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CONTENTS/ İÇİNDEKİLER

Boğaziçi University Journal of Education Special Issue/ Boğaziçi Üniversitesi Eğitim Dergisi Özel Sayı
Editor's Foreword/ Editorün Önsözüi
Special Issue on Distance Teaching/Learning during the COVID-19 Pandemic: Challenges and Responses
Editorial/ Editoryal Duygu Umutlu and Nur Yigitoglu Aptoula
Themed Issue Papers/ Özel Sayı Makaleleri Developing New Student and Instructor Roles in Online/Distance Higher Education Derya Altınmakas
In the Midst of Pandemic: Students' Opinions on the Teaching Approaches of a Community Dance Module During Quarantine Eleni Tsompanaki and Konstantinos Magos
Emergency Remote Teaching During COVID-19: Saudi University Teachers' Perceptions of EFL Classroom Interaction in Synchronous Online Lessons Wala Fahad Almijiwl and Müge Satar
Affordances of Lexicon Learning in Peer-Peer Computer Mediated Interaction During Covid-19 Outbreak: Doing Teaching, Initiating and Doing Learning Practices Gülşah Uyar
Fear, Despair, Love, Hate, Peace: Riding the COVID-19 Rollercoaster Gökçen Gök Kaça
Student Experiences and Equity during Emergency Remote Teaching in U.S. Higher Institutions: A Literature Review Xinyue Zuo and Denise Ives
Digital Board Games as a Tool to Boost Speaking in Foreign Language E-classes During COVID-19: Students' Perspectives Thomais Rousoulioti, Christina Tegou, and Paraskevi Thomou
Exploring English Majors' Views and Perceptions of Emergency Remote Learning, Learner autonomy, and L1 Use in Asynchronous Video Lectures
Rurcu Gökgöz-Kurt 161

Special Issue on English as a Lingua Franca Practices for Inclusive Multilingual Classrooms (ENRICH)

Editorial/ Editoryal
Yasemin Bayyurt and Işıl Erduyan
Themed Issue Papers/ Özel Sayı Makaleleri Part I
Developing Teachers' and Learners' ELF State of Mind: The Principles and Premises of the ENRICH Project
Nicos Sifakis
ELF communication - From Pedagogical Catalyst to ELT Game Changer Kurt Kohn
Part II Unveiling Teachers' Personal Responses to Innovation Lucilla Lopriore, Alessandra Cannelli, Valeria Fiasco, Silvia Sperti
Language Teachers' Responses to Multilingual Classrooms: A Linguistic Ideological Perspective
Işıl Erduyan, Sezen Bektaş, Hakan Şentürk
Transforming into an ELF-Aware Reflective Practitioner through the ENRICH CPD Course: Insights from Greece (and Beyond)
Stefania Kordia
Adapting ELT Coursebooks Listening Materials within an ELF-Aware Perspective: Voices from Greek and Italian Classrooms
Lucilla Lopriore and Natasha Tsantila

Eğitimde Ölçme ve Değerlendirme Uygulamaları Ulusal Kongresi Özel Sayısı

Editoryal/ Editorial
Serkan Arıkan ve Bengü Börkan
Özel Sayı Makaleleri/ Themed Issue Papers
Öğretmenlerin Uzaktan Eğitimde Yaşadığı Sorunların Sıralama Yargıları Kanunyla Ölçeklenmesi
Mahmut Sami Yiğiter ve Selahattin Gelbal
Kırsal-Kent Başarı Farkını Açıklayan Öğrenci ve Okul Özellikleri: TIMSS 2019 Analizi Safiye Bilican Demir ve Özen Yıldırım
Millî Eğitim Bakanlığı Tarafından Yayınlanan Test Maddelerinin Madde Yazım İlkelerine Uygunluğunun İncelenmesi Eren Can Aybek, Seval Kula Kartal, ve Özen Yıldırım
Fen Bilimleri Öğretmenlerinin Üst Düzey Öğrenme Düzeyini Ölçen Soru Geliştirme Öz-Yeterlikleri
Ahmet Bolat, Sevilay Karamustafaoğlu, ve Özgen Korkmaz
Mesleki Gelişimde Öğrenme Topluluğu Yaklaşımı: Fen ve Matematik Öğretmenleri için Bir Ölçme ve Değerlendirme Programı
Bengü Börkan, Engin Ader, Beyza İnceçam, Arif Böyüksolak, Emine Erktin, Güneş Ertas, ve Serkan Arıkan

Editor's Foreword

We are closing 2022 with a comprehensive special issue that combines three different themes. Duygu Umutlu and Nur Yigitoglu Aptoula, who are the guest editors of the first theme, presented 8 articles as a whole that examined the challenges experienced during distance education/learning within the scope of the COVID-19 pandemic and responses to these challenges. It consists of the works produced by the partners and the plenary speeches under the guest editorship of Yasemin Bayyurt and Işıl Erdyan. The third theme consisted of the papers presented within the scope of the National Congress on Measurement and Evaluation Applications in Education under the guest editorship of Serkan Arıkan and Bengü Börkan.

Editorün Önsözü

2022 yılını üç farklı temayı birleştiren geniş kapsamlı bir özel sayı ile kapatıyoruz. Birinci temanın misafir editörlüğünü yapan Duygu Umutlu ve Nur Yigitoglu Aptoula, COVID-19 pandemisi kapsamında uzaktan öğretim/öğrenim esnasında yaşadığımız zorlukları ve bu zorluklara karşı cevaplarımızı irdeleyen 8 makaleyi bir bütün parçaları olarak sunmuştur. İkinci tema, ENRICH (Ortak Dil Olarak İngilizce'nin Kapsayıcı Çokdilli Sınıflarda Kullanım Pratikleri) adlı Erasmus+ Projesi çerçevesinde ortaklar tarafında üretilen çalışmaları ve konferansın ana konuşmacılarının konuşmalarının Yasemin Bayyurt ve İşıl Erduyan misafir editörlüğünde bir araya getirilmesinden oluşmuştur. Üçüncü tema, Eğitimde Ölçme ve Değerlendirme Uygulamaları Ulusal Kongresi kapsamında sunulan bildirilerin Serkan Arıkan ve Bengü Börkan'ın misafir editörlüğünde incelenen çalışmalardan oluşmuştur.

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Special Issue: Distance Teaching/ Learning during the Covid-19 Pandemic: Challenges and Responses

> Vol. 39-1 2022

Special Issue on Distance Teaching/Learning during the COVID-19 Pandemic: Challenges and Responses

The global outbreak of COVID-19 has profoundly changed our lives and professional practice. During the rapid switch to fully-online education, both teachers and students faced several challenges as it was a novel situation. This special issue of the Boğaziçi University Journal of Education aims to address this issue by focusing on distance teaching and learning practices during the COVID-19 Pandemic, focusing on challenges encountered and responses of teachers and students. Including research studies conducted in different contexts, the special issue also highlights the worldwide impact of the pandemic in educational processes and how challenges resulting from the pandemic have been resolved in different countries.

This special issue on Distance Teaching/Learning during the COVID-19 Pandemic includes 8 articles, each of which focuses on special topics about teaching and learning environments during the COVID-19 pandemic. Altınmakas, for example, investigates how different student and instructor roles emerged in higher education during the pandemic. Looking at a different context, Amijiwl and Satar examine Saudi EFL instructors' interaction patterns in synchronous online classes. Focusing on preschool teachers' experiences during the pandemic, Tsompanaki and Magos explore a module of community dance through distance learning. While Rousoulioti, Thomou and Tegou, focusing on teaching Greek, explore how digital board games can be used for vocabulary teaching and learning in online second language classes during the pandemic, Uyar delves into how peer-peer computer mediated interaction supports lexicon learning of second language learners. Zuo and Ives conduct an extensive literature review about the opportunities and challenges that emerged in higher education during the COVID-19 pandemic. Conducting an auto-ethnographic self-study, Gök Kaca explores the emotional challenges she encountered when teaching online during the Covid-19 outbreak and their impacts on her language teacher identity. Gokgoz-Kurt, on the other hand, examines how second language learners handled the challenges resulting from the pandemic in terms of first language use and learner autonomy during asynchronous classes.

In this issue, we aimed to showcase the distance teaching and learning practices during the COVID-19 pandemic. While the contributors of this special issue focused on various aspects of distance teaching, as they themselves underline, much more work remains to be done on an array of issues, such as, the features of emergency teaching in special education, face-to-face and virtual classroom instruction in foreign language contexts, and teacher training for distance teaching across the world. We hope that this issue will inspire much more work on distance teaching and learning in diverse contexts.

Duygu Umutlu & Nur Yigitoglu Aptoula Special Issue Guest Editors

Developing New Student and Instructor Roles in Online/Distance Higher Education

Derya Altınmakas

Abstract

The enforced rapid transition to online/distance education in 2020 created immeasurable disruption both for the faculty and students in HE contexts. The present study discusses whether an opportunity is born out of a globally experienced challenge for university instructors and students to develop new and transformative roles. The data for the present study were collected during the third term of distance education through a survey conducted with 112 students and 9 faculty members and semi-structured interviews with a convenient sampling of students and faculty members of an English department in Istanbul, Turkey. The findings indicated that online education enabled students to become more active and self-directed learners and faculty members to develop newer roles and strategies as course designers and mentors. The findings revealed an in-depth understanding of the experience and yielded implications for the viability of applications of distance/online/blended modes of learning and teaching.

Keywords: Online education, students, faculty members, higher education

Article info

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Introduction

The global Covid-19 pandemic has interrupted the taken for granted assumptions about our present and possible future selves. We all have been dislocated from our familiar contexts of teaching and learning in higher education (HE) amid the mist of this precarious and unsettling process. The enforced rapid transition to online/distance education in March 2020 created a globally experienced, immeasurable disruption both for the faculty members and students, particularly in HE contexts which rely on face-to-face student and instructor interaction (UNESCO, 2020). Most students, partly misconceived to have equal access to the Internet and digital platforms, did not readily have the agency for 'self-directed' learning or to navigate their learning processes online. The faculty members had to take immediate, individual and collective decisions on converting their courses for distance education without being fully informed about online teaching pedagogy and the affordances of available digital learning management systems. However, during the 2020-21 Academic Year, having gained some experience in remote education, responsible organs of the universities and faculty members were able to make more planned and informed decisions about the delivery of online courses

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and the use of digital systems. The use of technology in education has the potential to make instructors function in new roles as designers, mentors and facilitators and students as active learners, collaborators and discoverers (Thorne et al., 2015). This study explores whether an opportunity was born out of a globally experienced challenge for university instructors and students to develop new and transformative roles.

When the first cases of Covid-19 were verified and announced by the Ministry of Health in Turkey in mid-March 2020, education in all K-12 schools and universities were suspended for a week or two. Institutions with readily available online education infrastructure straightaway transited to online education while others took some more time as the transition required substantial investment in particular technological systems. Students and teachers have experienced this instant transition from face-to-face education to online education both similarly and disparately for different reasons and in various domains. The definition of online education per se goes beyond the delivery mode of a course as it is a form of a distance education programs which is purposely designed to cater specific requirements of virtual classrooms with its idiosyncratic pedagogies for instruction, assessment and student participation. Thus, within the scope of this paper, I will be using the term "online education" to refer to "emergency remote teaching" which is indeed "a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances" (Hodges et al., 2020). Hodges et al. (2020) define the latter as the use of "fully remote teaching solutions for instruction or education that would otherwise be delivered face-to-face or as blended or hybrid courses and that will return to that format once the crisis or emergency has abated" (para. 13), which I believe fully accords with our experience. Some researchers used also the term "the emergency COVID Online Learning (CoOL)" to distinguish the prevalent definition of online education from the conventional understanding of online education of pre-pandemic times (Tsang et al., 2021). Henderson, Selwyn and Aston (2017) used "digital residents" for today's university students indicating that "digital environments such as the internet are a way of life rather than discrete functional tools that can be turned on and turned off' (p. 1568) for these students. Yet, they also pointed out that it is important for university students to develop an awareness about how they can better make use of these digital tools for their academic studies. They administered a survey to 1658 undergraduate students and documented how students benefited from digital technologies and which digital tools they found most useful for their studies. They identified 11 "digital benefits" of the tools as perceived by students such as providing flexibility of place and location, organizing and managing the logistics of studying, reviewing, replaying and revising, seeing information in different ways, and augmenting university learning materials (p. 1571). Prensky (2001) used the terms 'digital natives' for today's students as they were born into the world of technology and the Internet and 'digital immigrants' for the teachers and instructors who have been acculturating to the new environment with an 'accent' they preserve. Pointing at the fundamental differences between the thinking, learning and information processing styles of the 'digital natives' and 'digital immigrants', Prensky (2001) suggested that teachers, who struggle to teach today's generation as they speak the language of the "pre-digital age", should "learn to communicate in the language and style of their students" (p. 4). In line with these, one can anticipate that transition to online education at the outbreak of the pandemic would be a smooth one for students, yet a challenging one for teachers. However, several early publications, focusing on CoOL experience in HE, have shown that the transition from face-to-face education to online education was disconcerting, demanding and strenuous for both parties (Bao, 2020; Cranfield et al., 2021; Oyedotun, 2020; Paudel, 2021; Peimani & Kamalipour, 2021; Ünaldı et al., 2021).

Marek, Chew and Wu (2021) conducted a very comprehensive study primarily exploring faculty perspectives from various parts of the world (90.2% Asia, followed by North American and European respondents) on their experiences in converting courses to distance education and secondarily students' learning experiences as perceived by the instructors during the Covid-19 pandemic. Their findings indicate that converting and adapting face-to-face courses to distance education within a very short amount time had been moderately a daunting task for most of the faculty, especially for those who had not used or been familiar with instructional technologies before. Most of the respondents reported that they had been overwhelmed with workload and stress stemming from required rapid changes in planning and implementation of diverse approaches depending on students' needs and affordances. Faculty members diverged on their views of student experience; while some stated that students adapted easily to the new system, others found students' behavior "dysfunctional" and indicated that students were not ready and as "tech-savvy" as they had been perceived and had difficulties with navigating their learning processes and time-management (p. 53). Mishra, Gupta and Shree (2020) published a case study investigating online teaching experience again from the perspectives of students and instructors at Mizoram University, India. One of the major challenges encountered was due to unstable Internet connection and the 'digital divide' between students who had access to necessary infrastructure and technological devices for online education and those who did not. They also highlighted that "level of understanding, lack of scope for meaningful interaction, the range for innovative teaching, and mechanical conduct of classes were the significant challenges reported by teachers" (p. 6). However, their findings also draw attention to a "blessing in disguise" (p. 5) in which instructors have gained virtual classroom experience, improved their teaching and presentation skills by using available digital materials and instructional technologies and developed newer strategies in engaging students in discussions while students, having difficulties with keeping up with the pace of the instructors while listening to the courses, had the chance to replay the recorded lessons and supplemented their learning with additional videos uploaded by their instructors. Aristovnik et al. (2020) conducted a very large-scale study and explored the impacts of the pandemic on the life (i.e., academic, social, personal and emotional) of HE students with a sample of 30,383 respondents from 62 countries using a web-based questionnaire composed of seven sections and 39 closed-ended questions. With regards to students' academic experiences, they found that most students were satisfied with the online delivery mode of the courses, especially with real-time conferences (3.30) and video recordings (3.26), followed by sending presentations (3.10) and written communication (3.14) on a global level (p. 8). Students coming from rural and remote areas were found to have had infrastructural problems related to the Internet and the electricity, and also limited access to some digital tools and study materials. Students were overall content with the way their lecturers' online

management of the courses and timely feedback on the coursework; however, almost half of the student population (42.6 %) indicated that their workload had become significantly larger, which according to Aristovnik et al. (2020) might be related to the fact that "lecturers unfamiliar with the new mode of delivery could overload their students with study materials and assignments" (p. 9). Undergraduate students were found to have had more concentration problems compared to postgraduate students as studying at home exacerbated with isolation and distracting factors led to higher stress, lack of self-discipline and feeling of work overload.

Despite the challenges, online education, or in other terms CoOL, provided a new, democratized platform where students could experience being more "self-directed learners" who "actively engage in the learning process and can adopt proper learning strategies according to the learning setting" (Geng et al., 2019, p. 7) and "take greater responsibility for the learning process rather than being passively fed information by teachers" (Ali, 2020, p. 148). Moreover, as Strielkowski (2020) claimed omnipresent, vet unutilized digital technologies available to HE institutions, which under normal circumstances would take months put to use due to administrative regulations or academics' reluctance, came to the fore and started to be used. This has paved the way for understanding the unorthodox fact that all elements of higher education (e.g., lectures, exams, defenses, even graduation ceremonies) and academia (e.g., meetings, conferences, research) could be conducted remotely and online as effectively as they are done in "real life" (Strielkowski, 2020). Implementation of online/remote education during 2020-21 and adoption of hybrid and blended models of education during the 2021-22 academic year, undoubtedly, revolutionized principal foundations of higher education.

Method

The present study is an exploratory case study in its nature, and therefore I have adopted a convergent parallel mixed methods research design (Creswell, 2013) in order to gain an in-depth understanding of online education as experienced by undergraduate students and faculty members of the respective context during the Covid-19 pandemic. Considering the three main characteristics (i.e., timing, weighting and mixing) of mixed-method research designs (Ivankova & Creswell, 2009), in this study the data are collected sequentially – first quantitative and then qualitative (QUANT + QUAL), and the weighting is QUAL vs quant indicating that the study prioritizes qualitative data analyses and uses quantitative data only for descriptive purposes.

The Context of the Study

The data for the present study were collected during the third term of distance/online education, Spring 2021. The participants of the study are composed of a convenient sampling of students and faculty members of an English department in Istanbul, Turkey. In the context of the study, a digital learning management system (LMS) that had been

developed via The Sakai Project by the university's IT department has been available for use since 2011. Even though the university has been encouraging all the departments to use this system for all their available undergraduate and postgraduate courses, only few departments and some compulsory and elective courses that are open to the whole university and implemented with principles of distance education were using the system to its fullest extent. The system functions similarly to Moodle or Blackboard; it allows for sharing announcements, syllabi, and course materials and creating assignments with originality reports (i.e., Turnitin is integrated within the system) and tests and quizzes, shows class rosters and statistics of use, has chatrooms and forums where students can share their ideas about a given topic, and enables instructors and students to interact with one another through messaging and emails. Different from the aforementioned systems, in this system users have their own home sites where they can create a profile and add other users and also have a drive where they save any type of document. Each course appears on a different tab on the user's home, be it an instructor or the student. In the context of the study, this LMS has been used actively for all the courses since its launch, yet not all the faculty members were using all the components of the available system. Before the pandemic, the LMS had been largely used for sharing the syllabi and materials of the courses, submission of assignments, and announcements. During the distance education period, other integral parts of the system came into use such as forums, chatrooms, and tests and quizzes. At the outbreak of the pandemic, in March 2020, in addition to the existing LMS system, Adobe Connect was used for the online delivery of the courses. In 2020-2021 academic year, the LMS was integrated with Big Blue Button, which allowed faculty members to create meetings on designated dates for the courses and also a new component - which helped to take attendance during the class – was added. Both Adobe Connect and Big Blue Button allow students to open up their cameras and microphones but only a limited number of students can use these simultaneously. Thus, mostly the lecturers use their cameras and microphones to deliver the lectures by sharing their slides/ materials and/or screens and students contribute to the class discussions by writing in the chat box.

Data Collection and Data Analysis

In order to gain a comprehensive understanding of students' experiences of online/distance education, I devised a survey on SurveyMonkey. The survey is composed of 55 items with closed-ended questions which provide ready-made options to choose from (Dörnyei, 2003). There are five sections in the survey exploring: a) students' initial experiences in their transition from face-to-face education to distance education, b) satisfaction with the LMS and online delivery of the courses, c) their overall academic experiences and feelings, d) demographic information, and e) the last item on the questionnaire probed whether the respondents would be willing to participate in an online interview. In order to devise the survey items, during the summer of 2020, I first reviewed the existing literature having investigated the perspectives of students and instructors on online education in higher education institutes (HEIs) during the Covid-19 pandemic. I devised the survey items based on the findings of these studies and considering the idiosyncratic situation of the context of the

study. I also devised a survey for the faculty members of the department composed of 19 closed-ended items investigating faculty members' overall experience of the period as instructors, academics and full-time employees. Both surveys provided information about the aims of the research, ensured respondents that their participation was entirely voluntary and anonymous that they could withdraw from the survey at any time they wished, and asked for their consent. I designed the questions for semi-structured interviews based on the questions of the survey. The research design received the approval of the Ethics Board of the university.

112 students responded to the survey and I have conducted approximately 20-minute online semi-structured interviews with 5 volunteering students in order to gain a deeper understanding of their experience and perspectives. Among 10 faculty members, 9 responded to the survey and I conducted 30-minute online semi-structured interviews with 4 volunteering respondents. The interviews were conducted via Zoom at the convenience of the respondents. The interviews were conducted either in English or in Turkish depending on the preference of each respondent, recorded on Zoom and later verbatim transcribed. The findings derived from the survey data set are analyzed descriptively, and the interview data set were coded and thematically analyzed, and excerpts were created.

Participant Profile

Among the students who agreed to participate in the survey, 80% are of 18-24 age group (composed of ~25% freshman, 11% sophomore, 27% junior, 37% senior years students). 95% of the student respondents live in Istanbul during the academic terms, and 90% of them live with their families. 40 students indicated that they worked in full time (n=9) and part time (n=31) jobs, and 22 students had co-living/caring responsibilities (i.e., for children n=5, for adults n=7) during the time of their studies. 80% of students indicated that during the pandemic, they had experienced feelings of anxiety, boredom, loneliness and fear of getting Covid, and almost half of the students encountered problems due to financial loss, travel restrictions and loss of a loved one.

Among the nine faculty members who responded to the survey, 3 are research assistants who have actively took part in online delivered courses as teaching assistants, 3 are assistant professors - two with 15+ years of teaching experience and one with 5-15 years of teaching experience, and 1 associate professor and 1 professor with 25+ years of teaching experience and administrative positions. 7 respondents indicated that they faced problems due to travel restrictions, 6 respondents had felt the fear of getting Covid and extreme exhaustion with excessive workload, and 4 experienced loss of a loved one.

Findings and Discussion

In this section, I will present the findings derived from both the survey and interview data sets first pertaining to students' perspectives on online education and then to those

of faculty members under two broad themes – transition from face to face to online education and academic experience, and I will discuss the findings of the study in line with the literature on online teaching and aforementioned studies. (Excerpts presented from the student interview data are labelled with S and for faculty members with F).

Transition from Face-to-face to Online Education

The survey findings indicate that 54.6% of the student respondents found rapid transition from face-to-face education to online medium tiring and difficult, 37.1% smooth and easy and the rest were indecisive, yet a big proportion of students (64.2 %) got used to the distance education after having experienced some difficulties and stress at the beginning of the process. Half of the student population (50.5%) indicated that they enjoyed receiving their education at the comfort of their homes while the same proportion also had problems related to concentration as there were too many distractions at home. Students' initial responses to the question that asked whether online education is as efficient as face-to-face education showed that 52.5% of the students did not find online education efficient while for 27.8% online education was satisfactory, and the rest were indecisive. Only 20% of the students indicated that they had limited access to the Internet and computer facilities, which they thought had minimized their learning opportunities. The way interview respondents described their initial transition processes to online education is also consistent with these findings.

The transition was a bit rocky, at first, we had the chatrooms. I really don't mind typing in the computer, but that was a bit hard because I wasn't used to doing classes like this. (Interviews\S:2)

So that's why online education is convenient in terms of not making others sick. I was very fine with it actually; it was the best experience I've ever had. The best! Because I'm an introvert, at the comfort of my home, I was very close to my material, I did not have to use the public transportation to get school from where I am, which would make me very tired, and I became more motivated knowing that my materials were there, everything was digitally there so I could store them. (Interviews\S:3)

When we first started with online education, there was a chaotic atmosphere. Both as students and teachers, we were not used to a system like that. We tried to survive as much as we could. But then, I think in the second-year online system was better. We all got used to it and there was a long summer holiday in between, so you could get together and planned better, I guess. (Interviews\S:1)

Faculty members were anticipated to have experienced a more stressful transition to the online education. They very rapidly found themselves in a situation where they had to convert their teaching materials and adapt them to the new medium of delivery, redesign their evaluation and assessment methods, and gain quick adaptation to the use of LMSs

and virtual classroom experience as well as establishing a meaningful and supportive rapport with students to uphold their motivation for learning, participation, and sense of belonging to their departments. The respondents were irresolute when they were asked whether converting their courses to online mode of delivery was a smooth and easy process; for most of them it was a difficult task only at the initial stages and created excessive workload and stress (Marek et al., 2021). Instructors' acculturation to online delivery methods is observed to have been affected by factors such as familiarity with learning management systems and online teaching skills, the design and interactional requirements of the courses, the extent of existing materials' readiness and adaptability to online teaching, and the nature of the components of the assessment and evaluation methods

Of course, it was a totally different atmosphere. And it was not easy for us to adapt to these differences at the beginning, especially for a certain age group who had actively been teaching in face-to-face education for so many years. (Interviews\F:1)

At first, it was very difficult. We moved to online education very rapidly compared to the other universities. It was like redesigning a syllabus from scratch. The most difficult part for me was to rearrange the percentages that I had given for assessment. Not seeing the students was also difficult, but this was due to the system we were using. Not all courses are suitable for that, some courses require discussion and a lot of interaction. Lecture based courses are more suitable for online education. I already had some slides that I had been using in my classes, but I had to add more explanations or visuals to my presentations. (Interviews\F: 2)

I believe that those faculty members who were using certain tools or online LMSs before moving onto online education were quicker to adapt or change the way they teach or the way they use certain materials and luckier than those who did not use these things before. (Interviews\F:3)

One of the faculty members also asserted that preparation of online classes was more time-consuming. Due to lack of natural classroom dynamics where students also steer the development of discussions and instruction with their comments and questions, they felt the need to plan meticulously how they would be handling the materials and what they would be lecturing about for three hours, beforehand.

Regardless of its daunting nature, the urgent need to convert courses to online education as an immediate response to a crisis has also been a rewarding experience. As Oyedotun (2020) suggested, "online facilities, which were already in place in the university but were in minimal use prior to COVID-19 by both lecturers and students, proved to be extremely useful tools during the transition" (p. 2). And the faculty members gained experience about "the potential of using educational technology to create virtual classrooms, live lectures, online tests and quizzes, the sharing of documents" (Marek et al., 2021, p. 42), which enabled teaching staff, departments, and

administrative stakeholders to take more informed decisions about the educational planning of 2020-21 academic year and the further investments required for more effective online teaching technologies. The half of the faculty member respondents affirmed their satisfaction with the support they had received from university's responsible organs at initial stages while the other half stated that they needed more technical assistance and guidance.

Satisfaction with the Learning Management System (LMS)

As has been aforementioned, an LMS generated by the IT department of the university has been in use since 2011 in the context of the study. The students were already used to following the announcements, weekly syllabus and materials, submitting their assignments and managing their correspondence with the instructors via using the available system. During the initial phase of online education, Adobe Connect was used for synchronous and asynchronous classes, in which students' simultaneous participation with cameras and microphones were limited to 5 attendees. Due to this, mainly the students participated in classroom discussion via texting in the chat-box which was visible to all the attendees and only the instructors were using their cameras and microphones along with their presentations/materials for the delivery of their courses. In the 2020-21 academic year, Big Blue Button was integrated within the LMS, but this did not change anything in students' modes of participation.

The findings of the student survey revealed that 64.1% of the students were satisfied with the LMS and the general services the system provides (79.3%) such as assignments, resources, calendar, messages and chatrooms. 80% of the students indicated that they used the existing LMS more efficiently during the online education period than they used to do in pre-pandemic times. Only half of the student respondents (57.6%) found Big Blue Button efficient and sufficient for the online delivery of the courses; interruptions stemming from the university's infrastructural problems or the Internet systems that students or instructors were using at their homes were also reported as drawbacks. Similar to the findings of Cranfield et al. (2021), students were satisfied with the system mostly because they did not have to open up their cameras to attend the classes or participate in the discussions.

I like our system because in Zoom you have to have the camera open, which is kind of not nice. I personally liked not having to open up my camera, I'd like to see people, but I felt more comfortable because I don't like seeing myself, I get distracted. (Interviews\S:2)

This is an interesting finding where students and faculty members diverge. Although all of the faculty respondents found the LMS quite sufficient as an online education platform and felt themselves competent in using the system, they were hesitant about the efficiency of Big Blue Button for the very same reason students felt satisfied with the system – not opening up their cameras. Faculty members believed that Big Blue Button was insufficient and unsustainable for holding interactive classroom discussions, which

is considered highly significant for literature courses.

For the most part I'm very happy the way we can work with certain aspects of our LMS, its user-interface is easier, it is more accessible in both mobile and on desktops. Other platforms may not be accessible to all devices or some of their aspects are harder both for students and professors, I am quite content with our LMS but not happy about Adobe Connect or Big Blue Button because we do not have this human connection, we had this limitation of five or six webcams used simultaneously, which is a problem for larger courses. (Interviews\F:3)

Because the students participated in class discussions mainly by typing in the chat-box rather than opening up their cameras and microphones, most faculty members thought that the courses were not as effective as they used to be in face-to-face education. Apart from this, faculty members were specifically satisfied with the LMS as it allowed them to share sufficient number and sizes of materials and resources, open up assignments with similarity reports, post course syllabi and instant announcements, create short tests and quizzes, and they made extensive use of forum pages where they could further assess student participation on various discussion topics.

Academic Experience

The findings of the student survey revealed that majority of students had positive attitudes toward their learning processes and their overall academic experience during this period despite the problems related to lack of socialization on campus with their friends and instructors and isolating or distracting home environments. 70.9% students indicated that they gained more experience in self-regulated learning and took more responsibility of their learning processes during this time. Three major reasons for developing self-directed learning strategies and habits were having more time to complete their readings and to do further research for their assignments (62%), having more opportunities to supplement their learning with additional materials such as YouTube videos, online lessons and extensive reading (67%), and being able to study in their own time and at their own pace (66.6%). Moreover, as students had to participate in classrooms via writing and had to complete forum tasks and submit assignments more often than they used to, half of the student respondents (57.6%) reported that these activities improved their writing skills and that they had become better at organizing their thoughts and more articulate in expressing their ideas. Student respondents described their self-directed learning processes and improved writing skills as follows:

In the past, we had time, too and we could support each other. But during this period, we had more time to read. There was the need to focus only on our lessons. This makes you forget about Covid and your loneliness. I read a lot during those times. I paid so much attention to the feedback and I became more ambitious each time and tried to write in a better way. I had the chance to consult a lot of resources while writing and I think this improved my English

and writing. (Interviews\S: 1)

My studying techniques definitely adapted into the whole online learning. I personally liked the whole ritual of getting up and going to school and having my head in the space. So, I tried to do similar stuff in home with the whole, getting a coffee, getting dressed up. It helped; I think this period helped me a bit better articulate myself. You know, I tried not to use similar words in my forums or assignments all the time, I looked over what I've written, I tried not to post drafts. (Interviews\S:2)

Time is very extended for us to prepare a well-developed essay and we are always explaining ourselves with essays, paragraphs, this period affected our writing skills. In face-to-face period, we were speaking in the classroom, we did presentations, and we had some quizzes, but they were not all related to writing, so I believe that my writing skills have improved during this period. (Interviews\S:4)

As can be seen from the excerpts above, self-isolation at home and having more uninterrupted time to complete the assigned tasks and readings enabled students to develop newer strategies for studying, writing and doing research, which in return were perceived to develop their writing skills particularly in terms of planning and revising.

Students had divergent views in terms of their participation in classroom discussions. 41.3% of the students felt confident in participating classroom discussions, while 36.7 % did not feel confident, and 21.8% remained indecisive. Findings have shown that half of the students felt more comfortable with writing in the chat-box rather than speaking as part of their participation whereas the other half indicated that they could not participate as much as they wanted to since writing was the common way of expressing their ideas and responding to the instructors' questions.

In a sense I participated more in online education, but in a way I couldn't. I've always spoken in classes, but when it comes to writing, sometimes I was too late to express my opinions. (Interviews\S: 5)

I think my participation was less than I normally do. I get self-conscious when I write because it will stay there. If I had had a bit more confidence in me, I'd talk with microphone, but I don't. If everyone talked, it would be the best thing. In normal classes, I participated a lot, but here I don't know, I think because of the environment and because we were on computer, I got more anxious, because in the chat it stays there, and I was too much concerned about what I wrote and my participation. (Interviews\S: 2)

I am terrible at using the keyboard and typing. I always misspell things and then I get nervous and do more mistakes. Ok, everyone can do it. The important thing is to go on participating. I got used to it later on, I did better, I guess. (Interviews\S: 1)

The excerpts indicate that, particularly at initial phases, some students felt self-conscious about expressing their ideas with the fear of making structural deviations or spelling mistakes in writing, which inhibited their active participation. Trying to articulate their ideas accurately delayed some of the students' responses. And while some students got used to participating in lessons by writing in time, some others became more uninterested and detached from the classes with a feeling of alienation.

We don't have much tendency to write. In the past, we asked for permission to speak and we expressed our thoughts. But now, I don't feel like doing that when I don't see my friends around me. I don't really feel like being there. And the classes were recorded anyway. I did not participate, even did not listen sometimes because I was thinking that I could always go back to the recordings and complete my notes. But in regular classes, you listen attentively, you participate, knowing that you cannot rewind, you focus on what is being told. (Interviews\S: 4)

Faculty members brought different perspectives on students' participation in class. One of the faculty members found students' participation unsatisfactory and inauthentic.

You cannot really know whether they are really there or not. Among the 50 students only 10 of them are participating in discussions, only few opened up their cameras and spoke. (Interviews\F:1)

Another faculty member observed a more active participation in her classes, and she remarked that students who used to remain silent half the time during face-to-face education contributed more to the classroom discussions during the online education period.

At the initial phases of online education, some of the students who used to actively participate in class discussions got lost, they couldn't adapt and didn't like it at all. But I was surprised at some students, those who did not speak in class participated more. This was an interesting experience. This is probably in real classroom settings, those who knew best were the first to speak and answer the questions, but here because they have to write and it takes them some time to write, I was able to elicit more answers at the same time. I felt like those who were shy about speaking felt more confident in writing. (Interviews\F: 2)

This does not corroborate with the findings of previous studies demonstrating that good and motivated students do well whereas others work less or even disappear in online education (Marek et al., 2021). However, Peimani and Kamalipour (2021) similarly reported that "several reticent learners seemed to be more comfortable communicating through a textual, rather than oral, medium" (p. 9). Therefore, it can also be inferred that online education and being able to participate in classroom discussions via writing offered a safe and motivating space for retiring students.

In the context of the study, it was obligatory to record all the classes delivered via Adobe Connect and Big Blue Button. The recorded sessions automatically appear on

the LMS once the classes are over and students are able to access to these recordings whenever they want until the end of each academic term. The recordings were found to be the most useful and most favorited component of online education among the students as the recordings provided them with the flexibility of being able to go back to the lectures and complete the missing points in their notes and/or understand the parts which remained unclear. It was found that the availability of recordings did not notably affect students' notetaking during the classes.

With the class recordings, I can go back and listen, I can read again and again while listening, so that's a really good thing. If I can't understand something, I know that I can go back to it (Interviews\S:2)

Even though I attend the classes and I understand everything, I always feel as if I did not understand enough or rather, I might have overlooked because in the middle of a session, there are intense emotions and you're focusing on writing all these notes, so the recordings are a way to assure that I wrote what I wrote but I can always go back to and look at the recording and I can always feel safe knowing that thank God, I did not miss anything. It gets to point where I watch the recordings twice to assure that I did not forget anything, again I don't want to leave anything behind. (Interviews\S: 3)

I could understand most of the things and if I couldn't, I could always watch the recordings. I benefited from the recordings to complete my notes. (Interviews $\S:5$)

Students' contentment and satisfaction with the class recordings corroborate with the findings of Aristovnik et al. (2020) and Mishra, Gupta and Shree (2020). According to the faculty members' views, the recordings affected students' attendance to the classes in two ways; some faculty members noted their serious doubts about students' real status of attendance in classes observing that some students just appeared present on the system but were not actively listening to the lectures while others pointed to the fact that students were not attentively listening to the lectures or taking notes due to the unlimited access to the recordings. One of the faculty members also mentioned that availability of recordings led students to use the exact wordings of the instructors in their written coursework or in exam papers, which consequently hindered students' critical thinking and synthesis skills. Although the faculty members were not concerned about censorship or some form of surveillance, some of them felt self-conscious and disturbed by the idea that the recordings, which involved images of their physical appearance and lecture notes, were accessible at all times to the students. One faculty member remarked on the benefit the recordings brought to those students who could not attend classes during the day as they were working in part-time or full-time jobs during the pre-pandemic times and observed an increase in the grades of those students.

In terms of their overall academic performances and achievements, 70.9% of the students were satisfied with their grades they had received from their assignments and exams, and they felt that their instructors were fair with their assessment methods and criteria. Half of the students observed an increase in their grades during the online education; however, some students (46%) also thought that online education created an inequitable situation for those who really studied in contrast to those who did not act with academic integrity, and in relation to this 75.5 % of the students developed more sensitivity to plagiarism issues. The findings revealed that 81.6% of the students thought the number of written assignments and quizzes had increased during this period. 70.1% felt overwhelmed with the number of tasks they had to complete and 64.3% of the students felt quite exhausted with the number and length of materials they needed to cover for their courses. Students complained mostly about the posts they had to write for the weekly forums.

I don't know if they were more, the number didn't look as much, but I think it worked on me like I was at home; so, I either had to sit down and watch TV or do my homework. So, I did nothing, but studied, and this was overwhelming. Weekly forums were a bit tiring. I had to stay up till 12 to write those down, to do something good. (Interviews\S:2)

The forums literally drained me. We posted a lot in the forums. Actually, writing posts on different topics was fun, but we had a lot to cover. We also had quizzes, assignments, deadlines and we tried to do all of them at the same time. We were talking and thinking that each professor in a way acted as if we were only taking her course. I guess there was a lack of communication among the professors. (Interviews\S:1)

I think there was more homework involved. Since quizzes and exams have become unfortunately less significant, we had more homework (Interviews $\backslash S:5$)

Faculty members verified that they had felt the need to assign more written coursework during this period due to the university's online education policy on the percentages applied for web-based midterm and final exams – neither could be higher than 20%. The forum posts were also used as an assessment component to compensate for students' minimal participation in classes and in a way evaluated whether or not students were reading the assigned texts. One faculty member commented on the disproportionate workload assigned on students as follows:

Students- taking 5 or 6 courses- reached out to me and said this is too much. I think the main problem here is, we were trying to fill out some gap or we have this feeling that something is lacking in online education and we try to fill that part by making students write in chatrooms and forums. We have this drive forcing them to do more, we were not expecting them to write forum posts during face-to-face education. We also had these institutional online education regulations that we cannot give 40% for final exams or midterm exams because they are not invigilated, and that made us fill the course with little activities. With this excess of quizzes or forums or in- class presentations, are we still thinking in terms of ECTS or students' workload or are we thinking about the

assessment criteria? I don't know. I think it is the latter. (Interviews\F: 3)

Different academic disciplines employ different assessment criteria and evaluation methods, of course. For the Humanities and literary studies, students' preparedness for and participation in classroom discussions are considered highly important in terms of their academic performances. The midterm and final exams also require students to produce long essays in which they are expected to construct diligent arguments and discuss the topic by synthesizing theory and analysis of literary texts. Therefore, as mentioned by the respondent, when faculty members could not give higher percentages to the exams and thereby make students produce papers of the aforementioned quality, they might have felt the need to assign more written assignments and tasks. Evidently, this has caused them to deviate from the principles of pre-determined learning outcomes of the respective courses. So, this does not really stem from unfamiliarity with the new mode of delivery as suggested by Aristovnik et al. (2020).

As has been documented in other studies, this period has had an impact on the mental well-being of students and faculty members, as well. Particularly, students who previously had the experience of socializing and studying with their peers on campus, missed spending time with their friends (79.5%) and having one-to-one conversations with their instructors. 82.1% of the students appreciated the support they had received from their instructors during this period and they indicated that they had not lost their motivation or sense of belonging to the department. For the 2021-22 academic year, student respondents stated that they would like to go back to face-to-face education or at least have some of their courses online and some of them on campus. When students were asked if they would like to continue taking online courses together with face-to-face courses when the pandemic is over, 50.6% agreed, 28.9% disagreed, and 20.4% remained indecisive.

In a similar vein, faculty members mentioned that they missed socializing with their colleagues. According to the faculty members the most difficult aspects of this period were: managing student plagiarism, finding time and peace of mind for their own academic research, impromptu meetings held after-hours, being apart from their students and colleagues, and engaging students to participate in classroom discussions. And the perceived assets of the period were: teaching and working at the comfort of home, not commuting to work every day, being able to organize their own time, developing new teaching skills and gaining virtual classroom experience, devising new materials and new ways of teaching along with familiarizing themselves with available teaching and learning technologies. In the context of the study, faculty members are expected to be present on campus within the working hours; they have asserted that seeing and experiencing that everything can be done remotely helped them develop a newer sense of what it means to be an academic and demonstrated a novel way of being a full-time employee. They stated that they missed being in class with their students, yet they did not feel the need to commute to the work every day and be present in the office at all times. Therefore, most of the respondents stated that they would prefer to have more flexible working hours and that a "hybrid model" of working (i.e., being present at the office on some working days and working remotely on the others) could be an ideal solution once they go back to the "new normal". As Strielkowski (2020) mentioned, "many traditional principles of academic life will have to be reshaped due to our recent experience with the COVID-19 pandemic. While some of us are afraid of moving away from the status quo, others are willing to undertake this path" (p. 4). One of the faculty members noted that more technologically oriented faculty would not want to go back to the so called "normal" and would opt for a hybrid working and education model in the following years.

Conclusion

The pandemic crisis evidently has shaken our taken for granted assumptions about the foundations of tertiary level education and reshaped our conceptualizations of education and academic life. We all have witnessed and experienced newer possible ways of teaching and learning thanks to the technological advancements that are available to us in the 21st century. Students, in a way, became more active learners as they found themselves in a situation where they had to take responsibility of their own learning processes. As, Cranfield et al. (2021) proposed, "the emergency e-learning provided these students with the opportunity to improve their independent learning skills" (p. 12). They can be said to have become discoverers, as well, because in the times of selfisolation at home most of the students seem to have developed newer strategies to supplement their learning and meaning-making processes with research and additional texts and resources, learned to make use of available educational digital tools and improved their digital literacy skills (Ali, 2020). Moreover, CoOL provided students with the opportunity to contemplate and reconceptualize what university education means for them and many students have gained an awareness about what they need to do in order to achieve the desired results. As instructors found themselves in a situation where they had to take immediate decisions, convert and adapt their materials and teaching approaches in line with the requirements of online delivery mode, they have become designers. And those who were more open to experiment with new ways of teaching by stepping out of their comfort zones continued to learn and develop newer strategies on the way. In order to establish an emphatic and supportive rapport with the students and to create a safe teaching and learning atmosphere during these unsettling times, they have become mentors. Anomalous circumstances of CoOL period did not provide as much room for students to become collaborators as systematic online or blended education systems do. In order for students to become collaborators, instructors need to internalize their roles as facilitators. Yet, none of the parties were ready to adopt these roles as online education has been considered only as a temporary and complementary solution to these peculiar times. Peimani and Kamalipour (2021) argued that:

The extent to which higher education transformations have taken root and will persist into the post-pandemic future remains a key question, particularly considering the surging need for developing and implementing adaptive teaching, learning environments, and incorporating innovative remote technologies and digital networks into course designs. At stake is the role of

academia to remain reflective on its practices that will be important for shaping the future of learning and teaching in higher education (p. 11).

Therefore, all these recently published studies exploring the perspectives of students, teachers and instructors on online education in different contexts provide invaluable insights for our future designs. Based on needs analyses, it is important for HEIs to devise or invest in the most useful teaching and learning technologies for their specific contexts if online education maintains to be a part of their education systems. Faculty members should be provided with systematic support, if needed training, about the utilization of LMSs not only for the online delivery of their courses but also for the courses delivered in face-to-face education so that university students can become more active, self-regulated and independent learners. If HEIs opt to implement online teaching blended with face-to-face education in later stages, a balanced distribution of online and face-to-face courses, careful planning and implementation of assessment and evaluation methods, and effective coordination among the faculty members teaching the same year of students are essential pedagogical approaches to be considered by the programs. I believe rather than yearning for going back to the good old days or trying again to "normalize" post-pandemic times, we need to take lessons from this invaluable experience, look ahead and adopt more transformative approaches in higher education.

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Yükseköğretimdeki Uzaktan Eğitimde Gelişen Yeni Öğrenci ve Öğretim Elemanı Rolleri

Öz

2020 yılında yükseköğretim kurumlarında uzaktan eğitime yapılan hızlı geçiş hem öğrenciler hem de öğretim elemanlarının eğitim-öğretim hayatlarında kesintiye sebep olmuştur. Bu çalışma küresel olarak yaşanan bu zorluğun içinden, öğretim elemanları ve öğrencilerin yeni ve dönüştürücü roller kazanmaları için çıkmış olabilecek firsatları değerlendirmektedir. Çalışmanın verisi Türkiye, İstanbul'daki bir üniversitenin İngiliz edebiyatı bölümündeki 112 öğrenciye ve 9 öğretim elemanına uygulanan anket ve aynı gruplardan yarıyapılandırılmış görüşmelere gönüllü olarak katılan kişilerden toplanmıştır. Çalışmanın bulguları uzaktan eğitimde öğrencilerin öğrenim süreçlerinin daha etkin ve öz-yönlendirmeli bir yapıda ve öğretim elemanlarının ise verdikleri eğitimin yeni roller ve stratejiler geliştirmeleri sonucunda daha yaratıcı ve yol gösterici bir yapıda gerçekleştiğini ortaya koymuştur. Çalışmanın sonuçları yaşanan bu deneyimi derinlemesine anlamayı ve uzaktan eğitimde kullanılan uygulamalarının uygulanabilirliğini ve etkilerini tartışmayı sağlamıştır.

Anahtar Kelimeler: Uzaktan eğitim, üniversite öğrencileri, öğretim elemanları, yükseköğretim

In the Midst of Pandemic: Students' Opinions on the Teaching Approaches of a Community Dance Module During Quarantine

Eleni Tsompanakia and Konstantinos Magosb

Abstract

This study is part of a postdoctoral research on creative teaching approaches of movement expression, to preschool teachers, during pandemic. It examined participants' opinions on community dance through distance learning. Methodologically, it was an Art Based (ABR), Action Research, which combined alternative forms of expression. In this article, questionnaires and focus group interviews are examined, through qualitative analysis of data. The sample consisted of 88 students of the Pedagogical Department of Preschool Education, of the University of Thessaly, Greece. The results showed that a community dance module, contributed positively to the improvement of participants' psychological state, due to quarantine and affected the effectiveness of knowledge acquisition.

Keywords: dance, education, teaching, preschool

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Introduction

On March 11, 2020, the World Health Organization declared COVID-19 a 'pandemic'. The basic quarantine measures provided the temporary closure of most businesses and inevitably the universities (Snowden, 2020). Education was invited to explore multiple and alternative learning approaches, relating to the link between means of communication for distance learning, sociological and anthropological factors affecting the learning process (Baloran, 2020; Harari, 2020). Higher education institutions had to find passages and use teaching methods adapted to the new reality of the pandemic (Carrillo & Assunção Flores, 2020). The need to redefine educational processes with a view to a multi-prism learning approach has therefore arisen. Thus, the module of community dance and expressive movement had to find a new path in order to became functional and affective. The researcher is a professor in the University of Thessaly, conducting the specific dance module.

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Community Dance and Pandemic

Research has shown that in order to make distance learning richer and more effective, participants should be encouraged to express themselves freely, engaged in a critical and reflective process of communication with the teacher, have group cohesion and create communities (Alqurashi, 2019; Baloran, 2020; Beardal et al., 1996; Carey & Coutts, 2019; Dewey, 1933; Dreamson, 2020; Garrison et al., 2010; Jonassen, 1994; Kaloo et al., 2020; Kızıl, 2021; Mezirow, 1991; Sajnani et al., 2020; Zydney et al., 2019). In times of great historical challenges, the arts give space to process one's emotions, to discharge, to defuse and to interact with other individuals (Heyang & Martin, 2020; Kourlas, 2020; Sajnani et al., 2020) thus, making any form of art a fundamental tool for expression in times of pandemic. When knowledge is perceived through collaborative and democratic approaches and allows students to contribute collectively to the whole process, then learning becomes more familiar to them (Christian et al., 2020; Sajnani et al., 2020).

Specifically, the community dance course focused on the recruitment and understanding of the creative nature of teaching and learning and on the perception of the body as a means of reflection and creation (Dewey, 1933). The practice did not aim at the technical improvement of participants and this is because dance is used as a form of creative expression and a tool for teachers' didactic. This multi-important dimension of dance, allowed this art to penetrate and be applied in different fields, to different individuals regardless of age, abilities, gender and beliefs. Thus, dance is understood as an artistic, aesthetic, cultural, anthropological, pedagogical and educational instrument and not only as a physical function and development (Anttila, 2015; Best, 2004; Kuppers & Robertson, 2007; O'Neil et al., 2019; Stinson, 1995).

There is limitation in research concerning distance learning of arts, as experiential learning and an embodied process (Blanc, 2018; Heyang & Martin, 2020; LaGasse & Hickle, 2015; Pilgrim et al., 2020; Plevin & Yu Zhou, 2020; Sajnani et al., 2019; Sajnani et al., 2020; Vega & Keith, 2012). When it comes to community dance-movement and distance learning, the limitations are even bigger. They mainly concern technical courses aiming at improving the skills and abilities of professional dancers or at educating artists in general (Anderson, 2012; Beardal et al., 1996; Berg, 2020; Clements et al., 2018; Heyang & Martin, 2020; Garland & Naugle, 1997; Kourlas, 2020; Leijen et al., 2008; Parrish, 2016).

Teacher Training Through Community Dance in Times of Pandemic

The specific community dance course, generally focuses on active participation in experiential learning activities, in which movement and play are an essential component of developmental practices. It gives emphasis on the connection of art with education in an interdisciplinary way, allowing movement to be used as a tool for pre-school curriculum. The course is mainly practical, with theoretical applications to strengthen and enrich practice.

Due to the pandemic, the classes had to be conducted remotely and therefore this approach, encountered several difficulties. The challenges involved technological limitations, in terms of connectivity, limited technological knowledge, limited interactions due to switched off cameras, reduced active students' participation, limited space in students' residencies and most importantly, limitations in physical contact and group exercises. Moreover, another intense element was students' psychological state due to social distancing. Social distancing, which governs distance education, is further validated by the distancing of people as a precautionary measure in the period of the pandemic. In this way, academics were asked to produce meaningful work, in a short period of time and with many social variables. Therefore, these limitations were considered and approached as creative restrictions, building in that way a foundation for co-creation. With movement as a medium, an analogous approach was adopted allowing participants' aesthetic, educational, sociopolitical, moral, psychological and geographical factors to be reflected.

Improvisations, creative games, dance analysis through video projections and dance composition were the main axes of the module. These approaches led to a dance performance, composed and performed by the participants. The teacher acted as a director of students' needs and visions rather than a leader and choreographer. Through this process, the teacher aimed at familiarizing participants with artistic and aesthetic education through dance and assisted them in gaining understanding on the importance of experiential knowledge in the learning process. This approach gave participants an understanding of the tangible nature of knowledge in teaching and learning.

Structurally, the course focused on participants' active participation and gradually passed to the didactics where, the participants learned how to structure and compose exercises of physical expression themselves. They became animators, presenting their compositions to the rest of their classmates. Each class was a 'building block' towards the final performance.

Therefore, the teacher focused on each student and on the specific situation he/she was experiencing. The aim was to focus on an integrated, multi- sensory and multi-thematic approach to learning, framed by methods that promote student's personality, interaction, learning maturity, responsibility, critical thinking and analytical view, with emphasis on democracy and self-action.

Furthermore, scientific research on embodied or active knowledge (Sanger, 2019; Shapiro, 2008), on conscious state of mind and integration into living experience, seemed to offer a challenge for discussion about the dance experience, especially in the current state of the global pandemic (Lerman & Borstel, 2003; McFee, 1985; Mezirow & Taylor, 2009; O'Neill et al., 2019; Tsouvala & Magos, 2016).

Methodology

This study was an Art-Based, Action research. The sample consisted of 88 students (6th semester), from the 95 enrolled in this course, of the Pedagogical Department of Preschool Education of the University of Thessaly, Greece. The course 'physical expression and play in education' was an elective course and attendance was not mandatory. It lasted one semester that consisted of 13 (3 hours) classes. The final, visualized performance was composed by 51 students.

As an approach, art-based research, enabled the use of methods that have an executive and creative character, based on a continuous comparative qualitative analysis of data (Gerber, 2012; O'Neill et al., 2019).

The different teaching approaches emphasized on embodied knowledge and was provided by producing transformative learning beyond the traditional ways of knowledge (Mezirow & Taylor, 2009; Tsouvala & Magos, 2016; Leavy, 2017). Art-based research techniques aimed to describe and explore the subject from different perspectives, allowing participants to experience the action with all of their senses, making it more accessible and the experience more intense (Leavy, 2017). The interaction of theory, research practice and reflection, constantly enhanced not only students' diffusion of knowledge but teacher's didactic, too (Avgitidou, 2009; O'Neill et al., 2019).

As Action Research gives emphasis on reflection, the module focused on giving students time and space to reflect (Giguere, 2015). Subsequently, the classes took shape according to general concerns that were expressed by the participants. Afterwards, the classes moved to the justification stage where it was investigated what was functional and if not, what were the causes for the non-functionality. At this stage there was reflection on the options concerning the teaching approach and the means used, contributing to the expansion of knowledge interdisciplinary and experientially (O'Neill et al., 2019).

The final stage was that of critical analysis, where the teacher's/researcher's experience was approached with the intention of change and future improvement. Students' behaviors played a decisive role at this stage.

As follows, five (5) research questions emerged and were formulated as follows:

- 1. What are the predominant feelings of the participants about the situation they are experiencing, in the midst of a pandemic?
- 2. Can a community dance course be taught during pandemic?
- 3. What are the possibilities and limitations of distance learning in a community dance course?
- 4. What sub-elements of distance learning seem to motivate participants?

5. What are the participants' expectations from such an approach? Have they been achieved?

Research Methods

Action-Research is more of a holistic problem-solving approach. Art-based research (ABR) enables the analysis of tools that have an executive character. For this reason, the research consented to the use of various research tools of critical-dialectical research example. For the purpose of this paper, questionnaires and focus group interviews were examined in order to view students' opinions and beliefs.

Questionnaires

Questionnaires with open-ended questions were used for the participants after the end of the course. The questionnaire included open-ended questions of opinions or intentions, ie questions about how the participants feel but also what they think they have learned from the course. The questions also focused on the teaching approaches adopted, the use of dance and movement as a tool for transmitting knowledge and the effectiveness or not of distance education through creative, artistic activities.

Questionnaires are a direct way for students to submit opinions and also an easy way to collect a lot of data (Cohen et al., 2000; Rose & Grosvenor, 2001). The benefit of using questionnaires is that it reduces bias as the researchers' personal opinions cannot influence the participants' views (Rose & Grosvenor, 2001). The use of open-ended questions allows respondents to express their feelings, facilitating enhanced levels of understanding of the subject (Cohen et al., 2000).

Focus Group Interviews

The use of semi-structured group interviews was in the form of a discussion, open, without predefined questions, but with spontaneously questions that emerged during the discussion according to the research questions. Participants were asked to express their views freely and to refer to personal experiences (Rose & Grosvenor, 2001).

The advantages of using interviews lie within the fact that they can add more depth to the research, the response rates are good and respondents are more involved in the research (Cohen et al., 2000; Halkier, 2010).

The analysis and evaluation of the data was conducted in a qualitative way. Content analysis was used as a method of text analysis after the transcription of the data (Berelson, 1971; Miles & Huberman 1994), using inductive and deductive procedures. The coding of text units produced a large amount of material and therefore content analysis assisted in reducing the complexity of texts (Bauer & Gaskell 2000; Denzin & Lincoln, 2000). The answers from all participants were classified and were clustered in order to produce categories. Following that procedure, thematic categories and sub-

categories were produced. It was possible then to detect the number of times each category occurred (Denzin & Lincoln, 2000; Thomas & Nelson, 1996).

This process increased the analytic precision in handling the insights gained. As Bauer (2000) states: '...content analysis bridges statistical formalism and the qualitative analysis of material' (p. 132).

Results

The results are presented and discussed according to the research methods. From the 61questionnaires that have been collected, five main categories were created according to participants' statements. Each category was then divided into sub- categories, formed from the various reports on the same category. Categories can be seen in bold and participants' statements in italics.

The first category concerned the distribution of **theory and practice** within the online courses. From 80 statements, 14 focused on the negative impact theory had through distance learning on this practical module. They believed that an important amount of praxis was restricted in comparison to the in-person classes. Nevertheless, they acknowledged the fact that the module although was not exclusive practical, it gave them new perspectives on how to view theory in a more creative way and opened up new horizons on the approaches used that make a class more interesting. There were 61 statements that reviled participants were satisfied with the structure of the course.

The second category concerned the **motivation** the participants had. We identified 48 statements, most of which related to the experiential nature of the course as a positive experience. Fifteen (15) statements were related to the lecturer's good mood, and as one participant stated, 'the motivation was transmitted by you who were waiting for us with so much pleasure' and five (5) references to the communicative nature of the lesson, as the lecturer gave the participants motivation by the 'space given to us to put forward our views'. Moreover, the multidimensional structure of the module, using different techniques and approaches gave participants motivation. For example, on participant stated that 'every time we were waiting to see something new. And that in itself was a motivation'.

The third category concerned the impact **technology** had to the module. Of the 100 statements, which were related to technology and distance learning, 75 contained positive statements such as 'initially I was quite skeptical about the extent to which this course could be properly implemented in the face of the pandemic and still be interesting, as it is a course that is basically about movement, however, the lecturer's approach and ideas managed to make it one of my favorites'. Another participant said: 'I believe that the situation we have experienced and continue to experience has been a good excuse to try new things and new worlds that we would not have had the opportunity to explore otherwise'. There were also recorded 25 negative statements as

for some participants 'distance learning can in no way come close to face-to-face teaching'.

The fourth category concerned **communication**. There were 93 statements concerning opportunities for 'dialogue as an important element that influence learning', the power of communication as an element that first puts students in a 'good psychological state' and thus 'helps them to attend more eagerly' and the need for more 'intimacy with the lecturer'. Psychology played an important role in how everyone engaged in the course and received knowledge. There were seven negative statements that focused on the luck of communication due to turned off cameras.

The final category received the most statements (276), with 138 statements referring to **shared experience** the participants had. We recorded 58 statements relating to the strength of experience. One student stated that it was a powerful experience because dance 'helps me to relax... I was given the opportunity to understand what I was feeling, to understand myself, my feelings'.

These experiences made the learning process more meaningful with 70 statements focusing on the connection of dance with pedagogy. For example, there were statements like 'we understood the application that movement has to preschool children' and other statements focusing on the power of movement 'to unlock us and in this way allow us to see the essence and the connection to the pedagogy'.

From the focus group interviews, five categories emerged. The first category concerned participants' **psychological state** during quarantine. In the first stage of the interviews, fear of the unknown, fear of loss and stress for the condition were the main states the participants experienced. In the final stage of the interviews, there was a huge change in attitudes, as most participants changed their way of thinking. Twenty-five participants (25/88) said that through movement they 'untied' and 'freed themselves', bringing out what was hidden and preventing them from expressing themselves. There were strong references to how the physical expression module helped them as it gave 'space to express themselves verbally and physically'. The movement improvisations, placed them in an 'interiority' that helped them to find 'peace'. The performance 'In between borders' at the end of the course, was a 'strong motivation for activation', an 'almost meditative process' that made them 'reflect' in order to 'see, understand and listen to themselves differently'. They all said that when they 'managed to balance themselves psychologically', they were also able to 'enjoy the learning process' more.

The second category concerned the development of a **holistic approach** towards the community dance module. It was found that participants understood, to a large extent (78/88 participants) how movement can be used as a learning tool. The results revealed that through a holistic teaching approach, students were able to 'develop kinesthetic awareness', 'cognitive development', 'understanding of basic principles of creative dance', but also 'develop their research skills' such as understanding the basic process of 'creating, presenting, critically analysing dance', understanding 'analysing and framing dance themes' and 'approaching themes interdisciplinary'. They were in

this way able to 'explore and present their own ideas' thus, developing 'responsibility and independent work'.

The third category concerned **the weak elements of the course**, as it has 'changed from face-to-face to distance'. Fourteen (14/88) students felt that the 'magic' of the course 'was lost', as it was impossible to be highly practical. Various factors prevented participants from participating, such as lack of space in their home, or external sounds (family, noises at home) and fatigue from attending too many lessons through a computer. An important finding here was that despite these difficulties, they tried to work around them with statements such as 'we will try to participate with what we have' or 'we will not let the constraints hinder our learning'.

The results of the interviews showed that the students considered the teacher's attitude (approachable, cheerful, animating, eagerness to learn, non-processing approach to teaching, encouragement for personal enhancement, willingness to understand the situation we are in) as **strengths of the course**, as it influenced them positively. Also, the experiential nature of the course was one of the most important factors for activating participants and engaging them in the learning process. 'Learning through experiential exercises' and 'applying theory into practice' seemed to be the most important factors for understanding the subject matter. Placing the results in larger categories, a fifth category was created, concerning the **communicative nature of the course**, with 25 statements pointing that 'they were given space to speak their minds', 'to listen to different positions from their own', 'to express themselves without fear of saying what the lecturer wants or needs to hear'.

Discussion

The results of this research showed that participants were deeply affected by the unprecedented conditions of the pandemic. The psychological state directly affected the structure of the courses and the way the researcher approached them (Sahu, 2020). Participants' interpretations showed that there was a need for their opinions to be spoken. Their voices are rarely heard, as many have stated, so through this module there was freedom of speech and expression. It was impossible not to take into account the 'despair', the 'fear', the 'uncertainty', the 'lack of interest' for a lesson, but also the 'need' for a factor that would allow them to 'get out of the negative thoughts and feelings'. The results showed an insurmountable need for communication, for connection with the body and with others and for multimodal expression. Only when the module focused on these factors were participants activated. At the end of the course the psychological state of the students was completely different.

It appeared that dance and movement and the involvement in a performance, changed the participants' feelings and the way they experienced the quarantine. According to Heyang and Martin (2020), art in higher education brings hope and dance changes the way we experience a situation. Similarly, Sajnani et al. (2020) make it imperative to use the arts as a utilization of their therapeutic character. Thus, the

research revealed that in order for learning to be effective, the emotional state of students must be taken into account. As Brooks et al. (2020) argues, distance education should not be considered independently, but in conjunction with the situation the learner experiences in the midst of a pandemic and especially in quarantine conditions.

In addition, it was observed that most participants stated that the course promoted their self-efficacy. Being the focus of the learning process, by actively participating, the learner is given the opportunity to become responsible and autonomous in the learning process and in this way, self-efficacy is cultivated (Goulao, 2009).

Participants admitted that the process of distance education when is structured in an expanded space of interaction and reciprocity, it enhances their maturity in terms of the way they perceive knowledge (Avgitidou, 2014).

It also emerged that in order for a physical expression course to be effective from distance, it should focus on practice, experience and the application of theory into practice. Most students admitted that kinetic exploration, improvisation, and experimentation allowed them to explore themselves, creating bridges between their inner sense of self and their external relationship with others. Being free from critic, one could become an observer of himself/herself in a genuine way (Tsompanaki, 2009). Participants specified that this embodied nature of the course allowed them to understand the importance of movement in the educational process, understand it more in depth and discover ways to use it.

The research has led to the understanding that such procedures can be applied even remotely, despite space, sound and interaction constraints. Any restrictions were used as agents for creativity and not as inhibitors. For example, participants could improvise from a chair, taking space constraint as a game of spatial awareness.

Nevertheless, the limitations were many as any processing which makes cooperation and physical interaction imperative, was left out of course. Exercises could not be performed in pairs or in groups and that was missing from the course.

Moreover, factors such as limited space in their home, sounds from their environment, lonely way of performing movement, poor internet connection, were predominant limitations in distance education.

However, an interesting finding was the fact that even those who gave negative statements about this new reality of studies, were content with what they had. They did not allow restrictions to stand in the way for knowledge to arise. It is profound that difficult circumstances must be viewed with optimism.

As for the additional elements that motivated participants, the results showed that they need to connect their knowledge with their future action as active teachers. When the module involved teaching techniques and allowed them to facilitate an exercise, an idea or even the final performance on their own, it gave them motivation.

Thus, the creative process that led to a performance, but also the ease of its presentation through technology were in the center of interest.

At the same time, an important driving force for learning was the teacher's mood and her involvement in the whole process as a member of the team, beyond any hierarchy. As emphasized in similar researches (Edwards et al., 2006), the intimacy, the cooperation, the deeper communication with the teacher seems to greatly influence the participation of students in the courses, not only quantitatively, but also qualitatively. That approach gave an opportunity to hear their 'voices' and to give students speech, as they stated. The results showed that it is a very important factor as it enables them to discover the possibilities, to believe in themselves and to break the molds placed by the current system.

Furthermore, the physical expression course met the expectations of the students. Teacher's approach worked positively in the whole learning process and responded to the wishes they had in the beginning of the course. Participants stated that they did not expect that there would be practice, that technology would work positively, and that the module could escape the one-dimensional process of delivering theoretical reports, as they were accustomed in most cognitive subjects taught during the pandemic.

Conclusion

Overall, a community dance course, in a preschool education department can help enhance collaboration, support participant initiative, encourage creativity, encourage teacher-learner relationships, enhance critical thinking and reflection, enhancing participants' research skills, highlighting personal artistry, promoting lively critical discussions, strengthening responsibility and encouraging collective empowerment and emancipation (Alqurashi, 2019).

It can be implemented remotely, even in a period of pandemic, where confinement is experienced. It contributes positively to the improvement of the psychological state of the participants, as they express and share common experiences.

However, it cannot replace in-person learning, both in terms of content and on how it is addressed by participants. The limitations are numerous and mainly concern the lack of immediacy due to the use of technology, which also limits the teacher. But this research has shown that if constraints are accepted from the beginning and treated as creative methods, then learning becomes more interesting.

It is now certain that with the return to the new normality, the in-person lessons will not be the same as in the pre-pandemic era. Substantive issues emerged that will enhance the content of the course, the teacher's approaches and thus, the way students will receive knowledge.

This research highlighted the need to hear students' views, to allow them to be active partners of the teacher and not passive recipients. When we listen to students then

teaching is more direct and more effective, because it is addressed to the person as an active citizen and not to an anonymous passive group.

Through art-based methods, space and time were given to identify what is essential to my teaching. I was able to listen better to my students and hear their needs more effectively. The ability to collect data in a participatory context through art-based methods has had many benefits. I was able to observe more deeply the connection between the dance and pre-school education. This experience provided insights into dance and its application to education that could be of reciprocal benefit both for students and professors.

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Pandeminin Ortasında: Öğrencilerin Karantina Sırasında Toplu Dans Modülünün Öğretim Yaklaşımlarına İlişkin Görüşleri

Öz

Bu çalışma, pandemi sırasında okul öncesi öğretmenlerine hareket ifadesinin yaratıcı öğretim yaklaşımları üzerine yapılan bir doktora sonrası araştırmasının bir parçasıdır. Katılımcıların uzaktan eğitim yoluyla toplu dans hakkındaki görüşlerini incelemiştir. Bu çalışma, alternatif ifade biçimlerini birleştiren Sanat Temelli (ABR) bir eylem araştırmasıdır. Bu makalede, anketler ve odak grup görüşmeleri, verilerin nitel analizi yoluyla incelenmiştir. Örneklem, Yunanistan'daki Teselya Üniversitesi'nin Okul Öncesi Eğitim Pedagoji Bölümü'nün 88 öğrencisinden oluşmaktadır. Sonuçlar, bir toplu dans modülünün, karantina nedeniyle katılımcıların psikolojik durumlarının iyileşmesine olumlu katkıda bulunduğunu ve bilgi edinme etkinliğini etkilediğini göstermiştir.

Anahtar Kelimeler: Dans, eğitim, öğretme, okul öncesi

Emergency Remote Teaching During COVID-19: Saudi University Teachers' Perceptions of EFL Classroom Interaction in Synchronous Online Lessons

Wala Fahad Almijiwla and Müge Satarb

Abstract

COVID-19 caused a shift in language teaching from face-to-face lessons (F2FLs) to synchronous online lessons (SOLs) conducted via videoconferencing systems (VCS). This paper explores teachers' perceptions about VCS affordances for classroom interaction, their ability to create learning opportunities, and the challenges they faced and suggestions on how to overcome them. Following a mixed-methods approach, 20 English as foreign language (EFL) teachers at a Saudi University completed questionnaires and five participated in semi-structured interviews. Findings indicated that the webcam was the least used VCS functionality to facilitate interaction. Teachers thought that they created learning opportunities in SOLs but not as much/well as in F2FLs. Insufficient technological and pedagogical knowledge and skills were identified as main challenges which impeded interaction in SOLs.

Keywords: Emergency Remote Teaching, Classroom Interaction, EFL, Synchronous Online Lessons

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Introduction

Due to COVID-19, nearly all education systems have shifted their language teaching, unexpectedly, from F2FLs to SOLs (Bozkurt et al., 2020). This sudden shift resulted in what has been termed Emergency Remote Teaching (ERT) defined as "a temporary shift of instructional delivery to an alternate delivery mode due to crisis circumstances" (Hodges et al., 2020, para. 13). In this context, most universities worldwide, and in Saudi Arabia, delivered their SOLs via VCS since they might be the best possible alternative because they offer various affordances, such as text-chat, screensharing, breakout rooms, and webcams, which support and facilitate interaction (Barley, 2021). Overall, online language learning via VCS is a growing, valuable area of research within Computer-Assisted Language Learning (Wigham & Satar, 2021). VCS affordances have been investigated in second language (L2) interaction by several scholars in distance education contexts (e.g., Guichon & Cohen, 2014; Guichon &

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Wigham, 2015; Dey-Plissonneau, 2019), but not much in emergency remote English language teaching (ER-ELT) contexts.

Additionally, an increasing number of studies have focused on online pedagogical interaction (Wigham & Satar, 2021). Classroom interaction is essential because it improves language learning (Mackey & Goo, 2007). Through features of interaction, it is possible "to understand learning more fully" and how learning opportunities are influenced or mediated (Walsh & Sert, 2019, p. 752). Some of these features were investigated mostly in F2FLs (e.g., Walsh & Sert, 2019; Zolghadri et al., 2019). Thus, more research is needed from different geographical locations (Walsh & Sert, 2019) and in SOLs, especially during ER-ELT since the literature around this area is exceptionally limited.

Research has shown that in Saudi Arabia, VCS platforms were widely adopted by teachers and students during ER-ELT, yet it's a fairly new technology and several challenges may impact pedagogical interaction in such platforms (Alahmadi & Alraddadi, 2020). Various challenges were also reported in certain ER-ELT studies, such as digital illiteracy and pedagogical challenges (e.g., Alvi et al., 2021; Hazaea et al., 2021). Educators require specific online competencies to resolve the challenges they face during SOLs (Moorhouse et al., 2021). We do not yet have a full understanding of whether and how university EFL teachers created L2 learning opportunities in SOLs during ER-ELT, which features of VCS they largely used, which challenges they faced, and how such challenges can be overcome. Thus, this study will explore the perceptions of EFL teachers via a mixed-methods approach during ER-ELT to address three questions:

RQ1: How often do EFL teachers use VCS affordances to facilitate L2 classroom interaction?

RQ2: Based on features of classroom interaction, are EFL teachers able to create L2 learning opportunities in SOLs via VCS? If yes, to what extent compared to F2FLs?

RQ3: What are the challenges that might hinder L2 classroom interaction in SOLs? How might these challenges be overcome?

Literature Review

This section will review the relevant literature around interaction, the theoretical framework, VCS affordances and constraints, ER-ELT, and online teacher competencies.

Interaction and Sociocultural Theory

Interaction is key in L2 classrooms. It can give us insights into the learning process (Walsh & Sert, 2019) and promotes L2 development and acquisition (Li, 2017). Several

scholars argued that the processes of interaction are the root of any L2 learning in a classroom (Ellis, 1990). Additionally, Allwright (1984) suggested that these processes also present opportunities for L2 learning. Therefore, teachers are required to understand the different forms and patterns of communication and sustain the most proper ones (Walsh, 2002) to mediate L2 learning opportunities using a range of interactional practices and features, such as elicitation techniques and repair (Walsh & Sert, 2019). Some features of classroom interaction are valuable indicators for language acquisition, understanding, and eventually learning (Musumeci, 1996, as cited in Walsh, 2002). Employing these interactional features can enhance classroom interaction and participation. When students participate and engage in interaction, learning opportunities of L2 are created and mediated (Walsh & Sert, 2019); thus, promoting language development. In this study, we draw on Walsh (2013) and Walsh and Sert (2019) to understand teachers' perceptions on whether (and how) they could create L2 learning opportunities in F2FLs and SOLs. We specifically focus on two practices: (1) teachers' control of the interaction, via encouraging participation, inviting learners to interact/discuss, self-expression, or managing turns, and (2) speech modification techniques, through checking comprehension, co-constructing (negotiating) meaning, and using gestures.

Sociocultural theory (Vygotsky, 1978) stresses the social, dynamic, and cooperative nature of language learning and the crucial role of social interaction for L2 development. It argues that individuals collaboratively co-construct new meanings that are developed publicly as a speech but internalised privately as thoughts. To do so, they make use of symbolic tools (their language) and other ones (e.g., technology) to interpret the world or process new understandings (Lantolf, 2000; Vygotsky, 1978). The theory also argues that learning and knowledge are created inside cultural contexts, via social interactions, and through mental meaning-makings (Karpoy, 2014). Thus, learning can be seen as an interactive, contextual process. It is an interactive process since, for example, interaction or language modelling act as a catalyst. It is also a contextual process "because the depth and quality of learning depend on far-ranging factors, some specific to the learner and others particular to the environment" (Frechette, 2020, p. 364), as in the technological platforms that are utilised in learning. These platforms, as in VCS or audioconferencing systems, can assist L2 interaction and development by transforming the learning process (Peterson, 2009) and features of interaction via their affordances which will be explained below.

Computer-Mediated Communication (CMC): VCS Affordances and Constraints

VCS are Synchronous CMC (SCMC) platforms that offer various features for communication, including voice/text-chat, interactive whiteboards, file sharing, and webcamming. These features allow interlocutors to create and understand meaning via the wide range of communicative forms and modes, such as language, sound, or gestures. VCS affordances are "the profound mediating effects on communication" that could enhance language learner interaction (Barley, 2021, p. 98), whereas their constraints, as in the restriction of number of people visible on the screen at one time,

might limit interaction or the learning/teaching experience. Although VCS are "complex multimodal environments" with various layers of mediation in interaction, they allow for new forms of meaning-making "as they support oral interaction" through various affordances (Barley, 2021, p. 97-100). Dey-Plissonneau (2019) investigated the affordances in L2 tutor-tutee multimodal interactions via VCS and noted that text-chat allows interlocutors to co-construct lexical explanations, whereas breakout rooms offer teachers the opportunities to facilitate parallel group interaction. Wigham and Satar (2021), in their multimodal (inter)action analysis, stated that screensharing can bring the resources into interaction, while text-chat "enables the language teacher to capitalise on the multimodality of the teaching medium" (p. 2). Several scholars have investigated video-mediated interaction through webcam in online teaching/learning (e.g., Castelli & Sarvary, 2021; Develotte et al., 2010; Guichon & Cohen, 2014; Guichon & Wigham, 2015; Kozar, 2016; Satar, 2013; 2015; 2016; 2020; Satar & Wigham, 2017; 2020). That is because VCS allow access to non-verbal means of communication which can improve interaction and maintain social connections or mutual attention (Barley, 2021).

Overall, VCS facilitate multimodal interaction if the affordances are carefully chosen and utilised to efficiently support interlocuters, the learning process, and pedagogical gaols (Barley, 2021). This is even more pressing today, especially during the sudden shift of instructional delivery of English lessons into an ER-ELT caused by COVID-19 and its effect on interaction, which will be explored below.

Emergency Remote English Language Teaching (ER-ELT) and Online Teacher Competencies

Interaction in an ER-ELT context has come to the fore during the COVID-19 pandemic (e.g., Gao & Zhang, 2020; Moorhouse et al., 2021). In Saudi Arabia, many challenges were reported: students' lack of motivation to participate (Hashmi et al., 2021; Khalawi & Halabi, 2020), technical challenges (Khafaga, 2021), digital illiteracy, pedagogical challenges, and lack of engagement (Hazaea et al., 2021). Hazaea et al. (2021) suggested institutions to provide teachers with technical support, alternative platforms, or reinforce camera usage. In regard to camera usage, Al-Samiri (2021, p. 152) stated that "lack of visual input... is a significant challenge for" English students at Saudi universities. Although it is considered a challenge, turning on webcams is optional but cannot be made obligatory because of the cultural constraints in Saudi Arabia and the need to respect "users' privacy" (Al-Samiri, 2021, p. 152). As one of the authors is from Saudi Arabia themselves, we can report that in Saudi Arabian traditions, people value their privacy and the secrecy of their home. Learners might choose not to turn on their webcams because they do not wish to show their house, family members by accident, or their face for personal reasons, as in not wanting others to take screenshots or recordings, or for religious purposes when it comes to Muslim women who cover their face.

Nevertheless, several online teacher competencies may compensate the absence of non-verbal means of communication or enhance interaction in VCS.

Moorhouse et al. (2021) suggested three competencies during ER-ELT. First, online classroom management competence is the ability to manage the learning process without the physical proximity, employ students' time in class and out-of-class, help them adjust to the new environment, and, most importantly, use VCS affordances, such as screensharing or breakout rooms, to support L2 learning and interaction. Second, online classroom interactional competence is the ability to offer longer wait-time and space, give students time to prepare for discussions in breakout rooms before going public, or create a cooperative space for learning via game-based platforms or social media. Third, technological competence helps educators feel proficient in using VCS to offer opportunities for numerous forms of interaction. The third competence is somehow analogous to Guichon's (2009) competency of multimedia regulation. It is described as learning to use the most suitable communication tools "and to manage the ensuing interactions with the most adequate modalities" (p. 170). Finally, Guichon (2009) also outlined two other competencies. The competency of socio-affective regulation which is creating a rapport with learners, and the competency of pedagogical regulation which is having expert knowledge of L2, offering clear instructions and feedback, and "deploying an array of strategies to facilitate second-language learning" (p. 170).

Methods

This research used a mixed-methods approach. Although mixed-methods research require extensive effort and expertise, it enables researchers to investigate their research focus more comprehensively (Dörnyei, 2007). In this study, quantitative data were collected via a questionnaire, whereas qualitative data were collected through semi-structured interviews. In this section, we explain the participants, data collection tools and procedures as well as methods of analysis.

Participants and Context

Participants were male and female EFL teachers in a Common First Year (i.e., preparatory or foundation year) at a public university in Saudi Arabia, who taught via Zoom, Blackboard Collaborate Ultra, or Microsoft Teams amid the COVID-19 pandemic. Participants were selected based on non-probability and convivence sampling techniques (Dörnyei, 2007). The Scientific Research Committee at the university circulated the questionnaire via email where 20 teachers responded to it (Table 1) and five of them volunteered in their questionnaires to participate in the semi-structured interviews (Table 2) via an audio-recorded Zoom call.

Table 1Questionnaire Participants' Demographics

Demographics		Frequency	Percent	
Gender	Male	8	40.0	
Gender	Female	12	60.0	
	21-25	0	0	
	26-30	4	20.0	
Age	31-35	8	40.0	
	36-40	2	10.0	
	41 and above	6	30.0	
	British	3	15.0	
	Canadian	2	10.0	
	Jordanian	1	5.0	
Nationality	Pakistani	2	10.0	
v	Saudi	7	35.0	
	South African	2	10.0	
	USA	3	15.0	
	Arabic	8	40.0	
irst Language	English	10	50.0	
	Urdu	2	10.0	
	less than 1 year	0	0	
	1-3 years	3	15.0	
Teaching Experience	4-6 years	7	35.0	
	7-9 years	4	20.0	
	10 years or more	6	30.0	
	6 months or less	1	5.0	
	7-11 months	4	20.0	
VCS Experience	1-2 years	14	70.0	
	3-5 years	1	5.0	
	6 years or more	0	0	
	Zoom	18	90.0	
VCS that teachers use when teaching	Blackboard Collaborate	18	90.0	
	Microsoft Teams	2	10.0	

 Table 2

 Interview Participants' Demographics

Pseudonyms	Gender	Age	First Language	Nationality	Teaching Experience	VCS Experience	VCS used	Interviews' Date and Recorded Time
T1	Female	26-30	Arabic	Saudi	4-6 years	1-2 years	Zoom and Blackboard Collaborate	29/6/2021
T2	Female	41 and above	English	South African	10 years or more	7-11 months	Blackboard Collaborate	1/7/2021 39:32
Т3	Female	31-35	Arabic	Jordanian	7-9 years	7-11 months	Blackboard Collaborate	29/6/2021 33:10
T4	Female	36-40	Arabic	Saudi	1-3 years	1-2 years	Zoom, Blackboard Collaborate, and Microsoft Teams	30/6/2021 50:17
T5	Male	41 and above	English	United States of America	10 years or more	3-5 years	Zoom and Blackboard Collaborate	1/7/2021 46:47

Data Collection Methods

Data were collected using a questionnaire and semi-structured interviews. Instrument development went under a gradual process, outlined by Dörnyei (2007, pp. 112-113) to ensure their reliability and validity. The electronic questionnaire consisted of seven factual questions for the demographics, and 35 closed-ended statements that were divided into three sections: section one (VCS affordances) to answer RQ1, section two (learning opportunities) with two parts (Part A: F2FLs, and Part B: SOLs) to answer RQ2, and section three (challenges) to answer RQ3. The questionnaire included a numerical rating scale with four adverbs for section one to measure its frequency, and four points Likert scale for sections two and three to indicate the extent to respondent's agreement/disagreement with each statement (Dörnyei, 2007). Nearly all statements were adapted from the literature in which relevant content to this study was paraphrased to construct questionnaire's items. For example, item 1 in Table 3 (I use breakout rooms/groups to facilitate parallel group interactions) was constructed from Dey-Plissonneau's study (2019) who said that VCS:

[o]ffers breakout rooms that allows one or a group of participants to isolate themselves from the rest of the group for a certain time. This facilitates parallel group collaborations (pp. 30-31).

Only a reference to the source is provided next to the rest of items (see Tables 3, 4, and 7) due to lack of space.

A pilot questionnaire was circulated at two different Saudi universities, to which 11 EFL teachers responded. SPSS was used to do a Reliability Analysis to calculate the Cronbach Alpha. The section's acceptable level should be higher than Cronbach's Alpha 0.7; however, for scales with less than ten items, it is difficult to get a high Alpha; thus, the Cronbach's Alpha should be higher than 0.5 (Pallant, 2020). After running the reliability analysis, the questionnaire was amended by deleting the item 'I can listen to students carefully when they talk'. In doing so, the section's Alpha increased, and all items were estimated as reliable: section one (0.549 > 0.5), Part A of section two (0.924 > 0.5), Part B of section two (0.563 > 0.5), and section three (0.738 > 0.7).

Since questionnaires alone often "offer little scope for explorative, in-depth analyses", follow-up qualitative data were collected through five semi-structured interviews to obtain a holistic perspective to strengthen, support, and complement the questionnaire's results (Dörnyei & Taguchi, 2009, p. 108). The guide (Appendix 1) consisted of 13 questions which aligned with the questionnaire items. The interview questions were piloted with one volunteer teacher who also responded to the pilot questionnaire. No problems were observed with the pilot interview questions.

Data Analysis Methods

To analyse the questionnaires, SPSS, version 26, was utilised to generate descriptive statistics: weighted mean (*M*) and standard variation (*SD*) (Dörnyei, 2007; Pallant, 2020). Paired-samples t-tests were used to determine whether there was a statistically significant mean difference in teachers' perceptions about the extent to which they were able to create learning opportunities of L2 in SOLs compared to F2FLs.

For interview analysis, audio recordings were transcribed verbatim and analysed based on Attride-Stirling's (2001) thematic networks analysis. Data were broken into basic themes (BT), organising themes (OT), and global themes (GT) to construct web-like thematic networks and explore the most significant themes. This analysis is a top-down (deductive) approach in which codes, as in chatting, gestures, and sharing, that relate to the research questions and sections' items were identified before analysis (see Appendix 2).

Findings

In this section we present our findings for each research question.

RQ1: VCS Affordances

This section reports the frequency of EFL teachers' use of VCS affordances to facilitate L2 classroom interaction (RQ1). Table 3 illustrates quantitative results about teachers' perceptions in relation to their frequency of using VCS affordances.

Table 3Descriptive Statistics of Section One: VCS Affordances

Adapted from	Statements	A	Always	Often	Sometimes	Never	M	SD
	1. I use breakout rooms/groups to	N	4	10	6	0	2.00	510
(Dey- Plissonnea, 2019).	facilitate parallel group interactions.	%	20.0	50.0	30.0	0	2.90	.718
	2. I use the text-chat to offer written	N	7	7	5	1	2.00	015
	clarifications.	%	35.0	35.0	25.0	5.0	3.00	.917
	3. I use the text-chat to overcome audio breakdowns.	N	7	6	6	1	2.95	.944
		%	35.0	30.0	30.0	5.0		
	4. I screen share the lesson's	N	16	3	0	1	3.70	.732
	questions to trigger participation.	%	80.0	15.0	0	5.0	3.70	
	5. I turn on my webcam so that the	N	1	2	4	13		
(Barley, 2021).	learners can see my visual cues (visual cues are eye contact, hand gestures, and body language).	%	5.0	10.0	20.0	65.0	1.55	.887
(Moorhous	6. I look at the learners' webcam	N	1	0	1	18		
e et al., 2021).	images when they are turned on to monitor their engagement.	%	5.0	0	5.0	90.0	1.20	.695

As shown in Table 3, the highest mean score was reported for the fourth statement (M = 3.70, SD = .732), in which 80% of the teachers reported that they always used screenshare to support participation. The second most frequently used affordance was text-chat, and 35% of the teachers reported that they always used the text-chat 'to offer written clarifications' (M = 3.00, SD = .917) or 'to overcome audio breakdowns' (M = 2.95, SD = .944). The fifth (M = 1.55, SD = .887) and the sixth (M = 1.20, SD = .695) statements had the lowest average scores. To sum up, of all the affordances considered, the most used one was screensharing the lesson's questions to trigger participation, whereas the lowest used affordances were turning on the webcam and looking at the learners' webcam images to monitor their engagement.

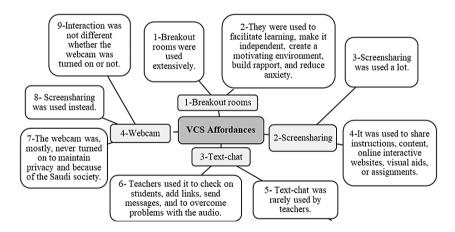
Figure 1 shows the thematic network which represents EFL teachers' perceptions about their use of VCS affordances to facilitate interaction in relation to four organizing themes: breakout rooms, screensharing, text-chat, and webcam.

OT1: Breakout Rooms

Interview participants suggested that break-out rooms were perceived favourably by all teachers and were used "extensively" (T5) during the classes. Teachers reported that they used break-out rooms for a variety of purposes: "to facilitate learning" (T3), make learning "more independent" (T3), to create "a motivating environment" by assigning roles (T3) or by organising "some group work activities" (T1). It was also suggested that break-out rooms helped build rapport and reduce anxiety to participate more freely since they "are not recorded" (T1).

Figure 1

Thematic Network for 'VCS Affordances'



OT2: Screensharing

Interviews suggested that screen share was used "a lot" since "it is very, very important... to have visual aids" for students to "be more focused" (T1). It was used to share instructions (T1 and T4), PowerPoint presentation (T2 and T5), the book, "online interactive websites, like Quizizz and Kahoot!", pictures, worksheets (T3), or assignments and videos (T4).

OT3: Text-chat

Interviews suggested that text-chat was "rarely" used (T4 and T1) unless to "check on the students" while "playing a video" or when they "are in breakout rooms" (T1). Teachers also reported that they used it when they needed to add links (T3) or to overcome problems with the microphones/audio (T5).

OT4: Webcam

Most teachers did not turn on their webcams (T1, T4, and T5). That was because of the Saudi "society" and its "restrictions" (T1), to maintain privacy and traditions (T4), or because if only the teacher turned it on, the platform would become, undesirably, "a teacher-centred platform" (T5). Screensharing was used instead since students might get distracted when webcams are turned on (T1) by facial features, backgrounds, and the lips' movement (T4). Out of the five interviewees, only T2 "always" turned her webcam on to "use gestures and... props". On the other hand, T3, who used to turn it on but then turned it off, did not see any benefits or difference in interaction as she explained:

"I used to open it... in the first semester... but in the second semester, it was not obligatory, so I did not open it... because... students are not opening their cameras, so I did not find any benefits and I did not feel that students interaction was... more... when I turned my camera on in comparison with when I turned it off, so I did not see any difference when I opened the camera in comparison [with] when I do not open it" (T3, interview, 2021).

When teachers used breakout rooms, screensharing, text-chat, webcam, and/or other tools/methods to employ features of interaction, they believed that they created L2 learning opportunities, which will be explored below.

RO2: L2 Learning Opportunities

This section presents findings in relation to RQ2, i.e., teachers' perceptions about the extent to which they were able to create L2 learning opportunities in SOLs compared to F2FLs based on features of interaction. A paired-samples t-test was generated to answer this question. As shown in Table 4, all the items were statistically significant (p < .05), which meant that for all the seven features of interaction, teachers did not think they were able to create L2 learning opportunities in SOLs as much/well as they can in F2FLs.

Although all items indicated a statistically significant difference between F2FLs and SOLs, descriptive statistics (Table 5) demonstrate certain patterns in relation to how teachers' perceptions shifted. In items 1-5 (encouraging participation, managing turns, inviting learners to interact/discuss, co-constructing meaning, and checking comprehension), we clearly see that fewer teachers 'strongly agreed' that they could create these opportunities in SOLs, and they largely 'agreed' that they could. While their perception towards opportunities they could create for students' self-expression (item 6) depicted a more positive picture for SOLs with 50% of teachers still strongly agreeing with the statement, responses to item 7 (use of gestures to help communicate) indicated largely negative perceptions in SOLs: while 85% of the teachers strongly agreed that they were able to use gestures for communication in F2FLs (M = 3.80, SD = .523), none strongly agreed to this statement in SOLs and in fact 50% strongly disagreed with it (M = 1.80, SD = .894).

 Table 4

 Paired-Samples T-Test of Section Two: Learning Opportunities

Adapted from	Statements	Pair	Mean	SD	t	df	Sig. (2-tailed)	
(Zolghadri et al., 2019).	1. I can encourage students to participate in the class	In F2FLs	.90000	.78807	5.107	19	.000***	
ai., 2019).	discussions.	In SOLs						
(Walsh, 2013; Walsh & Sert.	2. I can manage students' turns in the class	In F2FLs	.65000	.87509	3.322	19	.004**	
2019).	discussions.	In SOLs	.03000	.07507	3.322	17	.001	
(Zolghadri et	3. I can invite students to interact with each other in	In F2FLs						
al., 2019).	groups to encourage active participation.	In SOLs	.80000	.89443	4.000	19	.001**	
	4. I can work together with students to co-construct	In F2FLs						
	(negotiate) meaning in interaction.	In SOLs	.80000	.69585	5.141	19	.000***	
(Walsh, 2013; Walsh & Sert,	5. I can check students'	In F2FLs	.70000	.47016	6.658	19	.000***	
2019).	comprehension.	In SOLs						
	6. I can offer opportunities for students to express	In F2FLs	.35000	.48936	3.199	19	.005**	
	themselves.	In SOLs	.55000	.46930	3.199	19	.003***	
(Zolghadri et	7. I can use gestures to help communicate what I	In F2FLs	2.0000	1.16980	7.646	19	.000***	
al., 2019).	mean more clearly.	In SOLs	2.0000	1.10/00	7.040	1)	.000	

Note. **p* < .05. ** *p* < .01. ****p* < .001. (Dörnyei, 2007, p. 227).

To sum up, Table 5 indicates that most teachers strongly agreed with all features of interaction in F2FLs, while most of them agreed with almost all items in SOLs, except for item seven (20 % disagreed and 50 % strongly disagreed). Thus, we calculated Pearson's r correlation coefficients to understand whether there were any relationships between teachers' perceptions towards their ability to use gestures to express meanings in the two teaching settings and whether they turn on the webcam, their overall teaching experience, and their VCS experience. Table 6 indicates that teachers' perceptions towards their ability to use gestures to communicate meanings more clearly in SOLs was significantly and positively correlated with how often they turned on their webcams (r = .610, p < .01). This means that teachers who turned on their cameras more often were able to use their gestures to convey what they wanted to say more clearly. Moreover, there was a moderate significant correlation between the frequency of turning cameras on to use visual cues and teaching experience (r = .482, p < 0.5). This indicates that more experienced teachers were more likely to turn their webcams on in order to capitalise on visual cues while teaching. On the other hand, teachers' VCS experience was not related to how frequently they turned on their webcams (r = -.116, p > 0.5).

 Table 5

 Descriptive Statistics of Section Two: Learning Opportunities

		Part A	: In En	glish fa	ce-to-fac	e lessons	(F2FLs)	Part B: In English synchronous online lessons (SOLs)					online
Statements		StA ¹	\mathbf{A}^2	\mathbf{D}^3	StD ⁴	M^5	SD	StA	Α	D	StD	М	SD
I can encourage students to	N	19	1	0	0	2.05	22261	5	12	2	1	2.05	75015
participate in the class discussions.	%	95	5	0	0	3.95	.22361	25	60	10	5	3.05	.75915
2. I can manage students' turns in	N	15	4	1	0			5	12	2	1		
the class discussions.	%	75	20	5	0	3.70	.57124	25	60	10	5	3.05	.75915
3. I can invite	N	16	4	0	0			6	10	2	2		
students to interact with each other in groups to encourage active participation.	%	80	20	0	0	3.80	.41039	30	50	10	10	3.00	.91766
4. I can work	N	15	5	0	0			3	13	4	0		
together with students to co- construct (negotiate) meaning in interaction.	%	75	25	0	0	3.75	.44426	15	65	20	0	2.95	.60481
5. I can check	N	16	4	0	0			4	14	2	0		
students' comprehension.	%	80	20	0	0	3.80	.41039	20	70	10	0	3.10	.55251
6. I can offer	N	17	3	0	0			10	10	0	0		
opportunities for students to express themselves.	%	85	15	0	0	3.85	.36635	50	50	0	0	3.50	.51299
7. I can use gestures	N	17	2	1	0			0	6	4	10		
to help communicate what I mean more clearly.	%	85	10	5	0	3.80	.52315	0	30	20	50	1.80	.89443

Note. ¹Strongly Agree: StA, ²Agree: A, ³Disagree: D, ⁴Strongly Disagree: StD, ⁵Mean: M

Next, we turn to interview participants' comments in relation to their ability to create L2 learning opportunities in SOLs under two techniques: *Teachers' Control of the Interaction* (Figure 2) and *Speech Modification Techniques* (Figure 3).

OT1: Encouraging Participation

Interviews suggested that to encourage participation in SOLs, teachers used "random name pickers", "personalised activities" (T1), "Quizizz or Kahoot!" (T3), "google docs", or participation check lists (T2). Teachers "follow[ed] somewhat the same" practice in both environments, "except in face-to-face, [the teacher] can physically ask students to work together" (T5). It was more "challenging" to encourage participation in SOLs because the teacher could not "really see what the student [was] doing, or if she [was] active or not" (T1).

Table 6Pearson's Correlation (Bivariate)

		Item 7 (In F2FLs).	Item 7 (In SOLs).	Item 5	Teaching Experience	VCS Experience
7. I can use gestures to help communicate what I	Pearson Correlation	1	315	204	222	.158
mean more clearly (In F2FLs).	Sig. (2- tailed)	0	.176	.388	.348	.507
	N	20	20	20	20	20
7. I can use gestures to help communicate what I	Pearson Correlation	315	1	.610**	.302	092
mean more clearly (In SOLs).	Sig. (2- tailed)	.176	0	.004	.195	.699
	N	20	20	20	20	20
5. I turn on my webcam so that the learners can	Pearson Correlation	204	.610**	1	.482*	116
see my visual cues (visual cues are eye	Sig. (2-tailed)	.388	.004	0	.031	.626
contact, hand gestures, and body language). (From Table 3).	N	20	20	20	20	20
Teaching Experience	Pearson Correlation	222	.302	.482*	1	.397
	Sig. (2- tailed)	.348	.195	.031	0	.083
	N	20	20	20	20	20
VCS Experience	Pearson Correlation	.158	092	116	.397	1
	Sig. (2- tailed)	.507	.699	.626	.083	0
	N	20	20	20	20	20

^{*} Correlation is significant at the 0.05 level (2-tailed)

^{**} Correlation is significant at the 0.01 level (2-tailed)

OT2: Inviting Learners to Interact/Discuss

To invite students to interact/discuss in SOLs, teachers called them back to the main room to discuss the task "together" (T4), or gave "them a poll afterwards to get their individual ideas" (T5). However, "sometimes people do not participate at all" in breakout groups, whereas interaction in groups "is not really a problem in" F2FLs (T2). That is because F2F discussions are "more motivating for [students]... because they will see each other, they well use like facial expressions and body language"; thus, "interaction will be more effective" (T3).

OT3: Self-Expression

Teachers could offer opportunities for students to express themselves in SOLs "by providing them with online interesting activities, using games and puzzles, [or] giving them the opportunity to be more independent in learning by using breakout rooms" (T3). "[P]ersonalised" questions could be used to "reflect", but self-expression was "way easier" in F2FLs since the teacher could "resort to less resources and get more outcome" (T1).

OT4: Managing Turns

To manage students' turns in SOLs, teachers looked at the 'Raise Hand' feature and text-chat (T2), "randomly chose students" (T5), or pushed them to speak-up (T4). Although managing students' turns in SOLs was similar to F2FLs (T3), it was difficult to tell if a "student [was] done talking or not because" the visual aid was missing (T1).

Figure 2
Thematic Network for 'Learning Opportunities (Teachers' Control of the Interaction)'

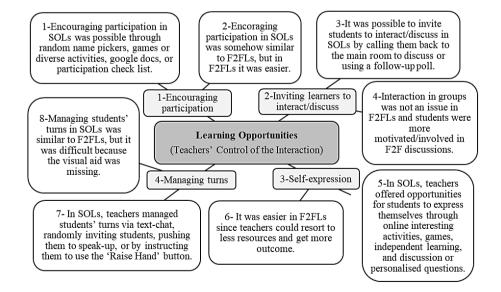
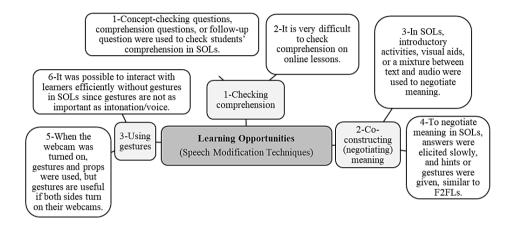


Figure 3

Thematic Network for 'Learning Opportunities (Speech Modification Techniques)'



OT1: Checking Comprehension

Interviews suggested that to *check* students' *comprehension* in SOLs, teachers used "concept-checking questions" (T5), and "comprehension questions" or "follow-up questions" (T1). However, "it is very, very difficult to check comprehension on online lessons" because in F2FLs "you could tell from the faces of students... if they are following or not" (T1).

OT2: Co-Constructing (Negotiating) Meaning

To co-construct meaning in SOLs, teachers used "introductory activities like brainstorming" or visual aids (T3), and "a mixture between text and audio" (T1), but students used chat when answers were elicited slowly, and hints or gestures were given to negotiate meaning and "it [was] pretty much the same [in F2FLs]" (T2).

OT3: Using Gestures

Interviews suggested that "gestures and... props" could be used "to explain" words, make "language come alive", help "ideas to stick", make learners "be more interested", and "get them to interact" (T2). Without gestures, "it would be... challenging to actually teach" lower-level students (T1). They are "very important for students to be like interacting and participating more"; however, they will be useful if both sides turn on their webcams (T3). In contrast, most teachers stressed that they were able to interact with learners efficiently without gestures in SOLs (T1, T4, and T5) since "gestures are not as important as, for example, intonation, voice, and so on" (T1). T5 elaborated:

"English is historically a context poor language. In other words, it does not require a lot of gestures. Most of the meaning is in the words itself... There are not many gestures that are useful for communicating language other than maybe dimensions, for example, big and small, that would have been helpful, but beyond these very simple dimensions, gestures would not have helped the students" (T5, interview, 2021).

To recapitulate, teachers explained their varied practice in SOLs which could create learning opportunities. When compared to F2FLs, most features and practice were implied as feasible in SOLs, but some were more challenging to perform.

RQ3: Challenges

This section reports the *challenges* that hinder classroom interaction in SOLs and *suggestions* to overcome them (RQ3). Table 7 demonstrates descriptive statistics in relation to the *challenges*.

 Table 7

 Descriptive Statistics of Section Three: Challenges

Adapted from	Statements In online classes, classroom interaction is hindered:		Strongly agree	Agree	Disagree	Strongly disagree	Mean	SD
(Khafaga, 2021)	1.by audio echoes.	N %	3 15.0	7 35.0	5 25.0	5 25.0	2.40	1.046
2021)	0.1 d d 1 6				9	23.0		
	2. by the restrictions on the number of students visible on the screen at one time.	N	4	5 25.0	45.0	10.0	2.55	.945
(Moorhouse		%	20.0				3.00	
	by internet connection issues.	N	6	10	2	2		.918
	41 224 114	%	30.0	50.0	10.0	10.0		
et al	4. because communication through both	N	3	8	9	0	2.70	.733
2021). 5	speech and writing is possible.	%	15.0	40.0	45.0	0		
	5. when students' webcams are turned off.	N	6	5	5	4	2.65	1.137
		%	30.0	25.0	25.0	20.0		
	6. when students respond only on text-	N	9	5	6	0	3.15	.875
	chat.	%	45.0	25.0	30.0	0	0.10	.0.0
(Alvi et al.,	when students are unfamiliar with the	N	10	7	1	2	3.25	.966
2021).	tools of the platform.	%	50.0	35.0	5.0	10.0	3.23	.900
	when teachers lack technological skills	N	13	4	3	0		
(Moorhouse et al.,	to use the platform effectively in online classes.	%	65.0	20.0	15.0	0	3.50	.761
2021).	9. when teachers lack skills to manage the	N	10	6	3	1	2.25	010
	online environment.	%	50.0	30.0	15.0	5.0	3.25	.910
	10. when teachers lack knowledge on how	N	10	5	4	1		
	to use videoconferencing systems to encourage learner-learner interaction.	%	50.0	25.0	20.0	5.0	3.20	.951
	11. when teachers lack knowledge on how	N	10	5	4	1		
	to use videoconferencing systems to encourage learner-teacher interaction.	%	50.0	25.0	20.0	5.0	3.20	.951

As shown in Table 7, 85 % of the respondents strongly agreed or agreed that classroom interaction was hindered 'when teachers lack technological skills' (M = 3.50, SD = .761). Over three-quarters of the teachers strongly agreed or agreed that students'

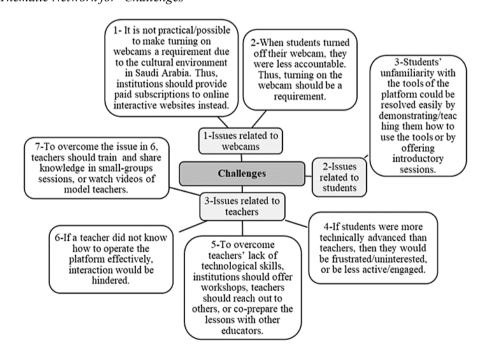
unfamiliarity with the platform tools (M = 3.25, SD = .966) and teachers' lack of pedagogical skills (M = 3.25, SD = .910) hindered interaction. Additionally, 75 % of the respondents strongly agreed or agreed that classroom interaction was hindered 'when teachers lack knowledge on how to use' VCS 'to encourage learner-learner interaction' or 'learner-teacher interaction' (M = 3.20, SD = .951). The lowest mean scores were reported for technological issues and limitations (item 2: M = 2.55, SD = .944, item 1: M = 2.40, SD = 1.046) where approximately half of the teachers strongly disagreed or disagreed with each challenge.

To summarise, teachers' lack of technological and pedagogical skills or knowledge in online teaching (items eight to eleven) and students' unfamiliarity with the platform tools (item seven) were the main challenges that might hinder interaction in SOLs, whereas technological issues and limitations (items one and two) were not much of a problem in this setting.

Next, we explore EFL teachers' perceptions about the *challenges* that might hinder interaction in SOLs and suggested solutions in Figure 4.

Figure 4

Thematic Network for 'Challenges'



OT1: Issues Related to Webcams

In relation to challenges caused by students' turning off their webcams, interviewees suggested that the experience was like "working in this black hole" where learners "are less accountable" (T2), whereas "being visible puts them... on the spot" (T5). There was also a "drop-off in participation online" (T5). Teachers suggested that turning on webcams should be a requirement/obligatory for both teachers and students (T5 and T3) because, "classes would be more interactive" (T1). However, it is not practical nor possible to pressure students/teachers to turn on their webcams due to the cultural environment in Saudi Arabia (T1 and T2). T2 further clarified that their university:

"strongly encouraged us to open our webcams and we were told it was going to become compulsory, but because of ... cultural environment we are in, I do not think they have a strong enough case to force women to show their face on webcam. I mean if outside women are wearing niqab and it is like strongly wrong in the culture to show your face, I mean now you are putting it on the Internet, anyone can hack... or they could be scared that... someone's brother or father or some man might be around" (T2, interview, 2021).

OT2: Issues Related to Students

Interviewees suggested that students' unfamiliarity with the platform tools "can be easily overcome" by "teach[ing] students how to use the tools" (T1), or "make[ing] an introductory session" (T3).

OT3: Issues Related to Teachers

Interviewees also indicated that if students were "more technically advanced than" teachers, then they would be frustrated/uninterested, or be less active/engaged (T1). Teachers provided some suggestions to overcome teachers' lack of technological skills: institutions should "offer workshops", as their university did, and teachers should "coprepare the lessons" with other teachers to "learn about new websites, [or] new tools" (T1), or reach out to others, as in their colleagues, supervisors, or the university (T2 and T3). Additionally, T1 said:

"If a teacher does not know how to operate breakout rooms effectively, then the learner-learner interaction would be hindered a lot because students' interaction with each other is very much decreased via online learning... if it is all conducted in the main room" (T1, interview, 2021).

Teachers' lack of knowledge on how to use VCS to encourage interaction and manage the online environment properly was highlighted as a challenge. To overcome this challenge, interviewees suggested for teachers to take responsibility for improving their knowledge (T4), train on using the interactive whiteboard and annotation (T5), to share "their knowledge" in "small-groups sessions", or watch "recorded videos of model teachers" who use VCS "the best" (T2).

Discussion

This study aimed to understand teachers' perceptions towards classroom interaction in SOLs via VCS during ER-ELT at a Saudi University. We sought to answer three questions in relation to (1) teachers' frequency of using VCS affordances, (2) their perceptions towards their ability to create L2 learning opportunities in SOLs compared to F2FLs, and (3) the challenges they faced when creating such opportunities and their suggestions as to how to overcome them.

In relation to the first question, our findings indicated that the most used VCS affordance was screensharing 'the lesson's questions to trigger participation'. Additionally, some interviewees stated that they shared instructions or visual aids, as in videos or pictures. This is, in some way, analogous to Dey-Plissonneau's (2019) study where one tutor "systematically shared the questions and instructions on screen", perhaps, "to trigger participation" (p. 160). Screensharing could also help bring the lesson resources into focus (Wigham & Satar, 2021).

Breakout rooms, in contrast, were utilised extensively to facilitate independent learning, create an active environment, build rapport between students, or participate more freely. Similarly, some teachers in Moorhouse et al.'s (2021) ER-ELT study reported that it is essential to use breakout rooms and give learners sufficient time and space to interact comfortably and build rapport.

Regarding the frequency of text-chat use, while most teachers stated that they always or often used it 'to offer written clarifications' or 'to overcome audio breakdowns', teachers who were interviewed pointed out that they rarely used it in SOLs unless they needed to check on students, add links, or overcome audio problems. Likewise, Dey-Plissonneau (2019) observed that text-chat "was the most frequently enacted traceable affordance that supplemented the oral mode with written clarification" or used "to overcome the frequent audio breakdowns" (pp.161-162). Similarly, one trainee teacher in Develotte et al.'s (2010) study said that she used text-chat "very little, except when" she "was encountering sound difficulties" (p. 308).

The lowest used functionality of VCS was the moving images of the participants available through webcams. This was not surprising because it is not a requirement in Saudi Arabia to turn on webcams "due to cultural constraints and respecting users' privacy" (Al-Samiri, 2021, p. 152). Therefore, most female teachers, and even students, in Saudi Arabia do not use their webcams in distance education for cultural reasons (Al-Nuaim, 2012). The findings in the present context were similar, yet the participants offered two additional reasons why they kept their webcams turned off.

First, teachers in this study were concerned that if only the instructor turns on their webcam, it would become a teacher-centred lesson. Other studies have reported similar results in that a lesson during ERT "can become very teacher-centred" where it feels "like 'a one-sided experience' or 'monologue'" (Moorhouse et al., 2021, p.10) or like "talking to yourself" (Castelli & Sarvary, 2021, p. 3567). However, one of the

participants (T2), who always kept her webcam turned on, disagreed. Although she described her experience as working in a black hole since none of her students had their webcams turned on, she emphasised that through turning her webcam on and using gestures, she was able to make learners interact with each other and be more interested in the lesson. Therefore, the real cause of the VCS platform becoming a teacher-centred platform, or a monologue, is perhaps due to teachers' pedagogical actions or style rather than keeping their webcams on.

Second, some teachers thought that learners might get distracted by their visual features or private backgrounds. This notion was acknowledged by Guichon and Cohen (2014) who explored the importance of webcams in L2 interaction in online learning and stated that:

being able to see the image of the interlocutor and oneself during [a] videoconferencing interaction may in fact be distracting for some learners who, as a consequence, will be less focused on the verbal components of the teacher's message, thus hindering understanding to some extent (p. 349).

Other literature in the area recommends that the webcam has its "biggest impact at the rapport-building stage when interlocutors are new to each other" (Kozar, 2016, p. 787) and teachers can turn off their webcams after this stage because the visual mode is "an 'energy-intensive' mode" (Kozar, 2016, p. 684). This is because webcams provide additional amount and volume of social information (auditory and visual) thereby increasing the cognitive load on interlocutors (Hinds, 1999). This increased cognitive load might lower the quality of teaching when educators try to monitor learners' webcam images and themselves rather than focusing on the pedagogical elements.

In contrast, utilising webcams increases students' understanding (Yamada & Akahori, 2007), creates more depth in verbal exchanges (O'Dowd, 2006), and "plays a major part in the socio-affective dimension of pedagogical communication" by developing interpersonal relationships and maintaining social presence (Develotte et al., 2010, p. 309). Moreover, the presence of teachers' own image through webcams might be beneficial in monitoring and modifying their own actions. When participants see their own webcam image, it increases self-awareness of actions and activates metacognitive behaviour (Yamada & Akahori, 2009) which could develop teachers' semiopedagogical competence to foster learning by appropriate use of semiotic resources (Cohen, 2015).

As regards our second research question, we found that when teachers use the above affordances appropriately, they could boost the possibilities of interaction in different modes, such as written, oral, whole class, or small groups communication, which in return guide and assist learning in SOLs (Moorhouse et al., 2021). However, when investigating teachers' perceptions about the extent to which they were able to create L2 learning opportunities in SOLs compared to F2FLs, teachers were more positive about creating such opportunities in F2FLs, particularly in relation to their ability to use their gestures to convey what they wanted to say. For example, teachers

stated that it was possible to check students' comprehension in SOLs, but it was very difficult to tell if some students were following or not because the visual cues from them were missing when learners turned off their webcams. Teachers also stated that it was possible to co-construct (negotiate) meaning in SOLs with other students via text-chat, audio, introductory activities, visual aids, or eliciting answers slowly. Although teachers were largely confident about their ability to promote classroom interaction, future studies can explore learner perspectives as well because only few learners in Alvi et al.'s (2021) ER-ELT study "agreed that teachers make them participate in the interpretation and meaning-making process" online (p. 345). There appears to be a discrepancy between teacher and learner perceptions as regards classroom interaction in SOLs.

Some teachers implied that they could interact with students efficiently without gestures in SOLs since gestures were not as important as intonation and voice. Voice or audio are indeed necessary to "compensate for the lack of non-verbal language," where "speakers have to rely predominantly on verbal input" (Barley, 2021, p. 102) as an alternative. Yet one teacher pointed out that gestures are very important for students to interact and participate more. While previous studies have acknowledged the role of gestures in supporting empathic and interactional functions as well as in enhancing L2 learning potentials (Develotte et al., 2010; Walsh, 2013), in the VCS contexts, they need to be visible and sustained long enough in the webcam frame for effective use (Guichon & Wigham, 2015). The teachers' perceptions as regards the role of their gestures visible through their webcam image in this study could be due to their inexperience in using the VCS webcam feature effectively in their lessons. While more experienced teachers were able to utilise the webcam and their gestures in meaning-making more, we did not observe any relationships between their webcam and gesture use and their VCS experience in general. This highlights the need to improve teachers' pedagogical VCS experiences.

Finally, the third question explored teachers' perceptions towards the challenges in facilitating classroom interaction in SOLs and their suggestions to overcome them. The findings indicated that most teachers agreed that interaction is hindered 'when teachers lack technological skills to use the platform effectively in online classes' or 'when students are unfamiliar with the tools of the platform'. Digital illiteracy can be one reason why low or lack of interaction is observed in SOLs (Alvi et al., 2021; Hazaea et al., 2021). Teachers in this study suggested that lack of technological skills can be overcome by workshops for teachers and learners on tool use. Likewise, other ER-ELT studies suggested the need to offer teachers intensive orientation sessions to engage learners in active learning (Rahman, 2020; Alvi et al., 2021; Hashmi et al., 2021), develop their computer literacy and efficient online communication (Alvi et al., 2021), and improve their technological competencies (Moorhouse et al., 2021).

Second, most teachers agreed that interaction is hindered when teachers lack pedagogical skills or knowledge in online teaching. To overcome these challenges, some teachers suggested that they should receive further teacher training, attend smallgroups sessions, or watch videos of model educators. Developing online classroom management and interactional competencies (Moorhouse et al., 2021) might also be beneficial.

In terms of the challenges related to webcam use, teacher perspectives were inconsistent. While some teachers reported no impact of the webcam on classroom interaction, others agreed that interaction was hindered 'when students' webcams are turned off'. Yet others thought that participation dropped in SOLs compared to F2FLs since the webcam images put students on the spot. Likewise, Gao and Zhang (2020) reported that some students became more active and confident compared to F2FLs when they turned off their webcam. This might be because remaining anonymous could be perceived as liberating by some students who feel less nervous and concerned about making errors "and are more willing to take risks" (Barley, 2021, p. 108). Overall, the teachers felt both teacher and student webcam images had to be visible to achieve positive impact.

Most teachers were also indecisive when it came to suggestions for the use of webcams. Some teachers recommended that turning on webcams should be a requirement. Likewise, Hazaea et al. (2021) suggested to address camera usage and reinforce it, if possible, to allow for a more efficient interaction. However, other teachers stated that making it a requirement is not practical nor possible due to religious reasons or the social norms in Saudi Arabia. It is important to be mindful of equity/equality, diversity of individuals, and inclusion (EDI) when dealing with camera use (Castelli & Sarvary, 2021). Some individuals who live in countryside areas might have unstable internet (Alvi et al., 2021) and experience audio/video lag if they were forced to turn on their webcams. Thus, teachers need to develop "communicative and interactive teaching methodologies that engage the students and motivate them to learn" (Alvi et al., 2021, p. 350) in contexts where it is not possible to use the webcam image.

Conclusion

This study presents three key insights about L2 classroom interaction in SOLs in the ER-ELT, particularly at higher education in Saudi Arabia, which can be of value to institutions and teachers who employ SOLs in their EFL teaching in similar contexts. First, findings indicated that screensharing, breakout rooms, and text-chat were the most used VCS affordances to facilitate L2 interaction. In contrast, the webcam image was the lowest used VCS affordance because of the social norms in Saudi Arabia, the distractions that might be caused by the speaker's features or backgrounds, or the undesirability to turn an online class into a teacher-centred lesson if only teachers turned on their webcams. Since it is not practical nor possible to force individuals in a sensitive context to turn on their webcams, more research is required to investigate whether and how classroom interaction can be maintained when webcams are turned off.

Second, teachers believed that within the ER-ELT context they were able to create several learning opportunities in SOLs, but not as well or on the same level as

F2FLs. Future studies investigating naturally occurring classroom interaction in ER-ELT contexts can further shed light on the interactional differences between SOLs and F2FLs.

Third, among several challenges that were perceived to hinder classroom interaction in SOLs, the main obstacles were teachers' lack of or deficiency in digital illiteracy and online pedagogical competencies and knowledge. Teacher training through workshops and model recordings of effective classroom practice to improve teachers' skills and competencies in creating L2 learning opportunities in SOLs is key to successful learning outcomes in VCS platforms. Although this study provided solutions to the main challenges, more research is required to see whether these suggestions are beneficial or applicable.

These new understandings may improve SOLs not only in Saudi Arabia, but in other contexts as well. Results also yield significant pedagogical implications. First, based on the findings, facilitating L2 classroom interaction via VCS appears to be feasible. Thus, higher education instructors' experience with SOLs during ERT may lead to longer-term impact on technology enhanced learning: more institutions - whose primary medium of teaching is F2F – are likely to adopt blended learning approaches (Satar & Akcan, 2014) and incorporate SOLs as part of their course structure. Second, in doing so, teachers need to be mindful of issues around EDI especially when including camera use, particularly in contexts where webcam is not available or discouraged due to socio-political norms, concerns for online safety, or technological limitations, such as lack of equipment or reliable Internet connection. Third, now that teachers developed some techno-pedagogical knowledge, they should continue to engage in Continuing Professional Development (CPD) in the area to keep abreast of new technological developments. Such training in relation to SOLs can specifically focus on teachers' online competencies to overcome limitations imposed by lack of learners' moving images via the webcam, including online classroom management, online classroom interactional competence (Moorhouse et al., 2021), skills in supporting social presence (Satar, 2015; 2020), and technological competencies.

Finally, one limitation of this study is the relatively small sample size. Future studies can replicate this research to understand teacher perceptions on classroom interaction via VCS in a variety of contexts across the globe.

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COVID-19 Sürecinde Acil Uzaktan Eğitim: Suudi Arabistan Öğretim Üyelerinin Eşzamanlı Çevirimiçi Yabancı Dil Olarak İngilizce Derslerinde Sınıfiçi Etkileşim Hakkındaki Görüşleri

Öz

COVID-19 pandemisi nedeniyle yabancı dil eğitiminde yüz-yüze derslerden videokonferans sistemleri (VKS) üzerinden eşzamanlı çevirimiçi derslere (EÇD) hızlı bir geçiş gerçekleşti. Bu çalışma, öğretim üyelerinin sınıfiçi etkileşim açısından VKS'nin sunduğu olanaklar, bu ortamlarda öğrenme fırsatları yaratabilme becelerileri ve karşılaştıkları güçlükler ile bu güçlüklerin üzerinde gelinmesi hakkındaki görüşlerini incelemektedir. Karma araştırma yöntemi kullanılan bu çalışmaya Suudi Aarabistan'daki bir üniversitede çalışan ve Yabancı Dil Olarak İngilizce öğretmekte olan 20 öğretim üyesi katılmıştır. Tüm katılımcılar geliştirilen anketi yanıtlamış, beş öğretim üyesi ile de yarı yapılandırılmış görüşmeler gerçekleştirilmiştir. Araştırma sonuçlarına göre etkileşimi desteklemek için en az kullanılan VKS olanağı kameradır. Öğretim üyeleri EÇD'lerde yüz-yüze eğitimde olduğu kadar olmasa da öğrenme fırsatları yaratabildiklerini düştinmektedir. EÇD'lerde etkileşimi engelleyen temel sebepler arasında yetersiz teknolojik ve pedagojik bilgi ve beceriler yer almaktadır.

Anahtar Kelimeler: Acil Uzaktan Eğitim, Sınıfiçi Etkileşim, Yabancı Dil Olarak İngilizce, Eşzamanlı Çevirimiçi Dersler

Appendices

Appendix 1

The Semi-Structured Interview

Sections	Interview's questions	Adapted from
	1- Tell me briefly about your experience with teaching English via videoconferencing systems?	
Section one	2- How often do you use the affordances of videoconferencing systems to facilitate L2 classroom interaction? <i>Give examples</i> .	(Dey-Plissonneau, 2019; Barley, 2021; Moorhouse et al., 2021).
Section	3- How do you encourage students to participate in online lessons?	(Zolghadri <i>et al.</i> , 2019).
two	5- How do you invite students to interact with each other in groups in online lessons?	
	 4- How do you manage students' turns in the class discussions in online lessons? 6- How do you work together with students to co-construct (negotiate) meaning in interaction in online lessons? 7- How do you check students' comprehension in online lessons? 8- How do you give feedback in online lessons? 9- How do you intervene, when needed, to provide language support in interaction in online lessons? 10- How do you offer opportunities for students to express themselves in online lessons? 	(Walsh, 2013; Walsh and Sert, 2019).
	11- Do you open your webcam in online lessons? If no, why? Are you able to interact with learners efficiently without gestures and how? If yes, are you able to use gestures? Are using gestures important? Why/Why not?	(Zolghadri <i>et al.</i> , 2019; Barley, 2021).
Section three	12- Are there any challenges that might hinder classroom interaction in English synchronous online lessons? <i>If yes:</i> What are the challenges? Why do they arise? How might they be overcome? 13- Why do the following challenges arise and how might they be overcome? Technological issues or limitations, internet connection issues, students' webcams are turned off, students respond only on text-chat, teachers' lack of technological skills, teachers' lack skills to manage the online environment, the communication through both speech and writing is possible,	(Moorhouse et al., 2021).
	technological issues or limitations (as in, audio echoes),	(Khafaga, 2021).
	students' unfamiliarity with the tools of the platform,	(Alvi et al., 2021).
	or teachers' lack of knowledge on how to use videoconferencing systems to encourage learner-learner interaction/learner-teacher interaction.	

Appendix 2

The Codes and Which Research Question and Section They Relate To

RQs and Sections	Codes	Organising Themes	Global Theme
Codes relate to RQ1	Breakout rooms, breakout groups, group work, and small	Breakout rooms	
and the items in	groups.		
section one in Table 3	Screen share, sharing, visual aids, and project.	Screensharing	VCS Affordances
and in Appendix 1.	Text-chat, texting, chatting, send messages, add, write, and	Text-chat	VCS Affordances
	link.		
	Webcam, camera, turn on/off, privacy, and Saudi norms.	Webcam	
Codes relate to RQ2	Participate, and encourage.	Encouraging participation	Iiii
and section two in	Invite, interact, discuss, and discussions.	Inviting learners to interact/ discuss	Learning Opportunities
Table 4 and in	Express, self-expression, personal experiences, and reflection.	Self-expression	(Teachers' Control of the Interaction)
Appendix 1.	Turns, manage, turn-taking, control, pick, and take turns.	Managing turns	the interaction)
	Check, comprehension, understand, and following.	Checking comprehension	Learning Opportunities
	Negotiate, meaning, and co-construct.	Co-constructing (negotiating) meaning	(Speech Modification
	Gestures, props, face expressions, and body language.	Using gestures	Techniques)
Codes relate to RQ3	Webcam, camera, turn on/off, and Saudi context.	Issues related to webcams	_
and section three in	Responding on text-chat, speaking, mute/unmute, and	Issues related to students	
Table 7 and in	unfamiliarity with tools.		Challanges
Appendix 1.	Lack of technological skills, workshops, lack of knowledge to	Issues related to teachers	Challenges
	manage SOLs, and lack of knowledge to encourage		
	interaction.		

Affordances of Lexicon Learning in Peer-Peer Computer Mediated Interaction During Covid-19 Outbreak: Doing Teaching, Initiating and Doing Learning Practices

Gülşah Uyar

Abstract

The outbreak of COVID-19 has changed education practices through moving faceto-face education to complete internet-based education. Therefore, the integration of technology which already gained acceleration before the pandemic has become the only solution to be able to carry out educational practices. The issue of making students communicate with each other on online platforms to get the best from educational practice and peer learning especially came into prominence following the outbreak of the COVID-19. This era also brought/raised the importance of the examination of technology integration in various practices in education including the peer-peer interaction in video-mediated task-based communication. To shed a light on an aspect of technology integration, the current study makes use of the data that comes from video recordings of online peer-peer interaction on individual virtual city tours of a group for three weeks during COVID-19 pandemic. The video-recordings of student-student interaction in groups are analyzed by using the micro lenses of multimodal conversation analysis (CA). The study contributes to the field with an in-depth examination of peer-peer interaction out of the classroom. The examination of the data shows that participants do lexicon teaching, initiate and do lexicon learning via negotiation of meaning during their videoconferences on their virtual city tours. Thus, it is obvious that peer-peer computer-mediated interaction provides learning opportunities and enables learning which suggests that tasks which require peer-peer interaction out of classroom can be integrated into course design.

Keywords: learning opportunities, peer-peer interaction, videoconferencing, COVID-19, CMC, lexicon

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Introduction

In line with the developments in the technology and adaption of human to technology in daily life, integration of it in educational settings and research on it have been increasing. Like other businesses, education needs to adapt to new regulations of new normal following the outbreak of COVID-19 (Triyason et al., 2020). Therefore, the integration of technology which already gained acceleration before the COVID-19

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pandemic has become the only solution to be able to carry out educational practices. While transforming the education to online environments completely, teachers carried out their teacher practices synchronously or asynchronously (Yi & Jang, 2020) in various countries. The issue of making students communicate with each other on online platforms to get the best from educational practice and peer learning especially came into prominence following the outbreak of the COVID-19. Thence, in addition to classes, designing online group tasks was a way to meet students' needs to be a part of a community and have shared experience (Dwivedi et al., 2020) via fostering peer-peer interaction.

Even before the pandemic, technological tools that provide students with situations to communicate in the target language have gained popularity by reason of the need of L2 students to use and get exposed to target language. While these tools provide an environment for computer-mediated communication (CMC) between native and nonnative students or non-native students from different parts of the world, they also may be helpful to convert the nature of classes by making students communicate with their classmates. Students can have more facilities to practice L2 in CMC settings when compared to teacher-fronted classroom interaction which restricts students (González-Lloret, 2011). Moreover, peer-peer interaction has more facilitative roles for L2 learning than teacher-fronted interaction (Fernández-García & Martínez-Arbelaiz, 2002). However, in spite of the efforts to change, classroom interaction is usually shaped and dominated by teachers (Sert & Seedhouse, 2011). As students have actual interaction with peers in online settings, they have a chance to improve their pragmatic skills in addition to linguistic resources, as well (González-Lloret, 2011). Synchronous computer mediated communication (SCMC) enables students to be more autonomous by engaging in more complex situations similar to actual interaction than classroom interaction (Gonzalez-Lloret, 2011). Therefore, educators can benefit from online tasks as they meet what students need and through them students exchange and improve their intercultural knowledge (Jauregi et al., 2011).

To have a holistic view of learning, contexts out of the classrooms should also be examined as they enrich and extend learning opportunities (Sert & Seedhouse, 2011). How students orient to computer mediated communication activities as learning opportunities and how they make use of these opportunities are largely unexplored. Moreover, the literature is generally shaped by asynchronous, semi-synchronous or synchronous text-chat interactions. Even though computer mediated communication was getting less attention (Jenks & Brandt, 2013), oral communication in L2 via videoconferencing has been becoming popular recently. However, despite the developments in technology and the increasing number of studies before and following the outbreak of COVID-19 exploring online interaction in L2 learning, as Balaman (2018) remarks L2 development in online task settings are primarily studied with etic and theory-driven perspective and studies which adopt emic perspective and have datadriven methodologies are needed to examine the process of mutually sharing knowledge in online tasks (Balaman & Sert, 2017). Therefore, CA can be the tool to examine technology enhanced language learning and how interaction is performed online (González-Lloret, 2015) by analyzing how participants make use of their resources and perform action without any pre-determined theories (Nguyen & Langevin, 2016). In parallel with the need to employ CA methodology to examine the interaction and development in online settings and its potential to display the process from the emic perspective with micro-analytic tools, the number of the studies which address CALL with conversation analytic tools has been increasing (e.g., Balaman & Sert, 2017; Dooly & Davitova, 2018; Dooly & Tudini, 2016; Fischer & Tenbrink (n.d.); Gibson, 2009; González-Lloret, 2008; 2015; Jenks, 2009; Jenks & Brandt, 2013; Kitade, 2000; Markman, 2005; Negretti, 1999; Nguyen & Langevin, 2016; Sert & Balaman, 2018). With these in mind, the current study makes use of the data that comes from online peer-peer interaction on individual virtual city tours of a group for three weeks during COVID-19 pandemic. The focus of the task is on authenticity and meaning making (Chapelle, 2009) and is loosely structured process-oriented task (Balaman, 2018) which does not require an output at the end. Individual virtual visits are held to give a topic to students to talk about and give them expertise on places they visited as they are expected to visit different places in the city. In doing so, it is aimed to create information gaps among participants which is expected to facilitate learning opportunities. In line with the data and my focus for this study, literature review is presented on the effects of COVID-19 pandemic on higher education, development of L2 in CMC settings, and learning and learning opportunities in interaction in the following section.

Literature Review

Effects of COVID-19 Pandemic on Higher Education

IAU Global Survey on the effects of COVID-19 on higher education showed that almost all the universities were affected by the pandemic and face-to-face education was completely abandoned in most of them (Marinoni et al., 2020). Online education has been the only and fundamental way to maintain education practices to adapt to new normal. (Xie et al., 2020). Therefore, COVID-19 era has transformed the practices of education (Yi & Jang, 2020), and the tools such as "Zoom" and "Teams" became a part of education and our daily life (Dwivedi et al., 2020). To provide quality learning experience to students in accordance with their needs, face-to-face classes and online classes can be integrated (Dwivedi et al., 2020) which was already in use before the outbreak of the COVID-19 and it became the common practice under the name of hybrid classes in most universities in Turkey following the end of curfew period.

A number of participants in IAU Global Survey put forward that immediate transformation to online education had brought some challenges as the pedagogy needs to be different in online classes than in face-to-face classes and how to meet these challenges may change across teachers. Nonetheless, higher education institutions did not necessarily promote to improve abilities of teachers while transforming education to online settings (Marinoni et al., 2020). For example, on one hand, COVID-19 promoted large scale implementation of technology mediated education, however, on the other hand it challenged the belonging to a community and engagement. While students could

reach the affordances of face-to-face education such as connectedness, friendship and collaboration, these affordances are quite limited in online learning settings. The teacher-student and student-student interaction can be in danger of diminishing in online settings (Xie et al., 2020). Therefore, to substitute physical face-to-face education, online education is to incorporate physical, bodily, and social dimensions of learning as it would be an underestimation of face-to-face education to replace it with text messages (Skulmowski & Rey, 2020). Besides the challenges COVID-19 pandemic generated while moving from physical face-to-face education to online education, it also promoted learning opportunities for more flexible learning, and virtual mobility and collaborative online learning practices were conducted more commonly. Moreover, some teachers take advantage of online teaching to learn and use new teaching practices and to extend their perspectives (Marinoni et al., 2020) and transformation of education to technology settings was seen as an opportunity for modifications in education (Yan, 2020). Accordingly, while enrollment rate to online classes of students at higher education increased even before pandemic (Xie et al., 2020) it seems that online and hybrid education promise to attract more students at higher education level even after COVID-19 in the next normal following the transformation to online education during the outbreak of COVID-19 and with new perceptions of online education as distance education seems to be compatible with various fields and blended learning can be answer for fields which require lab-based experience. Moreover, it extends learning opportunities and environments (Xie et al., 2020). However, it would be premature to claim if online classes will substitute face-to-face classes or replace it (Skulmowski & Rey, 2020).

Development of L2 in Computer Mediated Communication

There are studies which found a positive correlation between lexicon development and computer mediated interaction in other domains of SLA than CA (e.g., Fuente, 2003; Smith, 2004). Although most CA studies on CALL were descriptive in nature (e.g., Abe & Roever, 2019; Fernández-García & Martínez-Arbelaiz, 2002; Gibson, 2009; Jenks, 2009; Jenks & Brandt, 2013; Rusk & Pörn, 2019), there are a few studies which examine the development of interactional competence (IC) over time (e.g., Balaman, 2018; González-Lloret, 2008, 2015; Sert & Balaman, 2018) as well.

Communicating in L2 with interlocutors is an essential part of improving interactional competence and language resources (Chapelle, 2009) and CMC settings provide the opportunity to learners. CMC enables learning by affording a setting for collaborative learning, enhancing self-correction and meaningful interactions between NS and NNS and interaction among NNS from different proficiency levels with its unique properties (Kitade, 2000). CMC setting "provides linguistic resources not easily available in all language classrooms; among these, real, rich input, pragmalinguistic and sociopragmatic feedback from more advance speakers, a variety of speech act sequences, and space for engagement" (González-Lloret, 2015, p.581).

The first study -at least to my knowledge-which combines CALL and CA was carried out by Negretti (1999). Although the study was carried out to find out

differences between text-chat and face to face interaction, namely descriptive in nature, Negretti (1999) claimed that chat enhances oral proficiency skills. Similarly, Gonzalez-Lloret (2011) carried out a case study and she displayed that a single participant's interactional resources have increased through text-chat. In their longitudinal study, Balaman and Sert (2017) found that IC of participants has developed in time as their resources to perform the task have enriched and progressivity of the interaction was achieved better in the computer mediated collaborative task. In another study, Sert and Balaman (2018) found that language policing practices of participants changed from other to self-policing which is attributed to development and learning as students do not need to use L1. The authors also propose that negotiation of meaning practice of students and information gaps in the tasks have the potential to enhance learning and development longitudinally in online task settings.

Learning and Learning Opportunities in Interaction

After the social turn in SLA which followed the long-term dominance of cognitivist mainstream SLA (Atkinson, 2011), researchers have started to investigate language learning in social encounters. Thus, interaction has emerged as a popular research topic among scholars and some researchers propose that interaction is a tool to enable and facilitate language learning (e.g., Duff & Talmy, 2011; Kasper & Wagner, 2011; Lantolf, 2011; McKinney & Norton, 2011). For example, from the point of CA, learning occurs "on and in action" (Sert & Seedhouse, 2011, p.4). Thus, interaction has taken its place and gained popularity in studies which employ CA methodology as well (e.g., Brouwer, 2003; Lee, 2010; Pekarek Doehler & Pochon-Berger, 2015; Sahlström, 2011).

Although interaction in classroom setting has been examined in various studies (e.g., Cancino, 2015; Kardaş İşler & Can Daşkın, 2020; Lee, 2006; Mori, 2004; Walsh, 2002, 2006; Waring, 2008, 2009, 2011) and studies resulted in the emergence of the notion of classroom interactional competence (CIC) (Walsh, 2006), literature lacks studies which examine language learning opportunities in interactions out of the classroom setting (Kim, 2017) which provide learners with situations similar to real life experience.

Negotiation of meaning and expert roles are pre-conditions for language learning opportunities. Thus, curricula should include tasks which require negotiation and questioning whether in peer-peer interaction or students-teacher interaction (Reichert & Liebscher, 2012). However, it is noteworthy that emergence of language learning opportunities does not necessarily result in learning depending on (non)orientation of participants (Kim, 2012). Learner initiatives also play an important role in the active participation of learners (Kardaş İşler et al., 2019) and emergence of learning opportunities and by taking initiative of learning, learners manage their own learning processes (Waring, 2011).

Kim (2017) argues that peers consider and check epistemic status of each other and take precautions to prevent any breakdowns in the interaction. Not only learners orient to pedagogic goals and task achievement, but also, they deploy their turns to

achieve intersubjectivity. Therefore, their sequential turns and asymmetry in knowledge lead to learning. Moreover, as epistemic status of interactants is displayed in and through interaction (Kim, 2017), opportunities for learning emerge in situ. According to Brouwer (2003), in sequences that provide language learning opportunities (a) participants orient to each other to search, (b) there is role distribution as novice and expert among participants. For example, description of a noun by novice and deploying the noun by expert may provide learning opportunities in interaction (Kim, 2012).

All in all, micro-analysis of task performance of participants is needed to bring insight to developments in task enhanced computer mediated interaction (Sert & Balaman, 2018) and to have pedagogic implications for language learning, we should answer whether negotiation of meaning results in comprehension and acquisition (Gonzalez-Lloret, 2003). Moreover, Sahlström (2009, p.103) suggests that "if learning is understood as situated or constituted in interaction, research on interaction will provide for better understandings of learning." With these in mind, this study sets out to explore learning opportunities in peer-peer computer mediated interaction setting through micro analytic lenses of CA. Accordingly, I will provide the research context and data analysis respectively and I will discuss the results by referring to literature in the last section.

Research Context

Setting and Participants

The data for the current study comes from a task-based activity for general purpose English class conducted during COVID-19 lockdown in Turkey. The participants are three third grade undergraduate students at a state university, in Turkey. All of the participants are female and their age range from 21-23. They are enrolled to general-purpose English class and as a requirement of their course they implement some tasks. Although the participants did not get preparatory class because of the procedures applied in higher education, they get intense English classes which are offered for 4 years. The general-purpose English classes offered to them are distributed among grades as 6 hours a week in the first and second grades, 3 hours a week in the third and fourth grades. In addition to general purpose English classes, they get aviation English classes at 3rd and 4th grades in respect with their department.

Universities in Turkey adopted distance education during COVID-19 pandemic which caused some methodological changes in course designs of teachers, too. The task for the current study was designed to enhance peer-peer interaction which was ignored during online classes because of various factors. First of all, the time for online classes was restricted and most of the time was spent by lecturing. Secondly, students were not used to online settings which probably made them feel anxious about speaking. The last reason can be turn-taking practices which is quite different in online classroom interaction than face to face classroom interaction as we may face with some internet connection problems and embodiment of students is not available in most of the cases in

online education and students may not prefer to interact with their peers to avoid overlaps. Therefore, peer-peer interaction could not be achieved whereas it is an essential part of teaching as learning occurs in-and-through interaction and peers have an important role in it.

Research Procedure

To enhance peer-peer interaction the task that requires the students to virtually visit a city and then to share the experience with group members via computer mediated communication was introduced in the scope of the class in addition to online classes and weekly assignments. Students were divided into groups of three or four and they formed their own groups. By doing so, the possibility of feeling anxious was quite eliminated as students constructed their groups with peers they can easily interact. After the introduction of the task, informing students about the procedure, and getting consent forms, the task was conducted for three weeks. It is also noteworthy that the task is quite loosely structured which has some similarities to conversation for learning (CfL) by Kasper and Kim (2015) However, the task cannot be called as CfL as the topic was given by the teacher and it was assessed at the end of the semester. The students were expected to have recordings for about 20 minutes each week and no strict rules (i.e., L2 only) was introduced. The first step of the task was to individually visit a place in a certain city on virtual worlds so that students could take notes and before sharing their experience with group members, they could get familiar with vocabulary they do not have in their repertoire to share what they have experienced. The cities were London, New York and Bangkok respectively. Then, the second step was to meet group members online, to talk to group members about their virtual visit and record their interaction through the built-in video-recorder of Zoom. When they completed this step, they were expected to send their recordings to the teacher on Google Classroom before deadline each week.

The current study focuses on the screen-recordings of the implementation of task which come from one group consisting of three participants. The recordings of three weeks last approximately 60 minutes. To ensure the anonymity of the participants and regarding ethical issues, pseudonyms were used and data-session was conducted to ensure reliability of the findings. The data was analyzed through the micro analytic lenses of CA which provides fine-grained transcripts of interaction which also makes it open to reliability checking. By following CA research methodology, transcripts of the data were examined by unmotivated looking (ten Have, 2007) which uncovered that the task enabled students a setting where they could have learning opportunities and initiatives and doing teaching practices as well. Thus, how learning opportunities emerged and how they were used by students were analyzed by employing Multimodal Conversation Analysis (See Appendices for Transcript Conventions). Collections of the cases were done for each phenomenon found in the dataset. However, the study is not without limitations because of the video format of the participants; participants in the recordings are seen one by one. In other words, the participant who holds the turn by speaking is seen in the recordings because of speaker mode of the program. So, multimodal actions of nonspeaking participants are not available in this dataset. The

data will be analyzed with this in mind and situations which may create ambiguity will be avoided in the analysis.

Analysis

Learning opportunities, the task provide students are examined through the microanalytic lenses of CA. The data is analyzed in three sub-sections: doing teaching, initiating learning and learning respectively.

Doing Teaching

This section aims to indicate how participants use their resources in meaning making process and to teach words to their peers in the task of computer mediated interaction on individual virtual visits. It was found out that participants used their verbal and embodied resources besides artefacts available for doing teaching practices to be able convey meaning to their peers. I present one representative extract from the data. Before Extract 1 starts, SER takes the turn and starts to give some general information about her visit. The extract starts with her elaboration on her visit by showing a small globe in her hand.

Extract 1

Doing Teaching

```
ELI:
         Ahehe $very beautiful$A
          ^---shows the globe---♠
2
    SER:
          (inaudible) like this (.) but er they
3
           ♠ were not (.) color(.) ♠ful
           ♦---rolls her hands---♠
4
    ELI:
          huh
5
          and they were er hemispheres (0.6) ♠umm i don't know♠
    SER:
                                              ♠scratches her head♠
 6
          it is true er but i will say er A hemispheres (0.4) erm
                                           ♠ shows the globe--->
 7
           ♠(2.0) like umm (1.0) half ♠spheres
           ♠draws an imaginary line on the globe♠figl
           (0.5)
9
    GAM:
          huh
10
           (0.8)
```

In line 1, ELI orients to what SER shows but SER does not orient to ELI's evaluation and goes on to give information which is maybe because she is aware that they are doing a task and they should achieve what they are expected to do. In other words, she moves forward where she was left and explain what she saw is similar to the globe in her hand in line 2 (like this). In line 4, ELI shows active listenership (Sert, 2019) with a minimal response token (huh huh). SER states that there were hemispheres in line 5 and in the same line, we see her hesitation (umm i don't know) which is reasoned in line 6 (it is true er). Then in line 6, she utters hemisphere again which accompanied by her showing the globe one more time and followed by pause of 0.4 length and hesitation marker (erm) and another lengthy pause (2.0) in line 7. After the long pause, she explains the word hemisphere (like umm (1.0) half spheres) in the same line. Moreover, starting from the lengthy silence in line 7 she draws an imaginary line on the globe. Her explanation and embodiment practice show that SER thinks that her peers may not know the work hemisphere and she uses her verbal and embodied resources, and artefact she holds in her hand to explain the meaning of hemisphere. By doing so, she uses all her resources available in meaning making process. Actually, it is similar to practices that a teacher can do in the classroom to teach a word. Besides, after a silence of 0.5 in line 8, GAM shows understanding with a minimal response token in line 9 (huh).

As it was mentioned before, in speaker mode students are seen on the screen one by one and it prevents to make big claims about GAM's situation as her actions are not available for analysis. On the other hand, SER's doing teaching activity is very clear. Therefore, even if I do not have clear evidence if SER's peers knew the meaning of hemisphere before Extract 1 or they learned from SER, it is clear from the extract that SER successfully conveyed the meaning by using her resources. In this sub-section, it is observable that participants themselves undertake doing teaching practice although there is no initiation -as least explicitly- from their peers. Learning opportunities in the task are not limited to these practices, and in the dataset, there are examples of initiation to learn a meaning of a word as well which are presented in the following part.

Initiating Learning

In this part, how students orient this task as a learning opportunity and explicitly initiate learning is portrayed with one representative extract. Students ask meaning of certain words they do not know. This is mostly achieved by "what does x mean?" question format as it can be seen in extract 2. Extract 2 comes from the first week of the task and starts with SER's remark on her visit.

Extract 2

Initiating Learning

```
SER: and (0.5) then two there were sal er *sculptu*
                                                ♠averts her eyes♠
2
          sculptures of er people and ♠other things=♠
                                       ♠rolls her hands♠
3
    GAM:
          =SER\uparrow i have a question
4
          ye [yes
5
    GAM:
             [ummm (1.0) what does your(.)ermm (.) what does (0.2) x
                                   *----averts her gaze-----
6
          ♣sculpture mean♣
          *rolls her hands*
          (1.2)
8
    SER:
          oka:y sculpture means err things (.) made of stone er
9
    GAM:
          huh huh
10
    SER: and still
11
    GAM: huh huh *o:kay okay* i understand
                  *---nods---*
```

In line 1 SER mentions that she saw sculptures. However, she has problem in the pronunciation of the word that she starts to pronounce two times, but she cannot utter the whole word (and (0.5) then two there were sal er \(\strut \sculptu \strut \)). Moreover, she averts her gaze in her second try. In line 2, she solves the problem and utters the word correctly and elaborates on that (sculptures of er people and Aother things=A). Whenever SER completes her sentence, GAM calls SER in line 3 and she states she has a question. After getting approval from SER in line 4 with acknowledgement token, GAM starts her question (what does &your(.)ermm (.)what does (0.2)) accompanied with aversion during troubles in line 5 and she completes her question in line 6 (*sculpture mean*). After GAM's question, we observe a lengthy silence of 1.2 in line 7. The SER takes the turn to answer her peer's question in line 8 and she makes an explanation (oka:y sculpture means err things (.)made of stone er). GAM responds with a minimal response token to show understanding in line 9. However, SER goes on her explanation in line 10 (and steel), too. In line 11, GAM takes the turn again. She responds with a minimal response token and then she claims understanding (huh huh ♣o:kay okay♣ i understand). Her embodied action, nodding, also shows her understanding of the meaning.

It is obvious that students use the task-based activity as an opportunity for learning and they initiate for learning when they need. In the next part how initiation shown here helps students to add new vocabulary to their repertoire is displayed.

Learning

In this sub-section, I portray how a single student, GAM, shows her orientation what her friend, SER, has taught her and how the word sculpture became a part of her repertoire. In extract 2, GAM asks about the meaning of sculpture and she claims understanding

after SER's explanation. Although GAM used the same word for 7 times in three-week period, here I analyze one example in the first week just after SER's teaching. The extract 3 was tracked about 7 minutes after extract 2 and it shows that GAM uses the word sculpture.

Extract 3

Learning

```
GAM: *when (.) i (.) enter the *err inside (.5) umm (.)
1
          #opens hands and moves towards the screen*
          there was information desk (0.5) umm >of course<(.)
          ♣like (.)er ♣every (.) museum (.) should be (0.7)and err
          *rolls right hand*
          some documents (0.3)er about(.) museum (.) for (.) tourists
5
          (1.0) and also:(.)there was a (0.5)antique (0.6)ca:r it (.)
6
          *it's (.)it's *very shiny (.) *clear (1.0) a:nd(0.5) er(.)
          *scratches head*
                                         *rolls hands--->
7
          black color it's cute* (1.2) a:nd.hh err(.) in the
          museum (0.9) er there was ancient (.) ♣items er coins (.)
8
                                                 *shakes her head--->
          plates (.) forks \clubsuit (0.5) and busts (.) statues err (.)umm
10
          ♣ er sculptures♣ maybe (.)[as SER says]
          *-----*fig3
          1=smiles and raises index finger
                                      [hehehe]
11
    SER:
12
          (0.6)
    GAM:
13
          come to every (.) er (.) * every (.) country*
14
                                    *rolls left hand *
```

The extract starts with an extended turn of GAM from line 1 to 10. She describes what she saw from first moment of entrance to the museum. Firstly, she mentions about the information desk in line 2 (there was information desk (0.5) umm >of course<) and line 4 she describes what she saw in the information desk (some documents (0.3) er about (.) museum (.) for (.) tourists). After she describes an antique car she saw in the museum in lines 5-7, she moves on with ancient items she saw in the museum in line 8. Through the lines 8 to 10, she gives examples of ancient items that she saw in the museum such as coins, plates and so on and as the last item she utters sculpture in line 10 (□ er sculptures□ maybe (.) [as SER says]) which accompanied by a smile and embodiment activity as raising index finger. After she utters sculpture, she also points to the resource of this knowledge as SER ((.) [as SER says]). Moreover, we see SER's laughter as a reaction to the word sculpture in line 11 which is overlapped with the last part of GAM's turn in line 10 ([as SER says]). SER's laughter here, overlapping with GAM's pointing her as the source of her knowledge, indicates that she also knows-or understands from GAM's embodiment- that GAM has uttered what SER has taught her.

This extract shows that students in a CMC setting can learn lexicon from each other through initiation for learning or doing teaching practices of their partners and they can add new vocabularies to their repertoire. In this extract-also in the rest of the collection- it is obvious that the word "sculpture" became a part GAM's repertoire following her initiation for learning.

Discussion and Conclusion

With the effects of COVID-19 outbreak on educational practices (Dwivedi et al., 2020; Marinoni et al., 2020; Xie et al., 2020; Yi & Jang, 2020) new challenges have arisen (Marinoni et al., 2020; Skulmowski & Rey, 2020) for both teachers and students. In order to cope with challenges such as being connected, engagement and peer-peer interaction (Skulmowski & Rey, 2020; Xie et al., 2020), the task in the current study was assigned to students, which requires them to interact with their peers on their individual virtual visits through CMC.

Similar to previous studies (Balaman, 2018; Balaman and Sert, 2017; Chapelle, 2009; González-Lloret, 2015; Sert & Balaman, 2018), this study shows that computer mediated peer-peer interaction provided opportunity for L2 lexicon development. The study examined how students extend their repertoire of lexicon and displayed that computer mediated interaction can be a useful tool for learning affordances that students take initiatives when they encounter with an unknown word and negotiate meaning which is the first condition for learning according to Smith (2003). As Smith (2003) argues negotiation of meaning practice emerges when there is nonunderstanding, and we also encounter "What does x mean?" question form, which shows that not only the speaker but also the interlocutor plays a role in maintaining intersubjectivity by taking

initiative for learning, which also shows that students orient this activity as a learning opportunity. Moreover, although there was not any explicit initiation from their peers, they performed some doing teaching practices, which is in line with remarks of Kim (2017) that students may have predictions about future challenges and to maintain intersubjectivity they take some precautions by doing teaching practices. All in all, the micro-analytic examination of the data showed that students-oriented computer-mediated interactions as a learning opportunity for themselves and for their peers. Accordingly, they initiated learning or did teaching in lexicon level.

In addition to initiation for learning and doing teaching, the study also displays how learning occurs in situ. Extract 2 and extract 3 provide evidence of how initiation results in learning (Kardaş İşler et al., 2019) at least locally. After initiation for the word "sculpture", we see GAM uses the word when she takes the turn to share her experience in the same week and she uses the same word for six times in the following two weeks. Thus, the study shows how initiation for learning ended up with not only learning locally and but also in the long-term as "sculpture" became a part of GAM's repertoire according to her displayed epistemic status in and through interaction (Kim, 2017).

Although the study does not inform us about comparison of classroom interaction and peer-peer interaction out of the classroom (Fernândez-Garcia & Martinez-Arbelaiz, 2002), the interaction and learning affordances were not similar to classroom interaction (Cancino, 2015; Kardaş-İşler & Can-Daşkın, 2020; Lee 2006, 2007; Mori, 2004; Walsh 2002, 2006; Waring 2008; 2009; 2011). That is to say, it was similar to a real-life conversation (Gonzalez-Lloret, 2011) in which power distribution is equal and there is a dynamic role distribution among peers depending on the context.

Unlike what Mori (2004) observed in peer-peer interaction in classroom, and in contrast to the suggestion of González-Lloret (2003) to pair participants from different L1 backgrounds, the participants in this study did not use any L1 although they are coming from same L1 background and they were not instructed for L2 use only. L2 only interaction of the participants may result from the idea that every second of interaction is available to the teacher and they avoid using it unlike classroom interaction. Also, this practice can be attributed to proficiency level of students that in lower proficiency levels, L1 can be used as a resource as their repertoires in L2 are limited. Therefore, examining how lower-level students implement tasks with peers from the same L1 background merits further study.

All in all, it is obvious that participants in this study make an effort to maintain intersubjectivity which generated doing teaching, initiating for learning and learning practices. The results show that the peer-peer computer mediated interaction enhanced the participants' L2 repertoire (Gonzalez-Lloret, 2011) or provided a setting for learning. The study contributes to the field with an in-depth examination of peer-peer interaction out of the classroom (Sert & Seedhouse, 2011). In addition to other domains of research (Fuente, 2003; Smith, 2004), conversation analytic result of peer-peer computer mediated interaction showed how participants orient to the interaction as a learning opportunity and how learning emerges. Moreover, distance education and

hybrid classes seem to be promising for the future by means of the affordances they provide and extended perception of students and teachers during COVID-19 pandemic (Xie et al., 2020) although the extent to what degree online classes will be in use in future is unclear for now (Skulmowski & Rey, 2020). Thus, it is compatible to integrate CMC to distance education and hybrid classes in the next normal era (Xie et al., 2020) as it is obvious that peer-peer computer mediated interaction provides learning affordances and enables learning which suggests that tasks which require peer-peer interaction out of classroom can be integrated to course design (Reichert & Liebscher, 2012).

Overall, the study offers to integrate CMC while transferring the educational practices to online and hybrid classes, and to examine if/how it facilitates learning for further studies as online and hybrid classes, which have gained popularity following the outbreak of COVID-19 and the developments of technology, are to keep their places. Another pedagogical implication the study concludes is giving tasks in which students can use similar vocabularies through CMC may help the students to recall and use them in the long-term. Further studies might triangulate the findings with stimulated recall or through more longitudinal CA investigations. How CMC is shaped across different proficiency levels also merits further study.

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Appendices

Jefferson (2004) Transcription Convention

[]	Overlapping utterances – (beginning [) and (end])
=	Contiguous utterances (or continuation of the same turn)
(0.4)	Represent the tenths of a second between utterances
(.)	Represents a micro-pause (1 tenth of a second or less)
:	Elongation (more colons demonstrate longer stretches of sound)
•	Fall in pitch at the end of an utterance
-	An abrupt stop in articulation
?	Rising in pitch at utterance end (not necessarily a question)
CAPITAL	Loud/forte speech
	Underline letters/words indicate accentuation
$\uparrow\downarrow$	Marked upstep/downstep in intonation
0 0	Surrounds talk that is quieter
hhh	Exhalations
.hhh	Inhalations
he or ha	Laugh particle
(hhh)	Laughter within a word (can also represent audible aspirations)
><	Surrounds talk that is spoken faster
<>	Surrounds talk that is spoken slower
(())	Analyst notes
()	Approximations of what is heard
\$\$	Surrounds 'smile' voice

Mondada (2018) Multimodal Transcription Convention

* *	Gestures and descriptions of embodied actions are delimited between
++	two identical symbols (one symbol per participant)
ΔΔ	and are synchronized with corresponding stretches of talk.
*>	The action described continues across subsequent lines
>*	until the same symbol is reached.
>>	The action described begins before the excerpt's beginning.
>>	The action described continues after the excerpt's end.
•••••	Action's preparation.
	Action's apex is reached and maintained.
,,,,,	Action's retraction.
ric	Participant doing the embodied action is identified when (s)he is not the
	speaker.
fig	The exact moment at which a screen shot has been taken
#	is indicated with a specific symbol showing its position within the turn at talk.

Covid-19 Salgını Esnasinda Öğrenciler Arası Bilgisayar Temelli İletişimde Kelime Öğrenme Olanakları: Öğretme, Öğrenmeyi Başlatma ve Öğrenme

Öz

 $COVID-19\ salgını\ fiziki\ eğitimi\ tamamen\ internet\ temelli\ eğitime\ taşıyarak\ eğitim\ etkinliklerini\ değiştirmiştir.$ Bu sayede, pandemi öncesinde hali hazırda hız kazanmış olan teknoloji entegrasyonu eğitim faaliyetlerini devam ettirmedeki tek çözüm haline geldi. Öğrencilerin eğitim uygulamalarından en iyi şekilde yararlanabilmeleri için çevrimiçi platformlarda birbirleriyle iletişim kurmaları ve akranlarından öğrenmeleri konusu özellikle COVID-19'un patlak vermesinden sonra ön plana çıkmıştır. Bu dönem aynı zamanda video aracılı görev tabanlı iletişimde akran-akran etkileşimi de dahil olmak üzere eğitimdeki çeşitli uygulamalarda teknoloji entegrasyonunun incelenmesinin önemini gündeme getirdi/arttırdı. Mevcut çalışma, teknoloji entegrasyonunun bir boyutuna ışık tutmak amacıyla data olarak COVID-19 salgını esnasında bir öğrenci grubunun bireysel sanal geziler üzerine üç haftalık etkileşiminin video kaydını kullanmaktadır. Öğrenci etkileşiminden gelen video kayıtları konuşma çözümlemesinin (KC) mikro analitik lensleri kullanılarak analiz edilmiştir. Bu çalışma, sınıf dışında akran-akran etkileşiminin derinlemesine incelenmesiyle alana katkı sağlamaktadır. Veri bireysel sanal şehir turları üzerine olan video konferanslarında katılımcıların anlam müzakeresi yoluyla kelime öğretme, kelime öğrenmesini başlatma ve öğrenmeyi gerçekleştirdiklerini göstermiştir. Bu nedenle, akran-akran bilgisayar aracılı etkileşimin öğrenme firsatları ve öğrenmeyi sağladığı açıktır ve bu sınıf dışında akran-akran etkileşimi gerektiren görevlerin ders tasarımına entegre edilebileceğini göstermektedir.

Anahtar Kelimeler: Öğrenme olanakları, akran-akran etkileşimi, video konferans, COVID-19, Bilgisayar temelli etkileşim, kelime

Fear, Despair, Love, Hate, Peace: Riding the COVID-19 Rollercoaster

Gökçen Gök Kaça

Abstract

In this autoethnographic self-study, the author explores the emotional challenges she encountered when teaching online during the COVID-19 outbreak and their impacts on her language teacher identity. Reflecting on her journey in the 2020-2021 academic year, the author discusses her shifting emotions and teacher identity transformation under five chronological but not linear stages: Expecting the Unexpected, Sink or Swim, Am I loving it?, Something is definitely wrong with my teaching and Everybody is right, everyone is a victim. The study highlights the role of democratic institutions in empowering teachers undertaking emotional labor in an effort to enhance the quality of education. It also calls for more self-reflexive opportunities for teachers to help them better make sense of and negotiate emotional challenges and exercise agency.

Keywords: autoethnography, teacher emotions, emotional labor, online teaching during COVID-19 pandemic

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Introduction

On March 10, 2020 both students and staff in our school received an email from the Campus President's Office announcing that due to the actions taken by The National Ministry of Education and Culture for coronavirus prevention, all in-class face-to-face educational activities would be suspended until March 15, Sunday and that all educational activities would be continued online. Up until that very announcement, in our eyes, COVID-19 was some exotic disease that we saw on the news, something far away from our island. In a matter of minutes, however, it was no longer just a part of small talk, and it became very real, causing our classes to be suddenly dismissed in the middle of the day. On that day, we made some jokes together with our students and said goodbye to each other naively believing that we would meet the next Monday. It has been almost two years now, and that Monday has yet to come...

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The school closures caused by the novel COVID-19 pandemic brought a new wave in teaching and learning both locally and globally. Many teachers had to plunge into new technologies, various online platforms and online education policies without having sufficient time and opportunity to get oriented (Bozkurt & Sharma, 2020; Gao & Zhang, 2020), and they had to employ a new form of pedagogy that posed unique challenges. They were expected to set up classes in the virtual world, keep contact with students online, move teaching content and materials to online space, engage students in tasks and activities while navigating the requisite software within no time (Allen et al., 2020). The new normal also required changes to traditional ways of managing classrooms, organizing teaching tasks, providing feedback, motivating students and making assessments (Sun & Liu, 2021) and English language teaching (ELT) had its share of challenges (Atmojo & Nugroho, 2020).

From the onset of the COVID-19 pandemic, various ELT studies have been conducted focusing on different aspects of online teaching. These mainly investigate the effectiveness of certain online teaching platforms/tools (e.g., Khafaga, 2021; Kholis, 2020), language development (Karataş & Tuncer, 2020), assessment (e.g., Forrester, 2020) and learner perceptions (e.g., Huang et al., 2021; Novikov, 2020) and challenges (e.g., Ariyanti, 2020; Nartiningrum & Nugroho, 2020). Studies focusing on teachers, on the other hand, mainly deal with their perceptions of online teaching (e.g., Chiatoh & Chia, 2020; Gao & Zhang, 2020; Moser et al., 2021) and teaching practices and challenges (e.g., Bailey & Lee, 2020; Yi & Jang, 2020) as well as their coping strategies (e.g., MacIntyre et al., 2020). Although previous research has established that teachers now have to keep teaching in more fragile and unstable educational contexts (Flores & Swennen, 2020), very little is known about teacher emotions and their impacts on teacher identity and in-class experiences during this unprecedented period.

As an English language teacher, my interest in teacher emotion goes back to my master studies where I was introduced to the sociocultural perspective on learning and teaching, critical pedagogy and critically-oriented paradigms such as Global Englishes as well as the study of teacher cognition. This interest kept on growing with my exposure to various research on teacher identity (e.g., De Costa & Norton, 2017; Duff & Uchida, 1997; Tsui, 2007). It is now well established from a variety of studies that teacher identity shapes and is shaped by teachers' feelings about their students, the teaching context, the effectiveness of their own practices and themselves as teachers (Zembylas, 2003). That is, emotions are the "glue of identity" as they provide meaning to experiences (Haviland & Kahlbaugh, 1993, p. 301). As such, they play a crucial role in exploring what makes a good teacher and good teaching.

Thanks to the emotional/affective turn in applied linguistics and TESOL (Pavlenko, 2013; White, 2018), there has been a growing interest in teacher emotion studies in the last 20 years. Shifting the question from what emotions are to what they do, these studies regard emotions not only cognitive but also sociocultural and political (Benesh, 2017; Loh & Liew, 2016). They have shown that emotions are constructed at personal, institutional and societal levels (Wolff & De Costa, 2017). Since teaching online during the COVID-19 pandemic gave rise to unique conditions, which may have

required teachers to renegotiate and reconceptualize their teaching values, their commitments and practices for this new modality (Jones & Kessler, 2020), documenting language teachers' emotional experiences during this transition warrants attention. By adopting an underexplored methodology, namely autoethnography, (De Costa et al., 2019), this study aims to contribute to filling this gap in the literature.

Literature Review

Learning and Teaching English Online during COVID-19 Pandemic

Transitioning to online teaching amid COVID-19 pandemic has had certain ramifications for both students and teachers. Many students lost their motivation and interest towards live lessons. With their cameras off, they were less active in online activities (Karataş & Tuncer, 2020). This mainly resulted from language barriers, lack of collaboration with peers, online learning fatigue and inconsistencies between teaching modalities and approaches (Chiatoh & Chia, 2020; Novikov, 2020). Some students also struggled with limited ICT skills and unstable internet connection (Atmojo & Nugroho, 2020). On top of these, lack of Internet or device access prevented certain groups of students' abilities to receive education, creating further inequalities (UNESCO, 2020).

Teachers faced certain challenges due to the abrupt transition to online education, too. Many experienced worry and anxiety while trying to keep up with this new and unfamiliar form of teaching (Gao & Zhang, 2020). They reported heavy workload and irregular hours as the main stressors (MacIntyre et al., 2020). Online lessons took longer due to connection problems, and teacher talk increased as there was less interaction among students (Karataş & Tuncer, 2020). Moreover, those with low technological literacy struggled even more and had difficulties in managing online platforms (Bailey & Lee, 2020; Huang et al., 2021). Although many were not given any prior training for online education, they were expected to deliver effective synchronous/asynchronous lessons. This caused further stress among them and created self-doubts about their professional abilities (MacIntyre et al., 2020; Moser et al., 2021). Overall, the rapid conversion to online education blurred the boundaries between work and home, and combined with teachers' health-related concerns for themselves and their families, had severe impacts on their wellbeing (MacIntyre et al., 2020).

On the other hand, as the literature suggests, online teaching afforded various opportunities for professional development. Despite the initial challenges, teachers were quick in adapting themselves to the new pedagogy. Those given the opportunity benefited from various professional development activities, which resulted in enhanced professional competence (Gautam, 2020). The transition also increased teachers' digital literacy skills as they ended up using multiple learning management systems, online lecturing tools and instructional software to conduct their lessons (Fitria, 2020). This way, they started to see new possibilities for meaningful instruction (Yi & Jang, 2020) and rediscovered themselves as teachers (Farrell & Stanclick, 2021).

Teacher Identity

First with the social turn in second language acquisition (Block, 2003; Firth & Wagner 1997), then through the recognition of learner identity in language acquisition (Peirce, 1995), language learning and teaching began to be seen as an identity negotiation, a process during which "the teacher too was not a neutral player in the classroom, but on the contrary, her positionality in relation to her students, and to the broader context in which the teacher was situated was vital" (Varghese et al., 2005, p. 22). This inevitably resulted in a keen interest in teacher identity, which has maintained an exponential growth in literature since 2010. Research on this relatively new field has indicated that understanding complexities of language teacher identity is crucial as it has implications for teachers' professional development, pedagogical decisions and practices, interactions with their peers and students as well as their negotiations with power and ideologies (Kayi-Aydar, 2019).

Earlier studies were primarily on teacher's linguistic identities focusing mostly on the native and non-native speaker dichotomy, which yielded valuable insights into the issues of politics, power and inequality in the field of ELT (e.g., Golombek & Jordan, 2005; Pavlenko, 2003). These were followed by research on sociocultural identities of language teachers, which viewed identity development as a socially and contextually informed dialogic process (e.g., Kanno & Stuart, 2011; Tsui, 2007; Varghese et al., 2005). Finally, with the recognition of diverse and marginalized identities such as gender, race and ethnicity, the most recent line of research has become increasingly interested in the interplay between teacher identities and agency as well as teacher identities and emotions (e.g., De Costa & Norton, 2017; Kayi-Aydar, 2015). Drawing from post-structural approaches (Pavlenko, 2002), these studies have drawn attention to the complex, multiple and fluid nature of identity and yielded a productive research base for the investigation of how identities are shaped in the contexts of competing discourses and ideologies.

Taken together, identity research in ELT has established that language learning and teaching is a process that extends beyond linguistic performance that is measured against idealized native speaker norms. Rather, it is a process that encompasses a multitude of social, environmental and affective factors both for the learner and the teacher.

Teacher Emotion

Identity and emotions are inextricably interwoven. While emotions can inform and define teachers' identities, identity can in turn guide and shape teachers' emotional decisions and reactions (Zembylas, 2005). This bidirectional relationship has implications for teachers' instructional practices, their relationships with their students and others as well as their pedagogical transformation.

With insight afforded by sociocultural theory and positive psychology in language teacher emotion research, emotions are now viewed as socially and politically constructed "complex and multilayered experiences" (Zembylas, 2005, p. 18) rather than cognitive/psychological traits only. As such, they are not seen as states but processes which are shaped by various social, institutional and personal forces. Accordingly, the focus of research has recently shifted from teacher emotional appraisal and negative emotions such as anxiety and teacher burnout to post-structural lenses exploring teacher emotions as agency. One key theme emerged from such understanding is emotional labor (Benesh, 2013; Zembylas, 2005), which regard emotions as sources of teacher activism in response to tensions teachers experience between how they feel and how they are expected to feel. In other words, emotions act as signals indicating teachers if certain work situations are favorable or not (Benesh, 2018). This paved the way for studies embracing both negative and positive emotions to be able to foster teacher reflexivity and rewarding language teaching environments.

Previous Research on Teacher Education

Studies on language teacher emotion adopting post-structural lenses have revealed indepth understanding and professional transformations on the part of the participant teachers in terms of their instructional practices and professional identities. The studies all adopted a qualitative approach, and they were conducted in secondary school and university settings. The ultimate aim of these studies was to gain insights into the interplay between teacher emotions and teacher identity.

Loh and Liew (2016) explored emotional experiences of secondary school English teachers in Singapore. Using interviews and personal narratives, they found that the context-specific factors such as performance-based and exam-oriented teaching environment contributed to their emotional labor, leading them to adapt their teaching practices and reevaluate their expectations.

Focusing on the students rather than the teaching of English as the main catalyst for emotional labor, Song (2016) investigated Korean teachers' emotional reactions to teaching a group of study abroad returnee students. The participants' secret stories, as revealed by the interviews, indicated that they felt emotional discomfort in terms of their own competence when teaching such students. Although they initially argued that these students lacked the desirable English skills within the grammar and test oriented system, they later realized that this was, in fact, their excuse to maintain their own authority as all-knowing teachers. This awareness led to a fundamental change in their understanding of a teacher and teaching.

Similarly, Wolff and De Costa (2017) investigated the interplay between emotional labor and identity development of a non-native English-speaking teacher in a graduate teacher education program in the USA. Data from interviews, observations and journal entries showed that their participant developed a tailor-made pedagogy to meet the needs of her new student audience as she confronted and negotiated with her emotional challenges in her first year in the training program.

Finally, Benesh (2018) reported how English language teachers working at a US university context used emotions as agency and resisted a school policy on plagiarism by developing alternative pedagogies. Their emotional labor caused by the tension between what they felt obliged to do and what they felt they should do led to teacher activism, which further called for a more participatory approach in policy-making in institutions.

Language Teacher Emotion During COVID-19 Pandemic

So far, there has been a small number of studies focusing on language teacher emotion during COVID-19 pandemic. Among these, very few explore emotion from a post-structuralist lens. This section limits itself to those considering the link between the self and the social, cultural and political structures of school contexts when reporting language teachers' emotional experiences in various online teaching environments.

In their autoethnographic self-study, Liu, Yuang and Wang (2021) discussed a wide host of emotions, both positive and negative, experienced by the first author during her online teaching at a higher education institution in Wuhan, China. Using a personal diary as the main data source, the study revealed that the teacher's renegotiation with different emotional rules (implicit or explicit guidelines followed by teachers to evaluate their feelings in a situation) enabled her to improve her relationships with her students and colleagues as well as her attitude towards technology. Thus, the results highlighted the importance of channeling positive emotions to online teaching while embracing vulnerabilities and imperfections with students, colleagues and personal self.

Pham and Phan (2021), on the other hand, examined emotional orientations of seven Vietnamese higher education language teachers and their emotional responses in online teaching environments. Their interviews revealed various negative feelings involving confusion, frustration, and exhaustion, especially at the onset of their online teaching experience. In time, teachers started to develop more positive emotions as they adapted to the new mode of instruction. The way teachers regulated their emotions also varied. Some opted for telling their emotions freely in synchronous sessions to foster empathy with students whereas others tended to hide their negative emotions to maintain professionalism and objectivity. The authors attributed these varying opinions and behaviors to social and power relations embedded in their school culture, which further suggested that online instruction was no different from face-to-face education in terms of displaying teachers' emotional experiences in an intense and extensive manner.

Finally, Farrell (2021) explored adaptation challenges of four novice English as a foreign language (EFL) teachers in Costa Rica as they suddenly switched to online instruction. Focusing on the role of emotions in teacher reflexivity, the study identified the following repeated words in teachers' verbal reflections: exhausting, frustrating, angry, struggle, uncertainty and worry. The study called for the need for teachers to engage in reflective practices interviews and observations in this case) to discover more about themselves and better understand the challenges and emotions they felt so that they could successfully adapt themselves to online teaching.

The Study

Building on the positive psychology turn in language teacher emotion research and the existing studies, this self-study conceptualizes teacher emotions as dynamic and complex processes deeply intertwined with teachers' professional identities, which are shaped by social, political and contextual structures. It specifically explores the emotional experiences of an EFL teacher at a university context with respect to teaching online amid COVID-19 pandemic. This study is significant in three ways. First, it investigates how teacher emotions are mediated in an online environment. Since this mode of teaching has its unique conditions in terms of interaction, instructional pedagogies and workload demands, different emotional reactions might emerge in response to this peculiar teaching environment. Second, this study contributes to the existing literature on teacher emotions by making use of an underexplored methodology, autoethnography, to collect and present data. Finally, drawing on post-structural approach to emotions, the study can shed light on the interplay between teachers' emotions and their impacts on teachers' identity by discussing how an English teacher responded to emotional labor in her online classroom practices, which has important implications for teacher educators and policy-makers for the improvement of pre-service teacher education.

The two research questions that guided this study are:

- 1. What were the emotional challenges an English language teacher encountered during the COVID-19 outbreak?
- 2. What are their impacts on her language teacher identity and online classroom practices?

Methodology

The Setting

This study presents my online teaching experiences at a reputable English-medium university in Northern Cyprus amid COVID-19 pandemic. The university serves Turkish and Turkish-Cypriot students as well as students from the international community. At the time of the study, I was working at the English Preparatory Program (EPP), which aims to equip students with the necessary language skills and prepare them for their English-medium academic studies. The study presents my emotional challenges and their impact on my professional identity and classroom experiences in the 2020-2021 academic year.

Research Design

Following De Costa et al.'s (2019) call, I adopted autoethnography as a research method because I believe that through my personal narrative story, I could talk about teacher

emotions in a candid and in-depth manner with sufficient details, hopefully yielding valuable insight into language teacher emotions research.

Ellis, Adams and Bochner (2011) defines autoethnography as "an approach to research and writing that seeks to describe and systematically analyze (graphy) personal experience (auto) in order to understand cultural experience (ethno)" (p. 273). Since it mainly deals with "the cultural connection between the self and the others representing the society" this research method differs from other self-narrative writings such as autobiography and memoir (Chang, 2007, p. 207). That is, autoethnohgraphers write in a highly personalized style drawing on their experiences, thoughts and interpretations, yet they need to look at their autobiographical data with "critical, analytical, and interpretive eyes to detect cultural undertones of what is recalled, observed, and told of them" (Chang, 2007, p. 209) The "convincing I", as Spry (2001) puts it, is the key element in ethnographic texts since "good autoethnography is not simply a confessional tale of self-renewal; it is a provocative weave of story and theory" (p. 713).

Autoethnography research, as some scholars suggest, is not without its downsides (e.g., Wall, 2008). Chang (2008, p. 54) summarized the five potential pitfalls of this type of research:

(1) excessive focus on self in isolation of others; (2) overemphasis on narration rather than analysis and cultural interpretation; (3) exclusive reliance on personal memory and recalling as a data source; (4) negligence of ethical standards regarding others in self-narratives; and (5) inappropriate application of the label "autoethnography."

Despite these disadvantages, autoethnography has become a popular methodology in language studies in the past decade particularly due to the increasing interest in different strands of critical applied linguistics research (Yazan et al., 2020). Aiming to contribute to this emerging body of research and overcome possible limitations present in autoethnography, in this article, I acknowledge that my perspectives and experiences are shaped locally and globally and influenced by my personality, education and workplace as well as formal and informal interactions with my colleagues and students. Yet, I believe that when supported by scholarship and empirical research, telling my own story and sharing my experiences can empower not only myself as a teacher by making me an insider in the research and enabling my own voice to be heard, but also others hopefully by helping them reflect on and empathize with my narratives.

Data Sources and Analysis

When constructing my personal narrative, I utilized my text messages, personal comments on shared documents, email correspondences and voice recordings as well as meeting minutes. Detailed description of these tools together with the interlocutors involved is provided in the table below:

Table 1Data Collected for the Study

Type of Data	Content	Interlocutors
Text Messages	informal messages sent to colleagues from October 2020 to May	Colleague 1
	2021	Colleague 2
Group Messages	texts among instructors teaching the same level as well as the group	Colleague 4
	leader encompassing the period between October 2020 and February	
	2021	
Personal	my personal reflections of our online education experience as an	-
Comments	institution on a collaborating tool (December 15, 2020)	
Email	official emails sent by the institution and administration regarding	-
Correspondences	online education/policies/announcements from September 2020 to	
	May 2021	
Voice Recordings	Informal recordings sent to colleagues during 2020-2021 academic	Colleague 1
	year as well as one collected for a research study conducted in May	Colleague 2
	2021	Colleague 3
Meeting Minutes	personal notes taken during general staff meetings and group (level)	
	meetings in 2020-2021 academic year	-

Interlocutors listed in the table were all teaching online at the time of the study. They are all experienced teachers working at the context of the study for more than 6 years. They are also very close friends who I trust. Therefore, I was quite comfortable when sharing my thoughts and feelings with them using the mediums above. At the time of the study, Colleague 1 (C1) and I were teaching the same class. Colleague 2 (C2) was teaching at a different level, but we were in close contact throughout our online teaching experience. Colleague 3 also had a class from a different level. He was conducting a research study on online education experiences of teachers at the time, and I was one of his participants. Finally, Colleague 4 (C4) was my group (level) leader, who was responsible for addressing our needs and concerns regarding teaching programs and tools.

When analyzing the data, I used a combination of inductive and deductive coding approaches (Fereday & Muir-Cochrane, 2006). First, I carefully read my data tools to re-remember my experiences that pertain to emotional challenges I experienced as a language teacher during COVID-19 outbreak, and I took some notes. In the second round of my reading, I selected certain epiphanies (Bochner & Ellis 1992) in which I discerned salient patterns of different emotional states through open coding. Then, I put these episodes into a chronological order and organized them under emerging themes. I also had some informal talks with my colleagues about the episodes to better recall my experiences and interpret them, which helped me see how I made sense of these experiences in the first place as suggested by Ellis et al. (2011). After I narrowed my data down to five main stages, I wrote a narrative account of each stage, engaging in critical and emotional self-inquiry and self-reflection (Anderson, 2006). Finally, I analyzed each narrative by comparing and contrasting them against the existing research on teacher emotions and identity studies as well as studies on online teaching and

learning during COVID-19 pandemic to contextualize my personal experience within the broader scholarly literature.

Results

Expecting the Unexpected

After the sudden school closure in March 2020, we first taught asynchronously (over Google Classroom, G-Suite tools, and other AI assisted tools) for some time, and then started live sessions towards the end of the semester. The synchronous sessions (over LMS) were held on three days of the week and supported by office hours on the remaining days. This whole emergency remote teaching experience (from March to June 2020) was not something I would describe with negative feelings. On the contrary, I saw this half-term experience as an opportunity that I could use to improve myself in the integration of technology into language education, which I always intended to focus on one day but always postponed. There were lots of "aha" moments when I uttered sentences like "Ha there is such a platform, waow what a brilliant app, or Aha I learnt one more thing today." I remember feeling quite happy at the time thinking that I improved a lot professionally. I was also quite excited about combining what I learnt with my in-class teaching repertoire when everything would get back to normal.

2020-2021 academic year, however, started with a dramatic announcement. On September 2, we were informed that we would continue teaching online. This announcement meant that our online education adventure, which we thought would end soon, now became the only means to practice our profession. Shaken by this reality, we received another email saying that our program and syllabus would completely be based on a variety of instructional software, some of which were AI-powered. That long email was full of links and encouraging words that aimed to make us feel that we would take advantage of this new journey. Yet, what I remember from that day was the fact that I had felt lost and alarmed for the first time since the start of the pandemic.

The semester would start on October 12, and we got the news about our "virtual coursebook" in a timely manner in September, but we were able to receive training on the other two platforms that we would use for reading and writing skills, including the main instructional software only six days before classes commenced. The training sessions did not go beyond the tutorials or documents that had already been shared by email before. Since we did not have any knowledge of the program and syllabus at the time, we did not understand how the platforms would be integrated into the curriculum. For example, we did not know if certain aspects of the tools would be part of synchronous or asynchronous instruction. Similarly, we had no idea as to how they would be used for online performance evaluation. Therefore, to me, the information presented for the overall design of the whole program was rather limited and superficial. I found the training session for the main platform particularly confusing. This tool was originally designed for one-to-one ESL (English as a second language) classes, and at the end of the session, I was not sure how I would use it synchronously

with 20 students in front of me. Overall, the training sessions created new questions rather than answers.

After the general staff meeting on October 9, I only knew two things for certain: my class level and my teaching partner. We texted right after the meeting as both of us were worried about the fact that we still had no clue about how we would use the online tool. I remember feeling a little relieved after seeing that my colleague had similar concerns. The next day, I sent her the following voice recording: Obviously, there won't be a sample lesson session for the platform. Shall we meet on Saturday over Webex? I really do not want to go to the class without understanding the platform. I do not want to lose face. (October 10, 2020, Voice Recording sent to C1)

We had a 2-hour meeting over Webex the next day during which we went over our meeting notes, tried out the online tools and discussed what we had gathered from the previous meetings and training sessions. We also tried to grasp how to integrate the main teaching platform with online meeting platforms to be able to finally see how we would teach 20 people synchronously over them. Yet, even after watching more than 20 tutorials over the whole weekend, this still remained a mystery to us until the very first day of our classes.

As such, right before the semester, negative feelings like fear and discomfort were dominant. In line with the literature (Gao & Zhang, 2020; MacIntyre et al., 2020), I was caught off guard due to the abrupt shift to online teaching. Similar to the participants of Pham and Phan (2021) and Farrell (2021), I was not properly trained for the new platforms to be used for the execution of the lessons. As a result, I felt lost, distressed and overwhelmed by the uncertainties this new mode of teaching brought.

Sink or Swim

It turned out that those days were good days. With the start of the classes, physical fatigue was added to the pre-existing mental fatigue. Online education was a disaster for someone like me who did not leave the table before the job was done. The problem here was that the job was never completely done. After teaching four 50-minute lessons consecutively each day, I would spend hours in front of the computer reading emails, checking homework, giving feedback, preparing lessons or navigating the platforms. I also suffered from the challenges caused by the nature of online communication. During the lessons, I ended up constantly repeating myself for fear of not reaching out to my students, and this increased teacher talking time to a great extent, as also reported by Karataş and Tuncer (2020). Within a couple of weeks, my body started to fail me. I had pain, stiffness, numbness all over my back, my neck, my shoulders, my arms and legs. Here are a couple of excerpts from text messages and voice recordings I sent to my teaching partner and a colleague in the first two weeks:

Don't ask. I look at the world with empty eyes. (October 14, 2020, Text message sent to C2)

I feel like I am dying and all I did was just check homework. (October 15, 2020, Voice Recording sent to C1)

I am crying inside. (October 19, 2020, Text Message sent to C1)

I feel flames all around my neck. We will all develop neck hernias by the end of the semester. (October 23, 2020, Voice Recording sent to C2)

I will go blind from reading emails. I am tired of learning something new. (October 25, 2020, Text message sent to C1)

In time, I learned the hard way that the work I started might not be finished and that was totally okay since I would still work in the evening. I started to listen to my body and gave breaks on a regular basis. I even set alarms to remember that. Yet, there were certain things that I could not sort out on my own. Reflecting back on the beginning of the semester, here is what I said to C3:

We were expected to do a lot in a very short time. I felt like we were thrown into the ocean, but were not given a life jacket. And we were left alone, frankly. (May 26, 2021 Voice Recording)

Another cause of frustration was that we were expected to evaluate and assess student performance online just as we did during face-to-face education, using the same components and procedures. Speaking assessments, writing portfolio procedures, homework assignments and giving individualized student feedback were all part of the curriculum in addition to formal assessment tools. The main problem was not to implement these of course. It was that the platforms used as part of the curriculum were not suitable for the purpose and application of these components. Here is an example below where I complained about the portfolio procedure to our group leader over our Whatsapp group:

I still do not know why we had to include student writings over ... (name of the platform) in the writing portfolio. The tasks of that platform are not synchronized with the curriculum. Students see prompts with unfamiliar grammar structures and have to write paragraphs using them. They end up submitting paragraphs that they did not themselves write. (October 27, 2020, Text Message sent to C4)

I also had concerns about the reading and vocabulary teaching and testing procedures. Our online reading platform, to me, was not enough on its own considering how we tested our students. For example, we had referencing and guessing vocabulary sections in online exams just as we did during face-to-face instruction, but these were the skills that we taught using our books before we tested them back then. With our new platform, that was not the case. Similarly, online exams had gap-fill vocabulary questions before we covered understanding parts of speech in classes.

The counterproductive homework checking procedure was also an issue. We were expected to review each and every student's homework assignments from the main

platform by clicking on their submissions separately (31 students in total for me) every day and correct their mistakes, which was a huge waste of time for me. I spent hours just checking them each day, finding myself in tears a couple of times until I sent a message to our group leader saying that I could not continue doing this.

Due to the heavy workload, working in the evening was an everyday practice for me. To make things even more ironic, we were invited to a care and share session organized by our professional development unit on "work-life balance" at 6 pm. I had to follow this meeting in the kitchen cooking dinner. The meeting was the first and last professional development unit meeting of the whole academic year. I knew that no one wanted to leave us alone, and the meetings may have gained a new meaning amid all the workload, but the source of the helplessness I felt in my own world was a bit of this disconnection with my colleagues. Because I could not get together with my colleagues and share with them as much as I used to, I started to feel that whatever problems I had, I was the only one experiencing them. Little break time chats, visiting offices or casual talks in the kitchen were not a part of the job anymore. Without these, I had no means that could show me that I was not alone having problems on a typical work day.

Looking back, I realized that increased workload and irregular work hours during online education led me to develop certain negative feelings like fatigue, helplessness and frustration, as also indicated by previous research (e.g., MacIntyre et al., 2020). I also experienced intense emotional labor resulting from the mismatches between the materials/tools and student assessment/evaluation. Compared to face-to-face education, I had to spend more time figuring out those mismatches, designing lessons, preparing materials and giving feedback to student work accordingly, which negatively affected my overall perception of this new teaching territory.

Am I Loving It?

Online education had more than blood, toil, tears and sweat of course. My long-time procrastination of delving into the instructional tech tools came to an end with this new mode of teaching. In time, I gained more familiarity with the platforms and AI-assisted tools in our program and became more confident in designing and conducting lessons. This encouraged me to explore new methodologies or practices when teaching online. For example, I learned to give technology-enhanced feedback using screencasting. This gave me the chance to interact with my students in a different mode as a teacher and also eased my writing feedback duties, which became even more frustrating in online education. I incorporated the writing tasks from the main platform into my teaching more as I found them more useful than those in the AI-assisted reading platform. By assigning these tasks as asynchronous group or pair-work activities, I felt more satisfied as a teacher in helping my students improve their writing skills. Positive feedback I got from my students further motivated me to make use of this practice and way of giving feedback more.

I also started to actively use different features of online lecturing tools such as breakout rooms and online polls. I sometimes supported my lesson with Google Suite

products (e.g., Google forms) to bring variety into the class. With these tools and applications, I was able to enhance interaction in my lessons. Moreover, I had a chance to try the methods that I would probably delay using in face-to-face education for fear of not being able to manage them properly. As such, I added new skills to my repertoire when teaching online.

Another factor that made my online education experience more bearable was that the feedback I gave was listened to by the administration and necessary arrangements were made. One of our biggest problems, overambitious syllabus, became more manageable as, in line with our demands, some lessons were either removed from the program or made optional. As such, it became easier to keep up with the program. In addition, based on our feedback, the writing portfolio procedure was adapted, and the tasks from our AI-assisted tools were excluded from the evaluation. This "small victory" had huge impacts on the overall wellbeing of myself and other teachers considering the frustrations the whole process had caused.

I pulled off another "small victory" related to homework check procedures. The trouble of checking each student's homework for hours ended with the alternative solution brought by the administration. In response to the asynch work overload, the administration provided us with a chance to cooperate with 4th year ELT students. As part of EPP - ELT Teaching Practice Partnership, these students helped me check structured homework assignments, and I provided them with guidance related to their School Experience program in return. They observed my lessons, got my feedback and did practice teaching in the end. This whole experience brought a very fruitful collaboration and benefited both parties for the whole first semester.

I also closely collaborated with my teaching partner, which allowed me to maintain my sanity during the first semester. We sent dozens of messages and audio recordings to each other every single day on instructional software, students, syllabus and program, testing and evaluation, and many more, consulted ideas, took joint decisions on almost every subject and learned a lot from each other.

I felt more self-confident and autonomous as the curriculum and asynchronous workload eased, and I gained better command of the instructional platforms and other supporting tools. I started to adapt some of the tasks on the major platform that replaced the coursebook so as to create opportunities for students to produce something. I often assigned my students group projects or group presentations that would require them to meet after the lesson and I used screencasting while giving feedback to them. They seemed to be happy with these opportunities as many of them would later tell me that thanks to these tasks, they had become closer and developed a sense of community as a class, which was something they were missing due to the nature of online classes. Similarly, I felt more satisfied as a teacher thinking that I was actually helping them achieve their goals. What if online education was not so bad after all?

Overall, I started to experience positive emotions as I became more familiar with the online tools and platforms and discovered new ways of teaching (e.g.,

screencasting), which helped me become more resourceful as a language teacher. The positive feedback I got from my students boosted my motivation and enthusiasm towards online teaching. Finally, thanks to collaboration with my colleagues and the administration, I started to feel an increased sense of achievement. This, in turn, helped me enjoy teaching online. These results corroborate the findings of previous studies in that as teachers became more digital literate, explored and actively used new methodologies and cooperated with colleagues and/or administration, they started to develop positive attitudes towards teaching online (e.g., Farrell & Stanclik, 2021; Gautam, 2020).

Echoing the literature (e.g., Benesch, 2018), the study also reveals that teacher emotions are sources of teacher activism. In this particular case, negative emotions acted as a drive for a demand for instructional changes. Emotional labor caused by the discrepancies between the syllabus components and learning objectives as well as testing and evaluation led me to voice my concerns over the issue on several occasions, and these were heard by the school administration. As such, the school did not continue following certain instructional policies and adapted teaching content accordingly. Similarly, emotional labor caused by certain counterproductive practices encouraged me to negotiate with the administration. This exemplifies the role of teacher emotions as a means to promote teacher agency in that by resisting certain instructional practices and procedures, I brought the issues to the administration's attention in the hope of certain changes. In an effort to address the issue, the administration initiated a collaborative practice with the EFL department, which resulted in a fruitful experience benefiting both parties.

Something is Definitely Wrong with My Teaching

Our honeymoon with online learning did not last too long, though. I was hoping to make a fresh start in the second semester in a new level with new students now that I even began to like teaching online, but things did not go as I had planned. As a teacher, what feeds me the most is the feedback I get from my students. I feel satisfied when I consider myself useful in helping them reach their goals. However, it is not always easy to reach students and grasp what they feel when teaching online. For one thing, they need to be cooperative. One way they could show that is to keep their cameras on when possible. I believe making use of the visual cues and facial expressions is an inherent quality of successful communication, and it is a great source of feedback for the teacher. In the first semester, I was able to convince most of my students to turn on their cameras as much as possible, but that became a big issue in the second semester. Here is how I complained about the issue to C3:

I think the biggest problem I have with online education is that my feedback channels are completely blocked. All I see is a dark screen when I share something with them. When I make a joke, they are unresponsive. When I ask a question, they are uninterested. Cameras are always off. When I ask why, they say 'I did not turn it on in the first semester either.' I feel really really upset. (May 26, 2021, Voice Recording)

As the excerpt shows, I felt so helpless knowing that I could neither force nor convince them to keep their cameras on at least from time to time. It became harder to make sure if I was able to make myself clear as I could not see their aha moments or observe any change in their looks or faces. Therefore, online teaching felt like being in a management crisis all the time. It meant having constant worries like "What I am saying is really important, but are they with me?" I was never sure.

Inspired by some of my colleagues, one day I told my students that I would keep my camera off as well, hoping that this would help them understand the feeling. However, this made me even more unhappy. When it was on, I would at least think that I could reach those who were hopefully following. By turning mine off, that feeling completely disappeared. I felt restricted and immediately gave up on the idea.

To be able to use different channels, I tried to make more use of breakout rooms, written feedback and screencasting to be able to connect with them. I also held individual and group meetings with some to be able to encourage them to participate more in classes. Yet, not much changed. In time, I started to lose my motivation as a teacher. I felt deeply wronged since I thought that no matter how much I tried, my efforts were not appreciated. I also tried to adapt my teaching as much as possible, but I did not like what I ended up doing. I started to use Turkish most of the time and resorted to "textbook methodology" following only the platforms for content delivery with fewer and fewer pair and group work activities. I also reduced the number of assignments requiring students to work together since I realized that there was not much cooperation among them. Here is how I complained to a colleague: I gave up, I am afraid. There is tension every lesson. I only follow the platforms and I hate that. (April 6, 2021, Text message sent to C2)

In this new phase of online teaching, I felt like no matter what I tried, I could not teach a decent language lesson. That decent lesson was inevitably shaped by the teaching ideals in the face-to-face education period, filtered through my formal education, experience and institutional expectations as well as my own beliefs. No matter how hard I tried to attain these ideals, I simply failed.

As such, in my case, certain student behaviors during online education caused negative teacher emotions, consistent with the literature (e.g., Atmojo & Nugroho 2020). Lack of interest, empathy and cooperation on the part of the students in maintaining interactive lessons caused me to develop management concerns and I felt less satisfied with my work as a teacher. My disappointment further influenced my instructional practices, and I started to feel guilty of what I did in the class. This led me to question my teaching abilities and made me feel less of a teacher in time. This clearly shows that deeply rooted beliefs about effective language instruction might lead teachers to undertake emotional labor, which makes them even more vulnerable in times of uncertainty and crisis as in the case of a pandemic in this present study. Such beliefs may include the (alleged) efficiency of monolingual instruction or the (underchallenged) superiority of communicative language teaching.

Everybody is Right, Everyone is a Victim

Towards the end of the second semester, I felt I had enough of this. I was very demotivated for quite some time, and for the first time in my teaching career, I was not enjoying my profession. It was high time I stopped complaining and began reflecting. First, I realized that my perception of a good lesson was the reflection of a face-to-face lesson. I had applied what I considered good teaching in face-to-face classes. Similarly, good student behaviors in my mind were shaped by my previous experiences both as a learner and a teacher in face-to-face classes. Then, was it fair to accuse myself, my teaching practices and my students of not being good enough when teaching online?

Compared to face-to-face classes, it was harder to get to know my students, build rapport and cooperate with them online. It was also hard to understand if they had any academic concerns given that they were unwilling to participate, join the office hours or even have small-talks about their overall performance. However, rather than focusing on the ramifications of these in online classes, towards the end of the semester, I started to focus on discovering causes of such behaviors. What I ended up having as an answer was the fact that my students were lost. They could not develop much understanding of their academic performance since there was no means of comparison. Face-to-face instruction provided students with an environment where they inevitably formed ideas about each others' academic skills and language abilities when establishing personal relationships. In online instruction, this was not easy, and students could not pinpoint where they were academically. Therefore, I realized that what I labeled as students' lack of interest or academic ambition could have different external reasons, and they might not be just about students themselves. With this awareness, I became more understanding and tolerant of my students towards the end of the academic year.

Similarly, I developed a different perspective concerning my own teaching practices as classes were coming to an end. I realized that it was not right to set my standards for online teaching in comparison with face-to-face classes and that it was not the end of the world to adopt certain practices that I would not prefer in the past. For example, regarding my frequent use of Turkish in online classes, I started thinking that it might not necessarily be a bad thing as it was a tool to connect with my students, get some feedback from them or just check their understanding. Similarly, fewer pair or group work activities might not be a catastrophe in a language class if they were causing too much tension among students. With this perspective, I accepted the fact that adapting to the existing conditions did not make me a bad teacher. Here is my reflection on that to C3:

At first, I got so upset over my online practices, and it was a huge emotional burden. Not being able to teach the way I wanted, but I overcame this. I have different concerns now like if my students can hear me, follow me, understand my instructions and do the tasks I assign. My perception of success is different I suppose when teaching online. (May 26, 2021, Voice Recording)

It took a long time to reach this mindset, though. One might question whether I was lowering my standards when adjusting to this new reality. Here was my answer to that: Good teaching should not mean doing what our background, formal education or experience dictated. It involved evolving and constantly seeking new ways to provide students with an environment where they could feel heard, inspired and safe. My new goal in this unprecedented period as a language teacher was to achieve this.

These reflections show that teacher emotions could serve as means for professional transformation, similar to previous findings (e.g., Song, 2016; Wolff & De Costa, 2017). Emotional labor caused by the discrepancies between what I wanted to do and what I ended up doing in class led me to reevaluate my teaching philosophy. That is, I learned to mediate between my face-to-face teacher-self and my online teacher-self. Similar to Liu et al. (2021), accepting the vulnerabilities of myself as a teacher and those of my students enabled me to adapt my expectations and teaching practices without dwelling on tensions and conflicts. In a way, I found peace in the end adjusting to my new realities rather than constantly resisting them.

Implications

Although this study presents experiences of a single teacher and is limited to an EFL higher education context, it has several implications for teaching and learning English during online education globally as well as for emergency teaching in case of a possible pandemic in the future.

First of all, the results highlight the importance of providing teachers with ample training opportunities on instructional software and other AI-assisted tools before they start actively using them in classes. When teachers are expected to keep teaching during unprecedented times such as a pandemic without much guidance or support, they may find themselves de-skilled and insufficient, as commonly described in previous literature (e.g., MacIntyre et al., 2020; Moser et al., 2021). Therefore, it is crucial they feel confident about their skill-sets new pedagogies require, which will help decrease their emotional burden and prevent possible management crises. To achieve this, institutions need to identify teachers' needs and organize tailor-made training sessions accordingly to be able to provide a healthy learning and teaching environment. Similarly, teacher-education programs should aim at improving student-teachers' technology competence and consider the incorporation of online teaching and learning into their curricula, at least some online delivery of their own programs, as rightfully suggested by Farrell (2021) to reflect this new reality.

It is also important for institutions to ensure that syllabus objectives, instructional software and testing and evaluation are aligned when teaching online. The rapid switch to online education left many institutions without many alternative resources/platforms, and they had to make hasty decisions within a limited time. As such, they may not have anticipated certain problems caused by lack of consistency among these. However, considering that online modes of delivery will likely continue

even after the current pandemic (Farrell, 2021), institutions should learn to delegate to make informed decisions. They should benefit from the valuable experience teachers have gained by making them a part of the decision-making processes. Having inclusive and accountable administrations, as in the case of this study, will enable institutions to empower teachers and enhance the quality of education.

Echoing the previous findings (e.g., Gao & Zhang, 2020; Pham & Phan, 2021), the study also suggests that teachers need more cooperation and collaboration when teaching online. Staff meetings might have taken on a new meaning during the online education transition process due to time constraints, but this should not discourage related units/parties from creating different channels for teacher collaboration. Organizing mini-sessions with small groups on a regular basis might promote solidarity and increase motivation when teaching online. These sessions might also provide teachers with opportunities to renegotiate their emotional labor and support each other in developing new teacher selves in line with evolving pedagogies.

Pedagogically, the results indicate that both positive and negative emotions shape teachers' instructional practices, their relationships with their students and their pedagogical transformation, corroborating the previous literature (e.g., Loh & Liew, 2016; Wolff & De Costa, 2017). In my case, the emotional labor I felt throughout my online teaching experience helped me reconsider my understanding of a good teacher and good teaching. I stopped desperately trying to replicate what I was doing in face-to-face classes, which I considered ideal ways of teaching. I also stopped judging myself based on the unfair comparisons I made between my face-to-face and online teacher selves. Accepting my new reality and adjusting to the new pedagogy helped me develop more empathy and understanding towards my students, which subsequently improved my job satisfaction, similar to Liu et al.'s (2021) findings.

The study also confirms that emotional labor caused by the mismatches between what teachers think they need to do and what they end up doing could act as a catalyst for institutional reforms. Similar to the teachers in Benesh's study (2018), my frustrations regarding what we teach and what we test were a means to reconsider the program and syllabus in our case, leading to certain adjustments and adaptations. Engaging in such dialogue with the administration led to rewarding outcomes both personally and institutionally.

Taking the aforementioned reflections into account, the current study lends support to the previous work (e.g., Farrell, 2021; Liu et al., 2021) reminding the importance for teachers to engage in self-reflective practices so that they can better negotiate emotional experiences and exercise agency. To this end, teacher training programs might create opportunities for self-study and familiarize teachers with reflective tools. Similarly, teacher education programs may consider inclusion of emotional labor in their curricula as this would help student-teachers develop greater understanding of dissonant emotions and better prepare them for possible conflicts between their training and instructional demands of their workplaces (Zembylas, 2005).

Finally, this study exemplifies the potential of autoethnography as a research method in combining theory with life. Narrating personal lived experiences may keep researchers local, but they are also engaged in critical reflections thinking of the global, thus making better sense of their sociocultural contexts. As such, echoing Liu et al. (2021), this study calls for more support in the use of autoethnography as a viable research approach in scholarly writing.

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Korku, Çaresizlik, Sevgi, Nefret, Huzur: Duygusal Covid-19 Gelgitleri

Öz

Bu otoetnografik çalışmada yazar, COVID-19 salgını sırasında deneyimlediği duygusal zorlukları ve bunların öğretmen kimliği üzerindeki etkilerini araştırmaktadır. 2020-2021 akademik yılındaki çevrimiçi eğitim-öğretim deneyimleri üzerine eğilen yazar, değişen duygu durumlarını ve öğretmen kimliği dönüşümünü beş ayrı kronolojik aşamada incelemektedir. Çalışma, eğitim kalitesini artırmak için duygusal emek üstlenen öğretmenleri yetkilendirmede demokratik kurumların rolünü vurgulamaktadır. Çalışma ayrıca öğretmenlerin duygusal zorlukları daha iyi anlamaları ve müzakere etmeleri ile mesleki irade kazanmalarına yardımcı olmak için daha fazla öz-düşünümsel firsatlar için çağrıda bulunmaktadır.

Anahtar Kelimeler: otoetnografi, öğretmen duyguları, COVID-19 salgını sırasında çevrimiçi eğitim

Student Experiences and Equity during Emergency Remote Teaching in U.S. Higher Institutions: A Literature Review

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Abstract

In response to the spread of the COVID-19 pandemic, educational institutions worldwide broadened their use of online delivery modalities to maintain continuity of instruction. This article provides an overview of research that explores students experiences of emergency remote education (ERT) in the context of U.S. higher institutions and sheds light on students' perspective of ERT, the opportunities and challenges it brought, and its impact on educational equity. It also offers insight into measures institutions could pursue to deal with the challenges they encountered. Findings indicate that ERT transcended time and geographical limitations and afforded students' flexibility and convenience to schedule their learning. In general, students perceived colleges to be supportive, particularly their instructors. However, being forced to study online with limited access to university resources (e.g., financial aid, academic advising, and mental health), less contact with instructors and peers, and experiencing increased mental burden, made the learning experiences largely unpleasurable. The rushed digitalization of education put the vulnerable student population in a more disadvantageous position. Recommendations such as improving technology infrastructure, preparing educators for online teaching, cultivating an inclusive pedagogy, facilitating social interactions, and teaching with care and empathy are also summarized.

Keywords: emergency remote teaching, COVID-19, equity, online learning, higher education

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The outbreak of COVID-19 affected nearly every sector of life and brought about a digital revolution in the field of higher education (Strielkowski, 2020). As Susan Grajek said in an interview with EdScoop, "I suspect that one of the biggest impacts ... will be on the culture of higher education and its ability and willingness to collaborate across the many areas and to become more agile at making change because we've all changed extraordinarily rapidly" (Foresman, 2020). After the World Health Organization (WHO)

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declared COVID-19 a global pandemic in March 2020, colleges and universities worldwide began strategizing about different modes of education to ensure that students were not left idle (Montgomery, 2021). A rushed shift from face-to-face (F2F) instruction to emergency remote teaching (ERT) thus occurred (Hodges et al., 2020). Faculty members were compelled to digitize complex curricula or develop new course syllabi without adequate preparation and training (Armstrong-Mensah et al., 2020). Students were thrown into compulsory distance learning, departing from their residence halls without equitable access to digital tools and learning resources (Njoki, 2020). Though institutions strived to ensure the continuity of learning for all students, effectively running ERT was challenging. Lassoued et al. (2020) summarized four significant barriers to effective ERT: (a) students' ill adaptation; (b) pedagogical impediments in evaluation; (c) technical difficulties such as poor internet connectivity; and (d) financial and organizational obstacles like lacking digital devices.

As we approach the new normal in the post-COVID-19 era, colleges and universities around the world have begun offering partial remote learning (hybrid learning) and are expanding their online programs. This is a critical moment to listen to students' voices on ERT, identify the potential and challenges involved, and apply the lessons learned to the planning of future educational practices. A further consideration of digital equity and educational inclusion is also necessary, as remote attendance requires reliable technology access and sufficient digital skills, and the digital divide disproportionately affects those from marginalized communities (Daoud et al., 2021).

An investigation of extant literature indicates that most of the existing reviews on ERT mainly concern teaching and learning practices (Darras et al., 2021), instructional practices and effectiveness (Nieto-Escamez & Roldán-Tapia, 2021), service quality (Anthony, 2021), and learning and mental health (Mao et al., 2021). Some focus on a certain discipline, such as teacher education (Carrillo & Flores, 2020) and dental science (Chavarría-Bolaños et al., 2020). Some do not exclusively deal with ERT. In addition, most reviews are situated in K-12 contexts (Daoud et al., 2021). Reviews that provide an extensive description of U.S. college students' experiences during the pandemic are lacking. To address the gap, this paper synthesizes relevant studies and reports on the topic in the setting of US higher education. Through a meticulous examination of students' perceptions, needs, experiences, resources, and the situated environment, we aim to present a holistic picture of college students' education and engagement with ERT. In analyzing the opportunities and challenges of ERT for learners, we pay special attention to equity and inclusion issues.

Examining student life during ERT could help us understand the limits and potentials of the existing crisis-response migration strategies and online learning (OL), increase knowledge on how to better prepare for future crises (Hodges et al., 2020), and create an effective, productive, and inclusive learning environment for all learners. The research questions that guided the study were:

- 1. What were college students' experiences with ERT during COVID-19 in U.S. higher education?
- 2. What were the suggestions made in the articles reviewed for improving online education in higher education?

In the following sections, we first explain the differences between OL and ERT and introduce the concept of digital equity. Then we present the results on the students' perceptions of and responses to ERT. Based on these results, an in-depth discussion is conducted. After that, we summarize the recommendations put forward by the authors of the studies and propose how higher education institutions may leverage the knowledge gained to increase the effectiveness of remote learning and better prepare for future crises.

Online Learning (OL) and Emergent Remote Teaching (ERT)

Online Learning

OL has its origin dating back to the 1980s and a boom in the late 1990s and early 2000s (Ribeiro, 2020). It is a type of distance education taking place over the Internet and involves the use of computers or other electronic devices. With a few mouse clicks, students can attend class virtually, listen to lectures live or asynchronously, practice newly acquired knowledge, and receive feedback from instructors and peers (Armstrong-Mensah et al., 2020). Ribeiro (2020) observed that online learning is "a nice-to-have option" because it allows education to transcend constraints of time and physical location. Though the initial set-up of technologies is expensive, OL lightens the financial load in the long run and increases scheduling flexibility for learners who also have other part-time or full-time commitments (Armstrong-Mensah et al., 2020; Fedynich, 2013).

Nevertheless, the expansion of OL has been "a mixed blessing" (Fedynich, 2013). Although backed up by advanced information and communications technology (ICT), OL has yet to fully embrace the personalized teaching and learning that technology could provide (Saba, 2012). OL platforms, modes of instructional delivery and interaction, digital tools, and the type of support are usually not optional for learners, making it hard to adapt to personal learning styles and address individual needs. Hence, it comes as no surprise that online courses have a greater dropout rate than F2F education, though its root causes could be multifaceted (Patterson & McFadden, 2009).

Researchers point out that maintaining a high-quality and effective online education necessitates an inclusive, active, and student-centered approach that does not exclude any learners (Castelli & Sarvary, 2021) and demands a systematic approach in planning, design, development, and implementation (Hodges et al., 2020; Moore & Kearsley, 2011; Saba, 2012). OL is by no means merely moving the instructional materials and activities to a virtual classroom. According to the book, Learning online: What research tells us about whether, when and how written by Means et al. (2014), in planning and designing OL, the following nine dimensions need to be taken into consideration: (1) modality; (2) pacing; (3) student-instructor ratio; (4) pedagogy; (5) instructor role online; (6) student role online; (7) online communication synchrony; (8) the role of online assessments, and (9) source of feedback. Clearly, to achieve the desired learning outcomes, OL should be deeply rooted in adequate planning and instructional design informed by established theories and evidence-based practice.

Emergency Remote Teaching

With the rampant spread of COVID-19, ERT became "a mission-critical model" which helped ensure the continuity of education (Ribeiro, 2020). Under such circumstances, an attitudinal paradigm shift towards online education and reconsidering its value and viability is essential, particularly for members of higher education (Ribeiro, 2020). ERT could be defined as providing temporary access to instruction and support in a rapid, reliable, and contextually feasible manner during an emergency or crisis (Hodges et al., 2020). It does not involve recreating a comprehensive educational ecosystem (Hodges et al., 2020). According to Mohmmed et al. (2020), ERT "comprises ultimate exploitation of the available remote teaching tools for delivering the curriculum or educational materials that would normally be delivered physically or as hybrid or blended courses [...]" (p. 2), and thus requires more innovation, flexibility, and responsiveness from the higher education system (Chick et al., 2020; O'Shea et al., 2021).

ERT differs from the "normal" OL in which faculty are well-prepared to deliver online instruction, and students select their online courses as they did prior to the pandemic (Katz et al., 2021). ERT, promoted by COVID-19, compelled a rapid transformation that essentially denied students' choices, regardless of their needs, motivations, and competencies, and made remote OL the only means for engaging in class and continuing with coursework. Additionally, the swift shift from F2F learning to ERT deprived faculty of adequate time to meticulously plan and design courses, which is essential for ensuring high-quality online learning (Hodges et al., 2020). Consequently, ERT encountered immense obstacles and challenges in practice, as aforementioned.

Digital Equity

Educational equity means the education process is fair, namely, all students can access the educational resources and learning opportunities they need (The Glossary of Educational Reform). Advancing educational equity has long been at the top agenda of schools and educators. The rapid transition to ERT has brought digital equity to the forefront, as ICTs are increasingly implicated in online teaching and learning and are essential to the maintenance of social structure (Beaunoyer et al., 2020). Resta et al. (2018) define digital equity in the following five dimensions:

- Access to hardware and software, and Internet connectivity
- Access to meaningful and culturally relevant content in local languages
- Skills in generating, distributing, and exchanging digital content
- Support from educators who are proficient in using digital tools and resources
- Research-based knowledge about the application of digital technologies to enhance learning

Obviously, digital equity is more than just digital accessibility; it also encompasses digital competence, the quality of engagement, instructional resources, and support (Katz et al., 2021). Research indicates that meaningful access to the internet, multimedia resources, and parent mediation can be advantageous for promoting learners' academic performance (Robinson et al., 2020). As OL expands, how to close the digital gap and bring digital equity into education is an urgent task for institutions and educators, as no one should be left behind, intentionally or not (Qadir, 2020).

Methods

We conducted a comprehensive search of peer-reviewed journal articles on ERT during the pandemic in September 2021 across three databases: Education Research Information Center (ERIC), Web of Science Core Collection, and Google Scholar. No start date was specified. A combination of the terms was used: distance or remote or online or emergent; teaching or learning or education; Covid or pandemic; US; university or college or higher education. We did not limit our reviews to specific aspects or subject matters of education, as few studies satisfied the requirements, and we also considered research reports published by leading research institutes that collected large-scale survey data. In total, 51 potentially relevant pieces were identified. Then, the titles and abstracts of the articles were screened to remove less relevant pieces, reducing the total to 33. Next, a bibliographic search was undertaken by branching out from the reference list of the located articles. Following that, a full-text screening was performed based on the following inclusion criteria: (a) articles reporting empirical studies on student experiences of ERT during the pandemic or communication papers on the topic; (b) articles published in peer-reviewed journals or produced by reputable research institutions; and (c) articles written in the context of US higher education. Those that did not provide sufficient discussion on students' learning experiences of ERT were excluded. As a result, a total of 23 articles were included in the analysis. After the selection, following a grounded theory approach (Strauss & Corbin, 1997), each article was carefully read, highlighted, and coded by labeling the content, grouping for patterns, and summarizing for themes.

Student Experiences During ERT

In this section, we present the results of the review, organized according to the themes that emerged concerning student experiences during ERT: educational process, technology use and digital skills, and health and wellbeing.

Educational Process

During the pandemic, students attended classes that operated remotely or in a blended model to follow social distancing guidelines. That means, instead of attending in-person lectures, the vast majority of students received learning materials via the learning management system (LMS), joined synchronous live sessions, and/or watched

asynchronized recorded videos of lectures (Johnson et al., 2020). With in-person academic activities being almost supplanted by the remote learning mode, the educational landscape shifted dramatically. Below, we summarize how the educational process was altered and adapted to ERT and its impact on learning from students' perspectives regarding curriculum and pedagogy, assessments, interactions, motivation, and engagement.

Curriculum and Pedagogy

Results indicated that the hasty adaptation of ERT increased instructors' workload and simultaneously placed learners amid greater uncertainties. Students reported that acquiring the knowledge of subject matter and performance assessments were the most worrisome at the early stage of the shift (Loepp, 2021). However, generally, students did not experience major differences in terms of customarily delivering course content via lectures or discussions (Kim, 2020), though some courses were restructured to adapt to the revised curriculum (Flaherty, 2020). Specifically, students in courses that require hands-on practices experienced more difficulties. For instance, chemistry majors were deprived of the opportunity to manipulate equipment (Kolack et al., 2020), and education majors lost the chance to teach in-person in local schools (Kim, 2020). Medical school students' clinical rotations were also postponed and cut short (Calhoun et al., 2020). Nonetheless, alternatives were developed, though not sufficiently satisfying. For instance, student teachers were provided with opportunities to practice teaching online before joining virtual classes with young learners, with the added benefit of peer observing and debriefing (Kim, 2020). Meanwhile, medical students participated in telemedicine clinics paired with virtual surgical education, which allowed them to hone both visual and verbal skills (Ehrlich et al., 2020).

Besides, most instructors changed their pedagogical practices to make ERT more effective, many pursuing a flipped-classroom approach. Instructors provided prerecorded video lectures or online tutorials for students to watch before the online session, and students were to arrive at class prepared for discussion and application of the knowledge (Chick et al., 2020). To mimic the constructivist teaching strategies commonly used in F2F classes, students unmuted themselves while asking or responding to questions, or making comments via chat (Njoki, 2020). Some students were more active on social media platforms, sharing their doubts and resources to prepare for exams (Chick et al., 2020). Some also proactively collaborated with classmates to debrief group projects through video communication tools (Kim, 2020). However, ERT increased difficulties for instructors to adopt more flexible pedagogy (Loepp, 2021). In a physical classroom, teachers can more easily read students' facial expressions and body language, recognize their mind wandering, and check for understanding, while ERT challenged teachers to provide prompt feedback and make adjustments accordingly, as they were unable to properly gauge how students were progressing in virtual classrooms. Additionally, regarding the delivery mode, in a survey study with 184 students in public health, 69.9% indicated a preference for the asynchronous mode, owing to factors like not having to deal with technical issues and flexibility in class schedules (Armstrong-Mensah et al., 2020).

Assessments

The evaluation of academic performance constituted one of the biggest concerns of the students at the beginning of the crisis (Loepp, 2021). Students expressed the greatest anxiety about being accused of cheating on exams, followed by the potential of their classmates cheating (Patterson et al., 2021). Fair and objective evaluation of learning in online environments was a big challenge (Hallal et al., 2020). Techniques such as question and answer randomization and the usage of question pools were found ineffective (Kolack et al., 2020), since easy access to the internet could jeopardize the reliability of the evaluation (Oliveira et al., 2021).

Some instructors accommodated the ERT environment by adjusting assessment strategies. For instance, students received more flexible deadlines and more frequent but smaller assessments (e.g., quizzes and discussion posts), which helped mitigate the uncertainties that students may encounter during the pandemic, while also ensuring that students could keep up with the pace of the curriculum and gain new knowledge (Zuckerman et al., 2021). Yet most students reported experiencing an increase in their academic load as these new forms of assignments were added to the adjusted syllabi (Armstrong-Mensah et al., 2020). In addition, some professors were more lenient with grading and adopted a Pass/Fail grading system instead of the traditional letter grades (Calhoun et al., 2020). Besides, students generally viewed group projects and research laboratory exercises as the most challenging forms of assessments, while short essay responses and reflection papers did not require much effort (Blankstein et al., 2020).

Interactions with Instructors and Peers

Interactions and communications with instructors and peers play a significant role in promoting students' motivation and academic development. However, ERT hindered learners from staying connected to professors, impairing teachers' capacity to scaffold learners' knowledge construction, which may contribute to learners' low investment and poor performance (Katz et al., 2021). As one student recalled, "I am learning by myself, which has major limitations" (Patterson et al., 2021, p. 1327). It's unsurprising that students put a high value on teacher-student connections. They expected professors to be accessible, responsive, and communicative, to provide transparent information, guidelines, and expectations, to keep the LMS organized, and to be flexible and caring (Loepp, 2021). In a study of business school students, participants expressed their willingness to pay higher tuition for a similar level of engagement as before (Krishnamurthy, 2020). Results also revealed that more professors displayed greater flexibility and availability in terms of responding to students' inquiries, delivering oral and electronic feedback, maintaining e-office hours, and scheduling appointments for questions and discussions (Kim, 2020; Matters et al., 2021).

ERT also severely limited student-student interactions (Blankstein et al., 2020), depriving students of opportunities to share, negotiate, and engage in F2F activities and weakening their sense of belonging (Matters et al., 2021). When asked about the most

influential factors associated with a pleasant online learning experience, a group of political science students stated that "it was the person—not the material or the technology—that made the course successful" (Loepp, 2021, p. 169). Students reported that the presence of instructors, staff, and peers in ERT elevated their confidence in times of crisis (Matters et al., 2021).

Motivation and Engagement

Researchers revealed that student motivation and engagement tended to decrease after the sudden transition to ERT (Aguilera-Hermida, 2020). Students, disproportionately those from the lower end of the socioeconomic spectrum, did not feel comfortable participating in live activities and failed to show up regularly in virtual classrooms (Sequeira & Dacey, 2020). Some students found it difficult to fully engage during quarantine due to a lack of sufficient study space and constant distractions (Qadir, 2020). Students who were afraid of speaking up, either due to their shyness or concerns over English language skills, were more inclined to participate via the chat feature (Kolack et al., 2020). Additionally, a study seeking to understand why some students did not turn on their cameras during synchronous class meetings uncovered that concerns over personal appearances, physical locations, and weak internet connections were the major contributors, all of which put vulnerable student populations at greater risk of losing interactivity and engagement (Castelli & Sarvary, 2021).

Technology Use and Digital Skills

Educational technology frequently applied to ERT included: online educational platforms (Canva, Blackboard, Moodle); video communication tools (Zoom, Teams, Google Meet, Google Handout); team communication tools (Slack, Discord); social media (Twitter, Facebook); asynchronous videos (assigned or recorded by instructors); and synchronous class sessions (live). Below, we report findings regarding student experiences with ICTs, mainly associated with digital access, usability and reliability of technological tools, and digital skills.

Regarding accessibility, ERT did not affect everyone in the same way. Students who had depended on school-provided wireless networks and devices before the pandemic suddenly lost access to these supports, thus experiencing difficulties in attending online sessions, completing assignments on time, and properly managing their learning (Matters et al., 2021; Njoki, 2020). Although few students reported having difficulty accessing a computer, research indicated that white students had an easier time accessing it than their peers from any other racial or ethnic groups (Blankstein et al., 2020). Additionally, in a study on students' experience and acceptance of ERT, it was found that accessibility was affected not only by the availability of the internet or digital devices but also by the number of people sharing a single residence (Aguilera-Hermida, 2020). When students moved back home to live with their parents and siblings, the slower internet connections caused by multiple users resulted in a less satisfying learning experience (Aguilera-Hermida, 2020).

Students' digital skills for learning in the ERT mode were related to their prior exposure to OL. Patterson et al. (2021) conducted research among first-year medical school students and revealed that students' past experiences with OL differed significantly. 34% had never taken an online course, whereas 11% had completed five or more. Additionally, only a small portion of students had prior experience with multimedia assignments, collaborative online projects, or synchronous class sessions. Therefore, students' comfort levels with these activities varied during ERT (Patterson et al., 2021). The study also discovered a correlation between students' digital skills and their confidence in achieving success in OL environments. It also demonstrated that introducing online communication tools and allowing students to practice could help alleviate their anxieties and frustrations associated with ERT (Kim, 2020).

Student Health and Wellbeing

In this part, we synthesize results on students' non-curricular experiences related to the closure of campuses and the shift to ERT concerning student mental and physical health, finances, and student support.

Physical and Mental Health

The results showed that a great majority of students expressed less concern about getting the virus themselves than the health of their family members and friends (Armstrong-Mensah et al., 2020). In addition, students' mental health status deteriorated during the pandemic (Lederer et al., 2021). Major stressors that contributed to their increased mental health problems were: (a) health concerns for themselves and others; (b) difficulty in concentrating; (c) disrupted sleep; (d) feelings of isolation; (e) decreased social interactions; (f) anxiety; (g) concerns over academics and increased workload; (h) financial stress, and (i) suicidal ideation (Son et al., 2020). Students expressed substantially more concern about their mental rather than physical health (Blankstein et al., 2020), and the pandemic made access to mental health care difficult (Martinez & Nguyen, 2020). Although students across different racial and ethnic groups shared similar levels of concern about their mental health, white students were less likely to display intense anxiety over their physical health (Blankstein et al., 2020). Additionally, for students engaging in a hybrid model of learning, the reduced operation of public transportation made their daily commute stressful (Day et al., 2021). Furthermore, it was noted that the aggravated racial and national discrimination during the pandemic exacerbated the emotional strain of minority students. Instances of race-based discrimination in both virtual and in-person settings were documented in multiple studies (Day et al., 2021; Martinez & Nguyen, 2020).

Financial Hardship

Financial problems were frequently identified as a prominent source of overwhelming stress for college students after the pandemic outbreak due to job loss, being furloughed, or the slow pace of business they previously worked at (Armstrong-Mensah et al., 2020). Hence, they required more financial assistance in this difficult time (Martinez &

Nguyen, 2020). Moreover, studies revealed that students' economic circumstances took a huge toll on their academic performance (Katz et al., 2021) and mental health (Blankstein et al., 2020). Students of color faced more financial difficulties, struggling with basic needs like housing, food, and paying utility bills (Martinez & Nguyen, 2020). This problem is particularly pronounced among students from the lower end of the socioeconomic spectrum, in part because they often lack reliable access to the internet.

Student Support

Campus closures meant support services transitioned to a remote delivery mode. However, there was a dearth of supportive resources provided for students, particularly regarding financial aid, academic advising, access to student development centers, and mental health care (Day et al., 2021). Students lamented that they were "on their own" to develop good learning habits, identify a career path, and master professional skills (Matters et al., 2021). The absence of shared social and cultural capital exacerbated the difficulties of marginalized and underprivileged students in navigating through all the complexities in their daily lives (Matters et al., 2021).

Discussion

ERT implemented in response to the need for social distancing during the COVID-19 crisis, helped maintain the continuity of education in the wake of the pandemic. It had a great impact on students' educational experiences and brought both opportunities and challenges.

Benefits and Opportunities

First and foremost, the sudden, large-scale digitization of higher education in response to the pandemic, though not well-planned, did ensure instructional continuity for students (Krishnamurthy, 2020). While there was no substitute for hands-on experience, various approaches to mitigate the loss were developed and implemented creatively. In addition, ERT transcended time and geographical limitations (Kim, 2020), enabling students to access recorded online lectures and shared resources remotely (Kolack et al., 2020) and manage their learning through flexible scheduling (Aguilera-Hermida, 2020).

Besides, students benefited from the significant efforts of instructors and TAs in developing coherent online curricula, experimenting with pedagogical innovation, and inventing novel ways of content delivery. Though some instructors might be underprepared with the technical knowledge and instructional design skills of OL, many reflected on previous teaching practices, meanwhile exploited easily available online resources and strived to provide students with a better learning experience (Martinez & Nguyen, 2020). In addition, the newly devised and applied learning modules, assessment tools, and blended learning might also positively supplement future education (Calhoun et al., 2020). The digital transformation likewise created a valuable learning experience for students to learn new tools and applications, improve digital skills, and grow more self-motivated and self-reliant (Aguilera-Hermida, 2020). Other

positive outcomes included more time for assignments and being with family (Armstrong-Mensah et al., 2020). Studying at home also helped some students save commuting time and lower living expenses (Patterson et al., 2021).

Obstacles and Challenges

Generally, college students perceived their campus to be supportive and reported a high level of understanding (Martinez & Nguyen, 2020). However, many preferred F2F instruction and expressed unfavorable feelings about their COVID-19 related experiences, such as social distancing and school closure (Aguilera-Hermida, 2020; Duong et al., 2020). Challenges in time management and striking a work-school-life balance still existed as before the pandemic (Martinez & Nguyen, 2020). In terms of academic learning, the adaptation was not as easy as it seemed. Limited connections with instructors and peers dampened students' motivation, confidence, and sense of community. The loss of nonverbal communication impeded information exchange (Njoki, 2020). Additionally, a heavy cognitive load was required in ERT for learners to engage in meaning-making across multiple modalities (e.g., PowerPoint slides and audio/video communication). Also, students were easily distracted due to factors like convenient access to the internet, unfavorable home environment, stress, burnout during the lockdown, and non-interactive lectures (Aguilera-Hermida, 2020). Besides, instructors' inadequate knowledge and skills in technical and pedagogical aspects of ERT affected the quality of OL (Kim, 2020). Further, the ERT mode made it extremely hard for students to participate in experiential learning, and academic dishonesty would negatively impact students' development (Kolack et al., 2020). For students enrolled in a hybrid learning model, reduced public transit service made their daily commute more burdensome (Day et al., 2021).

On the other hand, the shift to ERT posed a threat to students' health and wellbeing. Negative feelings like loneliness, anxiety, stress, and frustration were fairly prevalent among college students (Son et al., 2020), and the absence of traditional classroom socialization led to reduced interactions with peers and professors, resulting in feelings of isolation (Blankstein et al., 2020). These findings support the claim that the "increase in the time spent at the computer and the lack of personal communication affect not only the mental but also the physical health of students" (Zamaraeva & Nikolashina, 2020). Moreover, a lack of support for students' mental health in times of crisis would severely damage their wellbeing.

Equity and Inclusion

ERT intensified the challenges of equity, especially digital equity, in education. As Katz et al. (2021) noted, "while all students faced the challenges associated with adapting to novel conditions in the middle of a semester, they did not begin that hasty transition on equal ground" (p. 10). Their readiness for ERT differed according to the availability of resources and support systems (Patterson et al., 2021). Cultural and linguistic differences, ethnicity, financial disadvantage, unfamiliarity with educational systems, low social economic status, and dependency on technology during ERT further

(re)widened the gaps (Qadir, 2020). Additionally, students' prior OL experience was also a contributing factor, with those having prior OL experiences reporting higher remote learning proficiency (Katz et al., 2021) and a more positive learning experience (Patterson et al., 2021). On the other hand, although digital equipment and internet access did not constitute a sizable barrier for US college students, its reliability and stability nevertheless hampered a part of the population (Katz et al., 2021). Additionally, underprivileged and vulnerable students lost motivation due to technological constraints, a lack of supporting facilities, and poor digital skills (Sequeira & Dacey, 2020). These findings underscore the existing disparities in access to support and opportunities during ERT and the importance of implementing more caring pedagogical approaches to learn about and empower learners (Sequeira & Dacey, 2020).

Besides, several researchers (Zuckerman et al., 2021) examined the relationship between ERT and equity gaps in course grades among subsets of student populations and concluded that the current assessment tool did not showcase the negative impact of ERT on minority students, possibly due to the changed grading policies and the ceiling effect (Zuckerman et al., 2021). Therefore, what was more critical for educators was appropriately interpreting these grades, properly measuring students' cognitive gains and identifying constraints, and providing additional support for disadvantaged groups (Zuckerman et al., 2021).

In addition, it was revealed that there was a significant gap in student support services provided for students enrolled in on-campus programs and those in online programs before the pandemic (Bouchey et al., 2021). Ensuring students in the ERT mode could access equal support and service remained a challenge (Bouchey et al., 2021).

Furthermore, campus closure and ERT made the daily lives of students of color even harder. They were more likely to experience difficulties meeting basic needs such as food, rent, paying utility bills, and maintaining health (Martinez & Nguyen, 2020). This partly explained the reason for the regained popularity of the phrase, "Maslow before Bloom," since the onset of the pandemic, which can be understood as prioritizing basic human needs (e.g., safety, physical, emotional, and mental well-being) before focusing on academic knowledge and skill development (Berger, 2020).

We use a professor's observation to conclude this discussion on the equity issues, "They call education the great equalizer... I am not so sure. Education can become an amazing equalizer only if individual equity is considered" (Sequeira & Dacey, 2020, p. 6).

Recommendations

Accumulating evidence suggests that universities are at different levels of preparedness for ERT. To make ERT more effective and to inform future OL educational practices, below we synthesize the recommendations and strategies put forward in the articles

reviewed. To begin, education practitioners must recognize that the purpose of ERT is not to adhere to stringent academic standards and check off all learning tasks, but to provide temporary yet reliable and flexible access to education (Hodges et al., 2020). However, developing preparation strategies for unexpected events (e.g., natural disasters, civil wars, and disease outbreaks) should be a top priority for institutions (Bao, 2020). Given the massive impact the pandemic had on every individual, curriculum completion should not be the sole goal of education (Cahyadi et al., 2021). The social and affective dimensions of ERT need to be emphasized (Chick et al., 2020), and a high degree of adaptability and flexibility from all parties involved in education should be encouraged (Zuckerman et al., 2021).

Instructors should be equipped with essential technical and pedagogical competencies to manage OL effectively (Aguilera-Hermida, 2020). The following practices and strategies are suggested: increasing interactions among instructors and students, affording spaces for constructive and collaborative learning (Zuckerman et al., 2021), maintaining a clean and organized LMS (Loepp, 2021), communicating goals, expectations, and directions explicitly (Sequeira & Dacey, 2020), establishing social norms (Castelli & Sarvary, 2021), breaking up complex concepts and delivering them in digestible units (Matters et al., 2021), developing student-centered discussion and incorporating interactive activities such as pair-and-share (Matters et al., 2021), designing project-based learning and assessment, and providing timely and constructive feedback (Tamm, 2020).

To empower students in stressful learning conditions, "incorporating self-care and caring pedagogical practices" (Sequeira & Dacey, 2020) was recommended, which could be instrumental in maintaining students' motivation and commitment (Cahyadi et al., 2021) and increasing their interest, confidence, engagement, sense of belonging, and willingness to take on more complex tasks (Sequeira & Dacey, 2020). Further, as the power dynamics between instructors and learners persist in virtual classrooms, practices related to teaching with care and empathy were recommended, such as initiating an introductory activity to get to know students and for them to get to know each other (Matters et al., 2021). Other practices like starting each session with brief personal updates, channeling course content and discussion to the current pandemic and students' lives (Sequeira & Dacey, 2020), scheduling regular check-ins with students, and sending a weekly Google Form to stay up to date with their psychological and academic statuses (Matters et al., 2021) were also suggested, which would help build meaningful relationships.

Regarding equity and inclusion, while digital access may be less of a concern in the US compared to many other countries, not all students had access to optimal remote learning circumstances, and COVID-19 exacerbated the existing digital inequalities (Beaunoyer et al., 2020). Therefore, providing technical support to those who need it was crucial in developing their communication and digital skills, closing confidence gaps, and fostering their participation in the virtual environment (Patterson et al., 2021). Besides, in planning and developing online curricula, adopting universal design for learning (UDL), increasing digital accessibility, and considering the

affordability of various learning modalities (e.g., offering multiple modes of communication, allowing students to participate and learn in multiple ways, and using multimedia) could help promote access (Ableser & Moore, 2018). Further, considering learners' unique life experiences, needs, interests, and capacity in instructional design could also contribute to constructing an inclusive learning environment (Matters et al., 2021).

Implications

This article synthesized research on students' experiences with ERT in the context of US higher institutions during the COVID-19 pandemic. The results indicated that ERT ensured the continuity of learning, transcended time and geographical boundaries, and afforded students' flexibility and convenience to schedule their learning. Students considered ERT less fun and engaging because of technological constraints, limited social connections, a lack of support services, and marginalized identities in virtual space. Instructors' insufficient knowledge and skills in online instruction made ERT less productive. The sudden switch to ERT also impaired students' health and wellbeing and worsened equity issues among them. Although ERT could not compensate for the practical experience and pleasure of interacting, it was beneficial as a supplementary tool and could be a potential choice in the future for continuing education (Hallal et al., 2020). Given that the pandemic has had a profound impact on university education worldwide, the review can help educational institutions in and outside the US better understand the practices of ERT. While the findings should not be interpreted as exhaustive, as a starting point, they do provide valuable implications for education practitioners, policymakers, and researchers worldwide.

This review study has implications for the current and future implementation of ERT, as many students worldwide will continue to learn remotely until the pandemic recedes (Katz et al., 2021) and new emergencies stemming from uncertainties will inevitably occur, posing new challenges for the higher education sector (Loepp, 2021). Providers of ERT and those responsible for strategic planning for ERT can benefit from our review regarding the barriers to ERT as well as the opportunities it brings. The insights offered by the review may aid in developing contingency plans, facilitating informed decision-making and institutional resilience. For example, the knowledge gained on the immediate impacts of the pandemic on students' mental health and financial stress can help university personnel better understand students' uneasy feelings and desperate needs outside of classrooms, and be sufficiently prepared to increase relevant resources and services allocation. Additionally, the notable disparity highlighted in the access to technology, the Internet, and learning opportunities among learners from diverse backgrounds reminds educational institutions of the urgency of the equity issue, and their duty to work out possible solutions to the problem. Moreover, the findings of the review help instructors be cognizant of the circumstances students face in pressing situations, build rapport with students, and better understand their needs, meanwhile, urge instructors to reconsider their pedagogical practices, and implement inclusive instructional practices.

The review also has implications for improving the quality of online education. The instructional best practices recognized through ERT can be broadly applicable to OL, and the goal of providing an inclusive and engaging experience for learners should also be the guiding principles for online education. The new insights this review generated regarding students' adaptation to online education could be valuable for the planning, design, and delivery of online instruction, the development of long-term OL strategies (Johnson et al., 2020), and the construction of an OL ecosystem (Aguilera-Hermida, 2020). The suggestions that learners put forward, such as facilitating connectedness with faculty and peers, prioritizing the distribution of support services, increasing technology access, and providing career-related information, are all appropriate and constructive. In fact, they are also helpful strategies that educators could leverage to better address learners' needs, and deliver sustainable and high-quality OL. In addition, this review highlighted that to capitalize on the huge opportunities remote instruction brings about, instructors should equip themselves with tools and resources, and incorporate them into their pedagogical practices, and to make online education more accessible and engaging, instructional designers and technology support teams also play a critical role.

This review is mainly limited in that it is confined to the context of higher education institutions in the US. To fully capture the learning experiences of university students worldwide and advance the dialogue about how to best serve them during ERT, review studies that are situated under different contexts need to be conducted. Additionally, more specific ERT-related issues and the circumstances students face, such as how to promote online engagement, how attitudes, motivation, emotions, and beliefs in ERT impact cognitive development, how inequalities impact learning opportunities and outcomes, particularly with the vulnerable student body, are worth exploring. Studies tracking the short and long-term effects of the pandemic on learners are needed. Further, how instructors cope with ERT, their needs and concerns require further examination.

To conclude, it is encouraging that, despite obstacles and challenges, the continuity of education has been accomplished through ERT in many parts of the world. Along with it is the rapid growth of online education. The experience shows us that although "unexpected events and circumstances often bring frustration", identifying the gap and adopting a problem-solving mindset is what ultimately leads us to a new chapter in life (Kim, 2020, p. 153).

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ABD'deki Yüksek Öğretim Kurumlarındaki Olağanüstü Durumlarda Uzaktan Eğitim Dönemindeki Öğrenci Deneyimleri ve Fırsat Eşitliği

Öz

COVID-19 salgınının yayılmasına karşılık olarak dünyanın dört bir yanındaki eğitim kurumları eğitimin devam edebilmesi adına çevrimiçi eğitim öğretim araçlarının kullanımını genişletti. Bu makale, öğrencilerin ABD'deki yüksek eğitim kurumları bağlamında olağanüstü durumlarda uzaktan eğitim deneyimlerini inceleyen, öğrencilerin olağanüstü durumdaki uzaktan eğitime bakış açılarına, uzaktan eğitimin getirdiği zorluklara ve eğitimde firsat eşitliğine ışık tutan bir araştırmanın özeti niteliğindedir. Bu makale ayrıca eğitim kurumlarının karşılaştıkları zorluklarla mücadele etmek için alabilecekleri önlemler konusunda bir görüş sunmaktadır. Edinilen bulgulara göre Olağanüstü Durumlarda Uzaktan Eğitim zaman faktörünün, coğrafi kısıtlamaların ötesine geçmiş ve öğrencilerin esnekliklerine ve öğrenme süreçlerini planlama elverişliliği açısından yeterli olmuştur. Genel olarak öğrenciler üniversiteleri ve özellikle de üniversitelerdeki öğretim görevlilerini kendileri için destekleyici figürler olarak görmüşlerdir. Ancak, üniversite kaynaklarına kısıtlı bir erişimle çevrimiçi olarak çalışma zorunluluğu (örn, finansal yardım, akademik danışmanlık ve mental sağlık), öğretim görevlileri ve akranlarıyla iletişim kısıtlılığı ve artan ruhsal yükler öğrenme tecrübelerini çok büyük oranda olumsuz etkilemiştir. Eğitimin hızlı bir şekilde dijitalleştirme çabası öğrenme konusunda zorluk çeken öğrenci nüfusunu daha da dezavantajlı bir konuma getirmiştir. Bu noktada teknolojik altyapıya önem verme, öğretim elemanlarını çevrimiçi eğitim için hazırlama, eğitime dahil bir pedagoji oluşturma, sosyal etkileşimleri teşvik etme, konuları ilgi ve şefkatle empati kurarak öğretme gibi öneriler makale içeriğinde özetlenmektedir.

Anahtar Kelimeler: olağanüstü durumlarda uzaktan eğitim, COVID-19, eşitlik, çevrimiçi öğrenme, yüksek öğretim

Digital Board Games as a Tool to Boost Speaking in Foreign Language E-classes During COVID-19: Students' Perspectives

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Abstract

This article elaborates the ongoing discussion about whether digital board games can enhance speaking in language courses. The research targets 51 adult L2 Greek students in Istanbul/Turkey addressing if digital board games in on-line classes can enhance speaking in foreign language during COVID-19. The results show that: online lessons meet the learning needs of adults, but they still prefer the face-to-face ones, the digital version of the game Story Cubes motivated students to participate more in the lesson, to collaborate with their classmates and to express themselves freely. The aforementioned game created a positive atmosphere in the classroom and finally it had a positive effect on the students' speaking.

Keywords: Digital games, speaking, storytelling, story cubes, e-classes, Greek as L2

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Introduction

The COVID-19 pandemic completely changed the traditional educational environment. Teaching was transformed from face-to-face to online at all levels of education. All educators had to completely modify and change their traditional face-to-face to e-classes regardless they had any previous experience. All these changes imposed new demanding tasks on teachers and students as well. Especially teachers acquired four different roles in this process of online teaching: a) pedagogical and intellectual role, b) social role, c) managerial and organizational role, and d) technical role (Klimova, 2021). In the context of their social role, trying to create a pleasant and friendly learning environment, many of them implemented digital games in the teaching of a foreign language.

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In the above-mentioned context, this research aims to gather and evaluate students' opinions about on-line courses, their thoughts about application of games in their e-classes, and in particular their thoughts about playing the game *Story Cubes*. To this end, the following research questions were investigated:

- 1) What are the perspectives of students about online education?
- What are the perspectives of students about the implementation of games in eclasses?
- 3) What are the perspectives of students about the effectiveness of the board game *Story Cubes* in speaking?

Literature Review

The outbreak of the COVID-19 pandemic was a challenge for foreign language education at all education levels as it forced teachers and students to change the traditional approaches without being fully prepared for this. The role of students changed during distance education. Several research has attempted to highlight the perspectives of learners of a foreign language via online courses during the pandemic.

Learners of a foreign language, according to Klimova (2021) felt motivated to study online during the COVID-19 pandemic, they considered the online language classes effective, but they also argued that face-to-face classes could not be replaced by the on-line ones and in this respect teacher's role as well. The results of another research (Maican & Cocoradă, 2021) revealed the protective role of retrospective enjoyment of on-line learning "in difficult times" or for students with lower performance. This research shed light on students' preferences for certain online resources during the pandemic, as well as for PowerPoint presentations. It also emphasized their views on foreign language teaching in the post-COVID period in a pleasant learning atmosphere, while the correlation between stress and foreign language learning was similar to that found in pre-pandemic research.

Other findings showed that graded e-materials helped international students to become autonomous and independent in developing their language skills during the pandemic in foreign languages e-learning courses. However, in terms of learning culture, international students were less autonomous and relied heavily on their teachers for learning and problem solving (Chen, 2021).

On the other hand, it has been shown that the connection between computers and language teaching is successful (Komis & Dinas, 2011). Young people are familiar with games, digital reality and technology in general (Lenhart et al., 2015; Shu & Liu, 2019), and students are increasingly using mobile phones, computers and digital games (Kirstavridou et al., 2020).

Many researchers highlight that digital games are more likely to help students. Recent meta-analyzes have shown that under certain guidelines, a game-based teaching works better for students than a process that does not include games at all (Martin et al.,

2019). Another factor that reinforces the need to implement digital games in education is the fact that technology is an integral part of our lives nowadays. For modern technocratic societies, technological means are considered basic means of facilitating our daily lives. Consequently, many of us could also use them as a learning tool (Collis & Moonen, 2001).

Therefore, the use of a greater variety of media and learning resources is gradually emerging as a complementary tool for the teacher, aiming to reduce student passivity (Collis & Moonen, 2001; Nazarova & Galiullina, 2016), especially in emergencies. In modern societies, where technology is gradually becoming more prevalent, it becomes necessary for teachers to enhance such skills in their students as much as possible (Gros, 2007). Digital Game based learning in language education can contribute to this.

The international literature refers to this type of teaching as Digital Game Based Learning, and in this case with regard to language teaching, as "Digital Game Based Language Learning" (DGBLL). The term gamification is often used, which is generally used to denote the application (mechanisms) of play in non-game environments in order to enhance the processes established and the experience of those involved (Caponetto, Earp & Ott, 2014).

Digital Game-Based Language Learning (DGBLL) is an innovation in education and may have a positive effect on the hitherto traditional teaching framework. Gradually, educational digital games begin to accompany educational practice (Gros, 2007; Kirstavridou et al., 2020; Shu & Liu, 2019; Vandercruysse et al., 2013; Yang et al., 2008). The research community is increasingly interested in the impact of digital games on the learning process (Brom et al., 2014; Caponetto et al., 2014) in terms of innovation.

Innovation, in this light, does not only mean the use of material from sources other than the textbook, but mainly the inclusion of games in teaching and let alone the foundation of the educational process itself on them (Kirstavridou et al., 2020). Without a doubt, digital games place the user at the center of the learning process (Nazarova & Galiullina, 2016), create challenges for him and consequently push him to develop problem-solving strategies (Gros, 2007). One of the most essential reasons for integrating games into the educational process is that in this way fertile ground is created for a deeper learning experience, to which the student is committed and develops a variety of skills (Shu & Liu, 2019). The present article focuses on the use of digital games for online teaching of Greek as a foreign language during COVID-19.

Digital Games in Teaching

The main categories of games that can be used by the educational community as complementary tools of the teaching process, are defined by researchers. According to Nazarova and Galiullina (2016) there are:

- 1. *Imitation games*, which use more communicative activities, with the main goal of developing students' respective skills.
- 2. Script cards games, when the teacher's goal is to develop the skill of producing and/or understanding spoken language. The teacher can use script cards consisting of standard second / foreign language native phrases, thus applying Game Scenes. Story Cubes game belongs to this category.
- 3. Sociodrama, which are games that present in more detail the characters of the game, thus developing the ability to describe and psychograph characters by students (Nazarova & Galiullina, 2016).

All these categories of games are not directly related to the challenge of increased cognitive outcomes, as their character is not purely educational. But they can support students' effort to speak in the foreign language. Students thus have many opportunities to use the second language, as they interact and communicate (Sylvén & Sundqvist, 2012).

A teaching based on digital games can be considered successful when it is successfully performed in terms of the following parameters according to Chik (2014). The first parameter is the success of educational - learning goals, the second the social interaction between students and the third factor is considered the content of the course to be properly designed, so students have an incentive to participate in the lesson. Finally, success is judged by the feedback that students will give (Chik, 2014).

The special motivation that students show in the content of knowledge when it is in the form of play, remains the primary reason that the teacher will want to adopt such procedures (Caponetto et al., 2014). According to Herzberg, an American psychologist who researched the link between motivation and performance, when the work itself is exciting for the participant, then it performs to the maximum (Wallace et al., 2008).

The main point, however, that involves learning through play is student commitment (Caponetto et al., 2014). Combined with motivation, as mentioned above, they are two of the most important factors for learning (Barnes et al. 2008). A study analyzing the relevant research linking game to language teaching (120 studies from 2014 to 2019) confirms that the words "motivation", "mobilization" and "dedication" are the most common and this confirms the close relationship of educational games with the corresponding emotions of students (Caponetto et al., 2014). Since games therefore involve the terms motivation and engagement, then they are also very likely to lead to learning by reinforcing it (Barnes et al., 2008).

In the most modern educational research that studies and supports the introduction of games in teaching, the "flow" factor emerges as a fundamental factor that is also involved in playful teaching (Brom et al., 2014). "Flow" seems to be a state of "flow", in which the student loses the sense of time, shows feelings of joy and high commitment (Rachels & Rockinson-Szapkiw, 2017; Shu & Liu, 2019). In particular, the

situation is characterized by a particularly high concentration in an activity, understanding it, a sense of balance between teaching requirements and student performance and student autonomy (Brom et al., 2014).

Regarding foreign language learning, performance in individual activities and a more complete understanding of content in a language, different from the mother tongue, are two of the dominant positive outcomes that have been proven to be associated with the parallel introduction of games in the lesson (Brom et al., 2014). In fact, here lies the difference between educational game in relation to games in general (Shu & Liu, 2019). It is pointed out, however, that the connection of digital games in a second language with the learning of structures outside the vocabulary has not yet been sufficiently proven (Chik, 2014; Sylvén & Sundqvist, 2012). Therefore, students who adopt digital language games show greater performance and development in their cognitive skills in the long run (Wouters et al., 2013; Yang et al., 2008).

The Game Story Cubes

Story Cubes game is a storytelling board game which encourages players to tell a story with the help of dice. Story Cubes is a set of nine dice with different pictures on each side used to prompt a story. It is a simple and easy game without strict rules, so it can be played in many different ways. In the present study students were asked to take turns and narrate a story in order to practice speaking by using the vocabulary (Thomou et al., 2009) of the thematic axis "Traveling" that it's included in CEFR (2001) and CEFR Companion Volume (2018). The game starts when the teacher rolls the first dice and gives a starting sentence as an introduction to the story. The first student continues the story, and every student has to build on and add to his/her classmates' story with a new dice, in order to strengthen the story until each student has spoken (Figure 1 shows a possible set of figures). There are no wrong or right answers and there is no score either. The only rule is that each student has to use minimum two or maximum three sentences in order to continue the story. In that manner there is a balance in how long each student talks. In the present study, prior to the beginning of the game, students brainstormed ideas in order to retrieve from their memory the relevant vocabulary of the thematic axis "Travelling" that they had been taught (Tegou et al., 2021). At the same time their teacher was writing it down on the blackboard, and thus creating a semantic map. The semantic map was initially built on the basic thematic subcategories of the thematic unit and then extended to the basic vocabulary items of each of them.

Figure 1

Story Cubes



Source: https://davebirss.com/storydice-creative-story-ideas/

Research Methodology

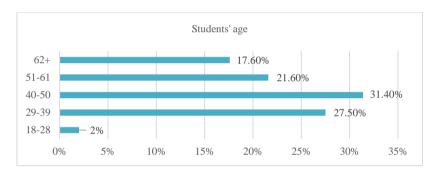
Data in this research were collected using a) classroom observation and b) an equestionnaire (Appendix 1) which has been answered by the students. Before conducting the research, the researchers designed an observation form (Appendix 2) based on the advantages and disadvantages encountered during the implementation of the game *Story Cubes*. Observations were made during six different online classes (where the number of students ranged between 4-10) in terms of participation, students' psychology, motivation, vocabulary usage (Thomou, 2008; Rousoulioti et al., 2020b) related to the thematic axis *Travelling* and duration of the game. Class sessions were observed, and questionnaires were administered to the students. The questionnaire was translated to students' first language (Turkish), the questions that appeared on it were formulated on the basis of the research questions and according with other research in the field (Bicen & Kocakoyun, 2018; Phuong & Nguyen, 2017; Zboun & Farrah, 2021).

The questionnaire was divided in three sections, according to the research questions, and it contained seven items referring to the first research question, seven items referring to the second, and eight items referring to the third one. The fifty-one participants were asked to choose one from a five-point Likert scale (1 = not at all, 2 = little, 3 = enough, 4 = much, 5 = very much) for each item inquiring their opinion best fits in the questions regarding: online teaching, the implementation of games in their online classes and the evaluation of the effectiveness of the game *Story Cubes*. Data were analyzed statistically using SPSS (version 27). Furthermore, two open-ended questions were used in order to detect what the students liked most about the game, and what was their opinion compared to the board game version of *Story Cubes* in face-to-face classes.

Research Setting and Participants

This study was conducted during the Fall Semester of the academic year 2021/2022 in online lessons. The participants consisted of students, teachers, and three researchers who observed the implementation of the game. Fifty-one students, 16 males and 35 females, who were adult learners of Greek as L2 in Istanbul/Turkey participated in the study. All the students' proficiency language level was intermediate B1/B2, *Independent user* according to the Common European Framework for languages (CEFR, 2001) and the e-diagnostic test of the Centre for the Greek Language (Rousoulioti et al., 2020a). Their age ranged between 18-62+ and they were classified in five groups as Figure 2 shows below.

Figure 2
Students' Age



Four teachers, two females and two males, participated in the study and their age ranged between 34 and 39. Three of them hold a MA, one of them BA and their teaching experience ranged from 3 to 12 years. Two of them stated that they had participated in seminars, training programs or workshops related to teaching Greek as a foreign language while all of them are members of *Dialog-os*, a digital community which supports teachers of GFL in Turkey.

Research Results

Students' Perspectives About Online Education

The research question aims to highlight the general attitude of students about distance education by focusing on the learning process, as it is described in *Table 1*. The majority of the participants was not familiar with online lessons in Greek classes before COVID-19 pandemic [statement 1 (M = 1.53, SD = .73)]. A few students report that they prefer online lessons to face-to-face ones [statement 2 (M = 2.43, SD = 1.9], as they believe that the interaction between them and the teacher is reduced [statement 5 (M = 2.12, SD = .89)]. On the other hand, they believe that online lessons cover their learning needs

enough [statement 6 (M = 3.00, SD = 1.00]. Certainly, online lessons are not a stress factor [statement 4 (M = 1.78, SD = 1.00], while it seems that students' participation in the lesson is not related to online lessons [statement 3 (M = 2.73, SD = 1.02]. Regarding the platform through which the lessons are conducted most of participants are very satisfied [statement 7 (M = 3.59, SD = 1.06].

Table 1Perspectives About Online Education

Sta	tements	Mean	SD
1.	I was familiar with online lessons before COVID-19 pandemic.	1.53	.73
2.	I prefer online lessons in comparison with traditional.	2.43	1.19
3.	I participate more in online lessons.	2.73	1.02
4.	I feel anxiety in online lessons.	1.78	1.00
5.	Interaction with the teacher in online lessons is better than face-to-face	2.12	.89
	lessons.		
6.	Online lessons satisfy my learning needs.	3.00	1.00
7.	I am satisfied with the platform that we use.	3.59	1.06

Students' Perspectives About the Implementation of Games in E-Classes

Generally, students have a positive attitude towards the game in the implementation of games in the class as it is described in *Table 2*. They often play games in the class [statement $8 \ (M=2.71, SD=.73]$]. Almost all of them like it from scale 3=enough till scale 5= very much [statement 9 $\ (M=5.45, SD=1.64]$]. Games motivate them to participate more in the lesson [statement 11 $\ (M=3.45, SD=.94]$] and they feel that they cooperate better with their classmates [statement 10 $\ (M=3.43, SD=.85]$]. They believe that games are a useful tool to practice speaking [statement 13 $\ (M=3.75, SD=.87]$] and they feel relaxed when they play [statement 14 $\ (M=3.35, SD=.82]$]. Additionally, they prefer to play a game rather than to answer to vocabulary exercises [statement 12 $\ (M=3.29, SD=1.04)$].

Table 2

Games in Digital Environment

Sta	tements	Mean	SD
1.	We often play games in class.	2.71	.73
2.	I like when we play games in class.	5.45	1.64
3.	When I play games in class, I feel that I cooperate better with my	3.43	.85
	classmates.		
4.	When I play games in class, my motivation to participate in it increases.	3.45	.94
5.	I prefer to play a game than to answer to vocabulary exercises.	3.29	1.04
6.	I find that games are useful for practicing speaking.	3.75	.87
7.	When I play games in class, I feel relaxed and I don't feel shy to speak.	3.35	.82

Students' Perspectives About the Effectiveness of the Board Game Story Cubes in

Speaking

Students generally responded very positively in the evaluation of *Story Cubes* as they agree *much* in most of the statements, described in *Table 3*. Most of the students agreed that the game *Story Cubes* was an ideal choice for their language level [*statement 21* (M = 3.59, SD = .88]. They also agree that they did not face any difficulties related to the instructions or the rules of the game, so it is a simple game from this perspective [*statement 15* (M = 3.18, SD = .82]. The images on the dice were very helpful for speaking [*statement 16* (M = 3.27, SD = .89], while vocabulary practice through *Story Cubes* makes the lesson more interesting [*statement 19* (M = 3.67, SD = .95]. Not having to face any score was very encouraging to them in order to speak fluently [*statement 18* (M = 3.57, SD = 1.04]. The fact that there are no correct or wrong answers decreased their anxiety very much [*statement 17* (M = 3.71, SD = .97] and they definitely want to play again [*statement 22* (M = 3.76, SD = .97]. In terms of vocabulary memorization, they reported that they remember better the vocabulary used while playing the game *Story Cubes* [*statement 20* (M = 3.37, SD = .98].

Table 3Evaluation of Story Cubes

Sta	Statements				
1.	Story Cubes game's design is simple and I didn't face any difficulties to	3.18	.82		
	understand how it's played				
2.	Pictures on dice helped me speak	3.27	.89		
3.	The fact that are no right or wrong answers decreased my stress for speaking	3.71	.97		
4.	The fact that in the game there is no score, encouraged me to speak	3.57	1.04		
5.	Practicing vocabulary playing the game Story Cubes makes the lesson more	3.67	.95		
	interesting				
6.	I remember better the vocabulary used (by me, by my classmates or by my	3.37	.98		
	teacher) during the Story Cubes game				
7.	Story Cubes game was ideal for my language level	3.59	.88		
8.	I want/look forward to play the game Story Cubes again	3.76	.97		

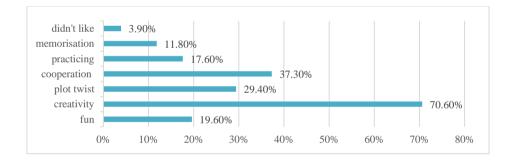
Students' Answers in the Open-ended Questions

Additionally, students had to answer in two open-ended questions. The first question was what students like the most about the game *Story Cubes*, which intended to be complementary to their answer to the third research question and their answers described in Figure 2. The majority of them liked *Story Cubes* mostly because it is a creative game (70.6 %) and promotes cooperation in the class (37.3 %). The students enjoyed the fact that there was a common goal, creating a story all together, while every

time there was a plot twist at the end of the story (29.4 %). This creates a fun environment, which was mentioned by the students (19.60 %) and probably increases their excitement. Some students reported that they liked practicing speaking and recycling vocabulary through the game (17.6 %) (Rousoulioti et al., 2020a). Furthermore, some students mentioned that the short duration of the game was an advantage because they did not get bored, the images on the dice were very useful and helped them come up with ideas and/or continue the story. There was just a small percentage of the participants, 3.9%, who reported that they did not like the game.

In the second open-ended question, students were asked if they have ever played the game in face-to-face classes, and what was their opinion about it compared to the online version. Only a few students, 25.5 %, had played the game in their face-to-face classes. Half of them preferred it and the other half did not mention any differences between the online and the face-to-face version. For the rest, 74.5 %, it was their first experience playing this game. Due to the small number of students, further research is needed to confirm students' answers to this question.

Figure 3
What Students Liked the Most in Story Cubes Game?



Data from Observation

Most of the students played the game for the first time, so the teacher explained in detail how the game was conducted. The first impression was very positive. The students saw the game as a challenge for all of them to create a story together. They were curious to play, and the participation was really satisfactory. In all classes the game was played twice for two reasons: In the first place, the first round was to warm up and secondly, the classes were small and therefore there was enough time. The pictures on the dice were useful and helped students speak. It is interesting that many students did not use the image itself, but they created sentences based on what that image reminded them or what it symbolized. That shows that images or pictures trigger associations in students' minds (Van Amelsvoort, 2013; Zainuddin & Idrus, 2016), and the absence of strict rules allows self-expression and boosts rapid thinking (Bicen & Kocakoyun, 2018). Consequently, a defined thematic axis (*Travelling*, in the present paper) did not work as

expected. Students did not focus on the specific thematic and did not try to use the vocabulary based on trips. The game worked as a tool for self-expression and images sparked the students' imagination, which led them to create funny and surrealistic stories. In lower levels, where the students have limited vocabulary repertoire, they mainly tried to focus on specific vocabulary, something that is worth further research.

Students enjoyed it a lot and in general they were laughing with the flow of the story. They were excited with every new roll of the dice because nothing was predictable. Every student/storyteller was twisting the plot and the next in line felt like she or he had to be alert and ready to add something new to the story. Some difficulties that have arisen were the following: There were a few long pauses where students needed some extra time to think. All students were not in a mood to play, or they did not understand clearly the rules, so when it was their turn to speak, they interrupted the game for clarifications. Furthermore, some of them did not follow the first-person or third-person narrative, that was defined indirectly from the previous student-player. In these cases, the teacher had to intervene so the story could make sense. Storytellers did a few grammar mistakes, which were not important enough hinder/ to (negatively) impact the other storytellers or the story itself. Last but not least, in two classes there were some technical problems, such as weak internet connection and problems with sound, which distracted the students and they had to stop their narration. As a result, the flow of the story was interrupted, and they needed more time to complete the round of the game.

Teacher's feedback was an important factor for the outcome of the story. When the teacher made any grammar and vocabulary corrections the flow of the story was disrupted. Probably, it would be better if the teacher kept his/her own notes of the mistakes and gave his/her feedback when the game was over. Other times, when the teacher reacted in a positive way during the outcome of the story e.g., s/he smiled, s/he laughed, s/he made comments as "nice", "let's see what will happen now" etc., that was encouraging for the students, and it boosted their confidence.

Discussion

RQ1: What are the perspectives of students about online education?

The current study reveals that, although most of the learners believe that online classes meet their learning needs, they still prefer face-to-face classes, as they feel that there is better interaction between them and their teacher. Face-to-face classes and the teacher's role in them could not be replaced by the on-line ones (Klimova, 2021).

The role of digital games in distance education is also important to create a pleasant learning environment, as it has been shown by this research. This could be counterbalanced by the usage of board games in the lesson, as they offer a highly interactive classroom environment (Gąsior, 2019) and a pleasant learning atmosphere. The level of stress when learning a foreign language remains the same between face-to-face courses and distance education during the pandemic (Maican & Cocoradă, 2021).

RQ2: What are the perspectives of students about the implementation of games in e-classes?

The motivation that students show almost each time they play educational games is the main reason for their adoption in the educational process (Caponetto et al., 2014). According to learners' perspectives of the implementation of games in e-classes, *Story Cubes* contributed to the learning process satisfactorily. First of all, students claimed that the game motivated them to participate more in the lesson and helped them to express themselves freely in speaking.

Additionally, they reported that this game promoted collaboration and eliminated their anxiety; factors that could be a reason for speaking difficulties (Hosni, 2014), which consequently throw a spanner in communication. Under these conditions, teaching based on the afore mentioned digital game can be considered successfully performed in terms of the three parameters according to Chik (2014) related to the educational suitability of a game: the success of educational - learning goals, the social interaction between students and the motivation of students to participate in the lesson.

Furthermore, the findings of the current study are in line with the claim that board games promote student-centered learning (Branch, 2009), enhance social and emotional development, and promote creativity. Through a (digital) game, a suitable ground is created for strategies such as cooperative learning and the task-based method (Gros, 2007; Shu & Liu, 2019). According to the above data, playful teaching includes elements/strategies, which improve both the performance and motivation of students (Chen et al., 2019).

RQ3: What are the perspectives of students about the effectiveness of the board game Story Cubes in speaking?

Board games can support students' effort to speak in a foreign language. Students thus have many opportunities to use the second language, as they interact and communicate (Sylvén & Sundqvist, 2012). Story Cubes, a storytelling game, has been implemented in e-classes during the COVID-19 pandemic as a mean of recycling vocabulary and speaking. According to participants' answers, the game was an ideal choice for their language level. Regarding the benefits of the game, participants reported that they liked it because it has a simple design, it does not have strict rules and it promotes self-expression. Also, the pictures on the dice not only help them speak, but also inspire them to think in a different way, enhancing creativity and sparking their imagination. Supplementary to the questionnaire administrated to the students, data were collected through classroom observation to cross-check students' answers regarding the implementation of the game.

According to research findings, the game *Story Cubes* created positive atmosphere in the class and boosted team spirit. Students' performance in speaking has been enhanced. Thus, it can be concluded that students unconsciously learn by playing, while acting like this they confirm the theory of indirect knowledge acquisition after DGBLL (implicit learning) (Chik, 2014).

Students were eager to participate in the game, they worked together to narrate a common story and they enjoyed it. The above, confirms the research fact that students may experience feelings of satisfaction, pleasure (Chen et al., 2019; Nazarova & Galiullina, 2016; Rachels & Rockinson-Szapkiw, 2017; Shu & Liu, 2019), greater motivation and attention, and particularly increased interest in the educational act (Caponetto et al., 2014; Chik, 2014) by playing digital games. This issue has also attracted the attention of educational researchers in recent years, as it is a common phenomenon for students to show reduced interest during teaching and to be provoked by feelings such as laziness or distraction.

Students' laziness is one of the major issues that concerns teachers during teaching. (Shu & Liu, 2019). However, by supporting teaching with activities that are entertaining like digital games, such feelings are alleviated, even eliminated, as students show a particularly high motivation to learn and participate in the lesson (Brom et al., 2014; Yang et al., 2008). In fact, the pleasure-satisfaction that accompanies such process is a primary motivation for learning (Shu & Liu, 2019), and as a result learning and practicing a second/foreign language often becomes unconscious (Chik, 2014).

In the research that support the implementation of games in teaching, the "flow" factor emerges as a fundamental factor that is also involved in playful teaching (Brom et al., 2014). "Flow" seems to be a state of "flow", in which the student loses the sense of time, shows feelings of joy and high commitment (Rachels & Rockinson-Szapkiw, 2017; Shu & Liu, 2019).

In fact, the simultaneous use of games as a means of entertainment and education, can lead children to great autonomy (Chik, 2014). The autonomy that the student can feel is related to the degree of their goal setting, that is their intention to turn an otherwise entertaining process into a learning process, thus changing the free learning into a targeted one (Chik, 2014).

In addition, students are attracted to digital teaching materials, as it is more suited to their personal interests (Kirstavridou et al., 2020). The learning process is influenced by students' emotional - personal situation, so they need to change their role, from a passive receiver to an active co-creator of the lesson (Nazarova & Galiullina, 2016).

Storytelling belongs to productive activities that contribute more to the memorization of new vocabulary (Hulstijn & Trompetter, 1998) offering students the opportunity to practice and recycle the vocabulary, that they already know, in a creative way. Digital games as *Story Cubes* are a fertile ground for the development of collaborative learning (Gros, 2007; Shu & Liu, 2019). This opportunity enhances social interaction and collaboration between students. In addition, it can also help students who have difficulties in socializing and expressing their views in the classroom.

The students stated that *Story Cubes* helped them to some extent in practicing the already known vocabulary. However, further research is needed. According to Chik

(2014), who studied vocabulary learning through digital games, it is concluded that frequent users of such games show increased lexical performance, but in a more every day and frequent vocabulary, which is usually the basic language of digital games.

In order to transmit the learning skills and strategies through games to the students, it is of great importance for the teacher to guide them gradually, giving them the appropriate guidelines (Martin et al., 2019). This is confirmed by the relevant study of Chen et al. (2019), who concluded that students' repetitive efforts in the context of teaching based on digital games, were associated with the state of "flow", with the performance and finally with the learning outcomes presented by the students.

Pedagogical Implications

In light of the COVID-19 pandemic, the education sector had to be transformed and strengthened with the use of technology in order the learning process to be continued unexpectedly, after the closure of educational institutions. Undoubtedly, there has been a shift from face-to-face to fully online synchronous and/or asynchronous training. In order to respond to this new situation from a technological point of view, it was necessary for students to have either a smart mobile device or a personal computer or an advanced mobile phone.

From a pedagogical point of view, it was important to continue to provide a high-quality education and to create learning environments that actively involve students to the learning process. In this context, digital board games make the learning process pleasant, playful, and unconscious to students. In addition, playful activities including digital board games help students develop motivation, as the learning becomes entertaining and motivate students to meet the demands of the game better and better. The aforementioned characteristics are very beneficial in the era of COVID-19, during which the replacement of face-to-face training by distance learning lasts for hours (Krouska et al., 2022).

Game-based teaching makes it possible to monitor students' progress in a non-invasive way. For example, the teacher can easily attend the language usage and not only the behavior of his/her students during the game and record their linguistic achievements. Several studies have dealt with the adoption of playful strategies in the learning process during COVID-19 and their correlation with students' motivation and the resulting learning outcomes (Nieto-Escamez & Roldán-Tapia, 2021). Teaching through playful activities is a relatively innovative strategy that is also attractive and effective for students. Through them learning can be achieved in a fun way. In relevant research, some students reported that videoconferencing in order to play educational games with each other helped them communicate with their classmates during periods of lockdown, fighting the feeling of social isolation (Nieto-Escamez & Roldán-Tapia, 2021).

The aforementioned hypothesis is reinforced by data collected during the lockdown, in Italy. From a psychological point of view, these data highlighted the role of digital technology in maintaining social relationships and combating the negative consequences of social distancing imposed to reduce the spread of COVID-19. In particular, according to research results, digital technologies and virtual encounters within their usage can develop a sense of social support, which is able to combat feelings of loneliness, boredom and irritability and cultivate a sense of belonging (Gabbiadini et al., 2020).

Conclusion

Therefore, the use of a greater variety of media and learning resources is gradually emerging as a complementary tool for the teacher, aiming to reduce student passivity (Collis & Moonen, 2001; Nazarova & Galiullina, 2016), especially in emergencies but not only in them. From many studies (Caponetto et al., 2014; Chen, Law, Huang, 2019; Shu & Liu, 2019; Yang, Wu, Huang Chien, 2008), it is clear that when a teacher uses games and even supports teaching a foreign/second language by them, the results may be positive.

Without a doubt, digital games put the user at the center of the learning process (Nazarova & Galiullina, 2016), create challenges for him and consequently push him to develop problem-solving strategies (Gros, 2007). One of the most essential reasons for integrating games into the educational process is that in this way fertile ground is created for a deeper learning experience, to which the student is committed and develops a variety of skills (Shu & Liu, 2019).

Finally, since games involve the terms motivation and engagement, then they are also very likely to lead to learning by reinforcing it (Barnes et al., 2008). The performance in individual activities and a more complete understanding of content in a language different from the mother tongue are two of the dominant positive outcomes that have been proven to be associated with the parallel introduction of games in the lesson (Brom et al., 2014). In fact, here lies the difference between educational game in relation to games in general (Shu & Liu, 2019). It is pointed out, however, that the connection of digital games in a second language with the learning of structures outside the vocabulary (Chou, 2012; Sulistianingsih et. al., 2019) has not yet been sufficiently proven (Bush, 2015; Chik, 2014; Sylvén & Sundqvist, 2012).

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Pandemi Döneminde Çevrimiçi Yabancı Dil Eğitiminde Dijital Oyunların Konuşma Becerilerine Etkisi: Öğrencilerin Bakış Açıları

Öz

Bu çalışma, dijital oyunların dil kurslarında konuşma gelişimi ve etkileri üzerine devam eden tartışmayı detaylandırmaktadır. Bu araştırma, COVID-19 pandemi döneminde İstanbul/Türkiye'de yabancı dil olarak Yunanca öğrenen 51 yetişkin öğrenci üzerinde yapılmış olup, uzaktan eğitim derslerindeki dijital oyunların yabancı dilde konuşma gelişimini ele almaktadır. Sonuçlar: Çevrimiçi dersler yetişkinlerin öğrenme ihtiyaçlarını karşılamaktadır, ancak yine de geleneksel olanlar tercih edilmektedir. Story Cubes oyununun dijital versiyonunun öğrencileri derse daha fazla katılmaya, sınıf arkadaşlarıyla ortak çalışma yapmaya ve kendilerini ifade etmeye motive ettiğini gösteriyor. Sözü edilen oyun sınıfta olumlu bir hava yaratmış ve nihayetinde öğrencilerin konuşmalarına olumlu etki yapmıştır.

Anahtar Kelimeler: Dijital oyun, konuşma dersi, dijital öykü, hikaye küpleri, Yunanca yabancı dil

Appendices

Appendix 1

		An	ket					
Cinsiyetiniz:		<u></u>						
Kadın	Erkek							
Yaşınız:								
18-28								
29-39								
40-50								
51-61								
62 ve üzeri								
Yunanca'da hangi seviyedesiniz?								
A1	A2	B1	B2	C1	C2			

Aşağıdaki soruları kendinize en uygun seçeneğe göre işaretleyiniz

		hiç	az	yeterince	çok	çok fazla
Online dersler						
1.	Pandemiden önce online derslere aşinaydım.					
2.	Yüz yüze derslere göre online dersleri tercih ediyorum.					
3.	Online derslerde derse daha çok katılıyorum.					
4.	Online derslerde kendimi stresli hissediyorum.					
5.	Online derslerde öğretmenle etkileşim yüz yüze derslere göre daha fazladır.					
6.	Uzaktan eğitim, ders ile ilgili ihtiyaçlarımı karşılıyor.					
7.	Derslerin gerçekleştiği platformlardan memnunum.					
Der.	ste oyun					
8.	Derste sık sık oyun oynarız.					
9.	Derste oyun oynadığımız zaman çok keyif alıyorum.					
10.	Derste oyun oynadığımız zaman sınıf arkadaşlarımla daha iyi çalıştığımızı düşünüyorum.					
11.	Derste oyun oynadığımız zaman oyuna katılma motivasyonum artıyor.					
12.	Kelimeleri pratik yapmak için; alıştırmaları çözmektense oyun oynamayı tercih ederim					

13.	Konuşma pratiği yapmak için oyunların faydalı olduğunu			
	düşünüyorum.			
14.	Sınıfta oyun oynadığımızda daha rahat hissediyorum ve			
	konuşmaktan çekinmiyorum.			
Stor	ry Cubes oyunu			
15.	Story Cubes oyunu basitti ve beni zorlamadı.			
16.	Story Cubes oyununda resimleri kullanmak konuşmama			
	yardımcı oldu			
17.	Story Cubes oyununda doğru ve yanlışın olmaması stresimi			
	azalttı.			
18.	Story Cubes oyununda oyunun puansız olması beni			
	konuşmaya teşvik etti.			
19.	Story Cubes oyunu aracılığıyla kelime alıştırması yapmak			
	dersi daha ilginç hale getirir.			
20.	Story Cubes oyunu sırasında (benim tarafımdan, sınıf			
	arkadaşlarım veya öğretmen tarafından) kullanılan kelimeleri			
	daha iyi hatırlıyorum.			
21.	Story Cubes oyunu seviyem için idealdi.			
22.	Bir daha Story Cubes oynamayı isterim.			

^{24.} Story Cubes oyununu yüz yüze derslerinize oynamış mıydınız? Yüz yüze dersle kıyaslayınca nasıldı?

ΦΥΛΟ:

Appendix 2 Έντυπο παρατήρησης

ΦΥΛΟ: Άντρας ΠΑΙΚΙΑ:	Γυναίκα 🔲
• ΣΠΟΥΔΕΣ	
Κάτοχος πανεπιστημιακού τίτλου	
Κάτοχος μεταπτυχιακού	
Κάτοχος διδακτορικού	
	δασκαλία της ελληνικής ως δεύτερης/ξένης
 Υρόνια διδασκαλίας ελληνικής 	ως δεύτερης/ξένης γλώσσας:
Ζητούμενα	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον	
Ζητούμενα	
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον	
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά Α) τη συμμετοχή	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά Α) τη συμμετοχή Β) την ψυχολογία των μαθητών	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά Α) τη συμμετοχή Β) την ψυχολογία των μαθητών Γ) τα μαθησιακά αποτελέσματα (χρήση	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά Α) τη συμμετοχή Β) την ψυχολογία των μαθητών Γ) τα μαθησιακά αποτελέσματα (χρήση	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά Α) τη συμμετοχή Β) την ψυχολογία των μαθητών Γ) τα μαθησιακά αποτελέσματα (χρήση αναμενόμενου λεξιλογίου κλπ.)	Παρατηρήσεις
Ζητούμενα Πλεονεκτήματα του παιχνιδιού όσον αφορά Α) τη συμμετοχή Β) την ψυχολογία των μαθητών Γ) τα μαθησιακά αποτελέσματα (χρήση αναμενόμενου λεξιλογίου κλπ.)	Παρατηρήσεις

Χρειάσ	τηκε	περισσ	σότερος ή	λιγότ	τερος	Ναι	(πόσος	χρόνος
χρόνο	για	την	ολοκλήρο	ωση	του	χρειάστηκε))	
παιχνιδ	ιού;							
Γιατί;						Όχι,		

Exploring English Majors' Views and Perceptions of Emergency Remote Learning, Learner Autonomy, and L1 Use in Asynchronous Video Lectures

Burcu Gökgöz-Kurt

Abstract

The purpose of the present study was to explore university students' views and perceptions of emergency remote learning (ERL), their self-reported degree of learner autonomy, and the use of the first language (L1) in asynchronous classes (i.e., pre-recorded video lectures) during their transition to ERL in Spring 2020. The participants were predominantly freshmen students studying English Language and Literature (ELL) at a public university in Turkey. The data was collected via a cross-sectional five-part web-based questionnaire using convenience sampling (n = 86). The study reveals interesting findings regarding (a) students' views about ERL, (b) their self-reported degree of learner autonomy, (c) their views about lecturers L1 use in asynchronous video lectures, and (d) whether and how these variables are interrelated and can be predicted by background variables. The qualitative findings further suggest that students hold mixed opinions regarding their new learning experience and mention the technical issues, lack of contact, and psychological problems as the most urgent issues to be addressed. Students were also found to be quite autonomous, and this was correlated with ERL ratings. Additionally, a majority of the ELL students considered the use of L1 in video lectures acceptable as long as it was limited. The findings are likely to inform the academicians who teach English majors at higher education institutions as well as learning management system designers by providing them with various insights.

Keywords: Asynchronous Learning, COVID-19, ELL Students, Learning Management System, Pre-recorded video lectures, Turkish students

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Introduction

Following the declaration of the COVID-19 pandemic in Turkey in March 2020, Turkish higher education institutions had to make a transition from face-to-face to online teaching and learning as smoothly and promptly as possible. They either had to

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completely close or switch to alternative models such as synchronous (e.g., videoconferences) or asynchronous (e.g., pre-recorded lecture videos) modes of learning and teaching. Prior to the pandemic, distance education was already implemented in higher education institutions in a very limited way; however, it was both optional and not as prevalent. Therefore, to distinguish between these two forms of online learning and teaching, new terms such as emergency remote learning (ERL), emergency elearning, or emergency distance/remote education were introduced as a panacea to sustain the teaching and learning activities in these unpredictable times. Since ERL classes had been normally planned as conventional, face-to-face classes, various problems emerged upon their rapid transition to distance education. In the time of global confusion, students, instructors, educational institutions, as well as curriculum, material, and learning management system (LMS) developers were not prepared. While teachers had to learn how to teach and reach their students in this new way of learning, students had to adjust their learning and study habits. With the increased flexibility ERL brought together, students were expected to take control of their own learning process. However, although this control, also referred to as learner autonomy (for a discussion, see Andrade & Bunker, 2009) has been claimed to be one of the goals of education (Xu, 2013) and requirements of successful learning in distance education (Andrade & Bunker, 2009; Moore, 1972; Yen & Liu, 2009), how much learners were ready for such an autonomous learning experience was unknown and will be further investigated in this study.

Another topic the present study aims to investigate is students' views regarding instructors' first language (L1) use in ERL classes. Although L1 use in the language classroom has been debated over years, especially after the mid-1990s, scholars have started investigating the use of L1 as a valuable pedagogical tool in second language (L2) learning, and the field has "now reached the point where there are virtually no commentaries made in the SLA field advocating the exclusion or even the strong limitation of the L1" (Macaro et al., 2018, p. 2). The use of L1 by L2 students and teachers has been investigated extensively in the language learning and teaching contexts at tertiary level, and found to serve various instructional and communicative functions (e.g., Ataş & Sağın Şimşek, 2021; Köylü, 2018; Shin et al., 2020). Previous research has also shown that some of the functions of L1 use, among others, are "feeling of connectedness," "keep[ing] students engaged," (Raman & Yigitoglu, 2015, p. 6), and "[establishing] empathy/solidarity" (Grim, 2010, p. 195), which are especially important in courses delivered via distance education (Bagriacik Yilmaz & Banyard, 2020; LaPointe & Reisetter, 2008). L1 use has also been investigated in English-medium instruction (EMI) courses in which academic content is delivered via L2 English. Findings have shown that teachers used L1 in EMI courses usually for such reasons as clarification of a certain concept, establishing a connection between the content and students' "cultural 'prior knowledge" (Macaro et al., 2018, p. 17) or promoting interaction and positive relationships (Breeze & Roothooft, 2021, p. 211). Despite its functions, it should also be noted that teachers and students are well aware of the drawbacks of L1 use on L2 development. Students prefer their teachers to "predominantly" use L2 English in the classroom, and expect their teachers to strive for making explanations in L2 English even when they need to explain a difficult concept (Macaro et al., 2018, p. 13). In this study, English Language and Literature (ELL) students' opinions regarding their lecturers' use of L1 in the pre-recorded video lectures during ERL will be investigated.

Given the challenges and the circumstances of ERL, the present study aims to investigate ERL views and experiences of the students who are majoring in ELL at a public university in Turkey. ELL students' views on ERL will also be examined in relation to their self-reported degree of learner autonomy and views of L1 use in their asynchronous ERL classes.

Literature Review

Distance education was described as "the effort of providing access to learning for those who are geographically distant" (Moore et al., 2011). Similarly, distance learning, as decribed by Volery and Lord (2000), was seen as an ability, which was later expanded to include terms such as online learning or e-learning (For a discussion, see Moore et al., 2011). There are two basic modes of online learning: asynchronous and synchronous. While synchronous learning describes learning and teaching which occur "simultaneously via an electronic mode," such as live sessions in real time, asynchronous learning takes place through the use of "readily available material in the form of audio/video lectures, handouts, articles and power point presentations" (Perveen, 2016, p. 22). Regardless of the mode, the effectiveness and the benefits of distance education are well-documented in the previous studies (e.g., Bernard et al., 2004; Traxler, 2018); however, ERL diverges from the traditional view of distance education due to its abrupt and unplanned way of maintaining learning and teaching practices (Bozkurt et al., 2020). As Hodges et al. (2020) indicate, the primary goal of remote learning and teaching is "to provide temporary access to instruction and instructional supports in a manner that is quick to set up and is reliably available during an emergency or crisis" rather than "to re-create a robust educational ecosystem" (p. 7). Although Hodges et al. (2020) further distinguish online and remote learning stating that the latter may also cover offline practices, for convenience, ERL (classes), online classes, or asynchronous video lectures will be used interchangeably to refer to the asynchronous type of learning in the current study.

Following the transition to ERL, students and teachers faced a variety of challenges and obstacles due to lockdowns. Since students had to adjust their learning habits and cope with many difficulties, a better understanding of students' views and experiences regarding this transition period is of vital importance for planning and implementing improvement practices. Studies investigating ERL experiences in the context of higher education in Turkey have reported negative findings related to ERL perceptions. Technical and infrastructural insufficiencies, lack of face-to-face interaction and communication, psychological problems, loss of engagement/motivation to learn, and assessment issues have been frequently found to be among the reasons which cause unfavorable perceptions and experiences of ERL (Alan et al., 2020; Durak & Çankaya, 2020; Erarslan, 2021; Taşçı, 2021). One study looking specifically at

English majors' views of ERL was conducted by Dinçer (2021). She investigated 11 first year English language teaching (ELT) students' and 4 instructors' views and experiences of ERL through journals, focus group discussions, and classroom observations, which took place online. The findings of her qualitative inquiry have shown that students and instructors had to face various technical, personal and assessment-related challenges while they also stated various benefits such as the availability of course recordings, convenience, and take-home exams. Dinçer's study is very important in revealing ERL perspectives of first year students who are majoring in English; however, further studies investigating various individual variables that might predict these views may help better understand the underlying factors.

Learner autonomy (LA) is one of these factors which has been researched in relation to distance education as a desirable characteristic of an online learner. It has been simply defined as learners' "ability to take charge of" (Holec, 1981, p. 3) or "the capacity to take control over" their own learning (Andrade & Bunker, 2009; Benson, 2001, p. 2). Learner autonomy is also underlined in self-determination theory (SDT). According to SDT, there are three psychological needs to be satisfied for internalizing academic motivation: autonomy, competence, and relatedness (Deci & Ryan, 1985; Ryan & Deci, 2000). Students are considered to have autonomy when their behaviors are "volitional and reflectively self-endorsed," for example, in fulfilling the expectations of their courses, and to be competent when they have the feeling that they can overcome the difficulties of their studies (Niemiec & Ryan, 2009, p. 135). First used in the realms of political science and philosophical studies, the concept of autonomous learning has been linked to distance learning as "such [distance] forms of learning may require the exercise of autonomy" (Smith, 2008, p. 396). In distance education literature, LA is also one of the three main aspects noted in Moore's (1972, 2019) theory of transactional distance, which provides a cogent account of the flexible structure and "the pedagogical complexity of distance education" (Peters, 1998, p. 2). Moore (2019) describes the concept of transaction in distance education as "the interplay of the behaviors of teachers and learners in environments in which they are in separate places and have to communicate through a technology" (p. 13). So, he claims that when the transactional distance increases, the level of autonomy expected from the students also elevates. In this vein, compared to distance education, students need to have higher degrees of autonomy because the transactional distance Moore (1972, 2019) mentions seems to be very large in ERL. Therefore, a closer examination of the interplay of ERL and autonomy might reveal interesting insights into the nature of the asynchronous mode of learning.

In much of the previous research, the significance of learner autonomy for successful online learning is underlined (Bozkurt et al., 2020; Firat, 2016; Peters, 1998). Empirical studies have investigated the role of autonomy in distance education in the context of Turkey, and mixed findings have been reported. Altunay (2013) examined the autonomous language learning behaviors of EFL learners in the Turkish Open Education System in their obligatory synchronous courses. The findings revealed that participants did not display autonomous learning behaviors as measured by their completion of non-compulsory activities as a part of their courses. Firat (2016)

investigated the e-learning autonomy of distance education students and found that their level of autonomy was high and linked to their use of information and communication technologies. Another study by Güneş (2018) looked at the relationship between academic success, motivation, and LA in distance and blended learning students (for a definition, see Driscoll, 2002). The students' self-rated level of autonomy was found to be higher for distance education students than those involved in blended learning. These studies have examined LA in the context of distance education, but much uncertainty still exists about the relationship between LA and ERL experiences. Since ERL has additional drawbacks such as technical problems, infrastructure and lack of planning, the level of autonomy students would normally exert may be affected. One study conducted with Turkish teachers of English as a foreign language examined teachers' perceptions of LA during the lockdown period (Güler & Esen, 2021), but there is a need to understand the nature of this relationship for students.

An additional issue the present study seeks to explore is the students' views regarding lecturers' L1 Turkish use in their pre-recorded video lectures. L1 use in L2 classrooms has been extensively investigated although there are relatively fewer studies in the EMI context (Macaro et al., 2018). There has been hardly any consensus on whether and how much L1 use should be allowed in the L2 classrooms and even more so in classes where English is primarily used for delivering content. In asynchronous video lectures, despite the lack of interaction, the lecturers are encouraged to create a sense of community, engagement, and solidarity through various ways, one of which might be the use of L1 as shown by previous research in foreign language learning (e.g., Grim, 2010; Raman & Yigitoglu, 2015). Studies have also shown benefits of L1 use such as creating a friendly atmosphere (Köylü, 2018), a supportive language environment and a personal attitude (Istifci, 2019). Also, in the context of distance education, students reported that they enjoyed listening to their teachers using "the local language" in the pre-recorded videos (Lapitan et al., 2021). L1 use could potentially be regarded as a means of creating "relatedness" which was emphasized as one of the three requirements for internalizing academic motivation (Deci & Ryan, 1985), and was often associated with "a sense of belongingness" and "connectedness" (Ryan & Deci, 2000, p. 64) within the framework of SDT. So, L1 use could serve as one way to help students in online learning feel the sense of "inclusion", "importance," and "interpersonal support" leading to "academic outcomes" such as "engagement," "effort," and "positive affect" (Furrer & Skinner, 2003, p. 149). However, previous research has also pointed out detrimental effects of L1 use in L2 classrooms because it might not only deprive L2 learners of the opportunities of input but also interfere with the L2 development (see Lasagabaster, 2013). At a higher education institution, Karakas (2016) investigated instructors' opinions regarding L1 Turkish use in classes where academic content is delivered through L2 English. His findings indicated that although the overall attitude was mainly not a disapproving one, those lecturers who opposed L1 use have reported "policy rules," "disciplinary problems," and "presence of international students" as primary reasons for not using the L1 in their classrooms. Previous research (Cook, 2001) has suggested "a judicious and theoretically principled" use of L1 (for a discussion, see McMillan & Turnbull, 2009), but it is uncertain whether and how the use of L1 may be controlled once it is tolerated (Turnbull, 2001). L1 use deserves further attention given the lack of agreement on the issue; therefore, the present study further seeks to explore the students' views on lecturers' use of L1 in the asynchronous lecture videos in relation to their perceptions of learner autonomy and ERL.

Purpose of the Study and Research Questions

Previous studies have examined students' views in distance education as they relate to learner autonomy, but it is still unclear whether a similar pattern exists for ERL students majoring in English. Additionally, when the critical role of creating an atmosphere of connectedness, belongingness, and relatedness in ERL is considered, a better understanding of students' views regarding the use of L1 in video lectures is very much needed. In order to address the above-mentioned gaps in the literature, the current study seeks to explore the students' perceptions of ERL experiences, self-reported degrees of learner autonomy, and views regarding lecturers' L1 use in asynchronous video lectures. Another purpose of the study is to explore the relationship among these and other predictor variables (e.g., gender, age, place of residence, type of education).

With reference to these purposes, the present study seeks to answer the following research questions:

- 1. What are English-major university students' perceptions of ERL?
- 2. What is English-major university students' level of self-reported LA?
 - a. What kind of a relationship exists between students' self-reported LA and their perceptions of ERL?
- 3. What are the English-major university students' views regarding lecturers' use of L1 in ERL classes?
 - a. What kind of a relationship exists between students' views regarding lecturers' L1 use in ERL classes and their self-reported LA?
 - b. What kind of a relationship exists between students' views regarding lecturers' L1 use in ERL classes and their perceptions of ERL?
- 4. How do English-major university students' perceptions of ERL, self-reported learner autonomy, and views regarding lecturers' L1 use in ERL classes differ according to socio-demographic variables (e.g., gender, age, place of residence, type of education) and online learning tendencies (e.g., ratings of the LMS, amount of time spent on the LMS, availability of internet)?

Method

Design

The present study employs a mixed-methods survey design in which the data was collected through a questionnaire with close- and open-ended items. Specifically, a parallel convergent design was employed aiming to combine and complement "quantitative statistical results with qualitative findings for a complete understanding of the research problem" (Creswell & Clark, 2018, p. 125). Of the parallel convergent design types, the present study employs the questionnaire variant in which qualitative data is collected through open-ended questions as "an add-on to a quantitative instrument" and "provide[s] the researcher with emergent themes and interesting quotes ... to validate and embellish the quantitative survey findings" (Creswell & Clark, 2018, p. 73). In line with the convergent design, the students' responses to the open-ended items, which were collected simultaneously, were analyzed qualitatively for recurrent themes to better understand the quantitative findings.

Data Collection Tool and Procedure

The online survey used for data collection comprises the following parts: Learner Background Information Questionnaire (11 questions), Autonomous Learning Scale (ALS) (12 questions), Emergency Remote Learning Questionnaire (ERLQ) (12 questions), L1 use in ERL Questionnaire (6 questions), and open-ended questions regarding ERL and L1 use (3 questions). Participants who volunteered to participate in the survey were presented with 44 questions to be completed. All questions were prepared on a five-point Likert scale ranging from 1= strongly disagree to 5 = strongly agree except for the open-ended and some background information questions. The questions in the survey were compiled using adaptation or adoption based on relevant literature. The questions used to measure the self-reported degree of learner autonomy were taken from Macaskill & Taylor (2010). The scale has a two-factor structure and consisted of 12 questions ($\alpha = .81$), all of which were initially included in the questionnaire without making any alternations. The questions which were used to investigate students' attitudes and views regarding their ERL experience were compiled from various resources (Bolliger & Wassilik, 2009; Kirmizi, 2015; Sahin & Shelley, 2008; Tekinarslan, 2008). The rest of the forced-choice questions which aimed to gather data on students' views on lecturers' L1 use and all three open-ended questions were created by the researcher taking into consideration the literature as well as the contextual needs and circumstances. Since the open-ended questions sought to further explore the quantitative findings, three general questions were formed: "What was best about ERL (if any)?", "What was worst about ERL (if any)?", and "What do you think about the use of L1 Turkish in ERL classes? Is it ok? Why/why not?" To further ensure the validity of the questions, a scholar with a Ph.D. in educational sciences reviewed the questions, which were then revised based on the suggestions. The online version of the questionnaire was prepared using GoogleForms, and the participants were sent out the link following the completion of the Spring 2020 semester.

Participants

The participants of the study involved the students studying ELL at a public university in Turkey, who were recruited on a convenience sampling. Due to COVID-19, the students started taking all their university courses as asynchronous, pre-recorded lecture videos in April 2020. Out of 170 students enrolled in a first-year advanced-level English grammar class, initially, 99 students completed the questionnaire. However, as the present study investigates students' preferences on L1 Turkish use in classes, 10 participants who reported speaking an L1 other than Turkish, and 3 additional duplicate records were removed from the data analysis (n = 86). It should be noted here that foreign students were required to pass a Turkish proficiency exam to enroll as a full-time student in the program as there were various courses, such as translation, which already assumed they spoke Turkish. The participation was voluntary, and the necessary ethical clearance was received.

Of 86 students included in the final analyses, 59 (69 %) had studied a two-semester compulsory intensive English preparatory program (IEPP) before matriculation. The rest had been exempted from the IEPP by either passing the proficiency exam at the beginning of the semester or showing evidence of an exam score whose equivalence was recognized by the school. Participants had completed a semester of classes, all of which were deployed asynchronously due to the pandemic. Female students constituted more than half of the sample (n = 49, 57 %). Finally, a majority of the students (n = 50, 58.2 %) reported living in a city with a population of 500.000 and more, which increases the likelihood of having access to the Internet. A majority of the participants were enrolled in evening education (n = 54, 62.8 %), and only 5 students (5.5 %) were 26 years and older.

Data Analysis

The quantitative data was analyzed with IBM SPSS v23.0 (2015) and Jamovi v1.6 (The jamovi project, 2021). Descriptive statistics was calculated for all four sections of the survey. Then, confirmatory factor analysis (CFA) followed by exploratory factor analysis (EFA) was conducted for the ALS. For the ERLO, the only factor analysis method used was EFA. Then, Pearson Product Moment Correlation and regression analyses were run to determine the relationship between the predictor and outcome variables. Except for confirmatory factor analysis, all analyses were completed using IBM SPSSS v23.0. For the analysis of the qualitative data obtained from the open-ended questions, a thematic analysis with an inductive, data-driven approach following the six steps described in Braun and Clarke (2006) was used. Also, a combination of description-focused and interpretation-focused coding was used as they have been reported to "work well together" when the purpose of the coding was to describe and interpret the data (Adu, 2019, p. 55). The qualitative data was coded and categorized to determine the themes using QDA Miner Lite software v.2.0.9 (Provalis Research, 2018). For calculating the reliability, half of the data for each question, which is approximately 45% of the whole data, was coded by a scholar with a Ph.D. in educational sciences for cross-checking. Then, Cohen's kappa was calculated for measuring inter-coder reliability and was found to be acceptable ($\kappa = .803, p < .01$).

Findings

Quantitative Findings

In the first part of the study, apart from the sociodemographic and language background questions, the participants were also asked questions regarding their ERL habits and experiences. Of 86, 53 (61 %) students reported spending 2 hours or less on the LMS used for ERL with 61 students (70.9 %) using a PC/Laptop with a reliable internet source (n = 63, 73 %). Only 13 students (15.1 %) stated using their phones alone to access their ERL classes with 23 students (27 %) reporting the unavailability of a reliable internet source. Participants also rated how much they liked the platform on a scale out of five, and the findings indicate that only 15 students (17.5 %) gave score of 4 and above (n = 18, 20.9 %, a score of "1"; n = 23, 26.7 %, a score of "2"; n = 30, 34.9 %, a score of "3"; n = 14, 16.3 %, a score of "4"; n = 1, 1.2%, a score of "5"), which is an indication that the students were not very pleased with the platform (n = 86, M = 2.5, SD= 1.04, Sk. = 0.03, Ku. = -0.88). Students also rated to what extent they agreed with the statement that the workload was too much with ERL. Fifty-one of them (62 %) either agreed or strongly agreed with it (n = 86, M = 3.7, SD = 1.07, Sk. = -.45, Ku. = -.68). Finally, there was an item regarding the objectivity of evaluation practices in ERL. The students were asked to express their level of agreement with the statement that the evaluation of success in ERL was quite objective. While 28 students (32.5 %) either agreed or strongly agreed that the evaluation was objective, 39 of the students (45.3 %) were neutral, and 19 of them (22.1 %) disagreed or strongly disagreed (n = 86, M =3.09, SD = .97, $Sk_{-} = .27$, $Ku_{-} = .10$). It is noteworthy that a minority of the students (n = 19, 22.1 %) indicated that they found the evaluation practices not very objective.

In the second part of the survey, the students responded to questions on the Emergency Remote Learning Questionnaire (ERLQ) compiled by the researcher in light of the relevant literature. As the descriptive statistics provided in Table 1 indicate, although students appreciated the flexibility of ERL classes (items 7, 8, and 9), the high mean values for items 11 and 12 further demonstrate that almost all students were frustrated with technical problems in ERL. A mean value of 2.00 for item 4, which asks students to rate their level of agreement with the statement "I learn better in online classes than in a traditional class environment," indicates that the students in the sample overall did not think that they learned better in ERL classes.

Table 1Descriptive Statistics on Attitudes Towards the ERL (n = 86)

- 11	T,	1/	CD
#	Item	M	SD
1	Overall, I am satisfied with online classes	2.48	1.25
2	Online classes contribute to my educational development.	2.70	1.15
3	I prefer attending online classes to regular/traditional classes on campus.	2.20	1.47
4	I learn better in online classes than in a traditional class environment.	2.00	1.19
5	Online education provides me with rich resources on class content.	2.62	1.23
6	I look forward to taking my next online course.	2.16	1.11
7	I appreciate the ability to return to asynchronous lecture videos to go through them at my own pace.	3.76	.92
8	I like the flexibility provided by the online environment.	3.53	1.16
9	I appreciate that I can access my online course any time at my convenience.	3.63	1.09
10	*I can manage my time better with online classes.	2.69	1.17
11	*Online learning is often frustrating because of technical problems.	4.23	1.08
12	*Technical problems discourage me from learning online.	3.97	1.27

Note. Items reported here are the initial pool of items and are not reserve-coded.

Before conducting a factor analysis, normality assumptions were checked. First, values for skewness (ranging from -.05 - 1.45) and kurtosis (ranging from .11 - 1.11) were computed, and four items were found to be above the traditionally acceptable range although Tabachnick and Fidell (2013) suggest values up to ± 1.5 should also be acceptable. Also, the Cook's distance values (ranging from .00 to .55) and VIF values were found tenable (ranging from 1.38 to 2.58), and thus the normality assumptions were met. The factorability of the data was confirmed based on Bartlett's test of sphericity $[\gamma 2 (66) = 439, p = 0.001]$ and the KMO measure of sampling adequacy (.85). The determinant (.004) of the R-matrix indicated no multicollinearity issues. Despite the relatively small sample size for conducting EFA, it is more than 7 times the number of items on the scale, which is considered acceptable (Gorsuch, 2003; Thompson, 2004). As the initial purpose of this analysis is to find the latent variables by considering item covariances rather than a reduction of items, EFA was preferred over principal components analysis (PCA) (Henson & Roberts, 2006; Plonsky & Gonulal, 2015). EFA with principal axis factor (PAF) extraction using direct oblimin (oblique) rotation was set as the extraction method to organize the latent variables. The oblimin rotation technique has been "a high-quality rotation decision" which has been shown to "better represent reality and produce better simple structure" (Conway & Huffcutt, 2003, p. 153: Fabrigar et al., 1999: Ford et al., 1986). However, since Jolliffe's (1972) criterion (eigenvalues > .7) yielded four distinct factors for a small number of items (two factors had two items), the eigenvalue was set to 1 for the analysis. In the initial analysis based on the extraction criteria, item 10 had a low factor loading (i.e., loading < .35), and thus was removed. Also, items 11 & 12 were removed for other reasons. First, they only affected the total variance explained by 1 %, and their removal would increase the alpha coefficient of the scale by about a score of 1.5. Next, previous research suggests having at least three items per factor (e.g., MacCallum et al., 1999). Finally, reliability was also

^{*} These items were removed from the questionnaire following factor analysis.

computed and revealed a high internal consistency with a Cronbach's alpha of .85. The total variance explained by the model was 54.6%. Table 2 below summarizes the findings of the PAF analysis.

Table 2Findings of the Principal Axis Factoring for ERLQ (n = 86)

#	Item	Factor 1	Factor 2	h^{2*}
		Satisfaction	Flexibility	
2	Online classes contribute to my educational development.	.816		.75
1	Overall, I am satisfied with online classes.	.771		.61
6	I look forward to taking my next online course.	.764		.61
4	I learn better in online classes than in a traditional class	.734		.56
5	environment. Online education provides me with rich resources on class content.	.734		.54
3	I prefer attending online classes to regular/traditional classes on campus.	.621		.40
8	I like the flexibility provided by the online environment.		.673	.79
7	I appreciate the ability to return to asynchronous lecture videos to go through them at my own pace.		.485	.31
9	I appreciate that I can access my online course any time at my convenience.		.455	.33
	Mean (SD)	2.36 (.98)	3.64 (.86)	
	Percent of variance	42.67	11.82	
	Cronbach's alpha	.88	.70	

Note. The principal axis factoring extraction method was used in combination with an oblimin rotation, and values smaller than .40 are not presented.

The third part of the survey included the questions of the Autonomous Learning Scale (Macaskill & Taylor, 2010). To meet the criteria for a confirmatory factor analysis (CFA), data was checked for normality. The values for skewness (ranging from -.05 - 1. 37) and kurtosis (ranging from .33 - 1.46) were calculated for individual items and were found to fall outside of the traditionally acceptable range for only three items (cf. Tabachnick & Fidell, 2013). Multivariate normality was checked by an examination of the Cook's distance values, which were found to be tenable (ranging from .00 to .09). Moreover, VIF values were also acceptable (ranging from 1.35 to 1.98). Therefore, no serious outliers were observed in the data, and the normality assumptions were met. Confirmatory factor analysis (CFA) using maximum likelihood estimation (MLR) was conducted for two factors (independence of learning and study habits). The model fit was initially evaluated based on the values of the chi-squared degrees of freedom ratio $[\chi 2 (53) = 109, p < 0.001]$, root mean square error of approximation (RMSEA = .11), standardized root mean residual (SRMR = .08), Tucker-Lewis index (TLI = .66), and Comparative Fit Index (CFI = .73), and the values showed poor indices of fit of the dataset (Hu & Bentler, 1999).

^{*} h^2 represents the communality coefficient.

Since there was an existing model and factor structure for the ALS, CFA was the first preference (Loewen & Gönülal, 2015). However, if there is no satisfactory fitness, previous research suggests conducting exploratory factor analysis (EFA) for scales used in a certain context for the first time as there will be variations in the data (Field, 2013; Loewen & Gonulal, 2015). The factorability of the data was confirmed by Bartlett's test of sphericity [$\chi 2$ (66) = 254, p < 0.001] and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (.68). The determinant of the R-matrix showed no multicollinearity issues. The same factor analysis method, PAF with oblimin rotation, was used as in the previous analysis. Based on an inspection of the scree plot, the total variance explained, and Jolliffe's (1972) criterion (eigenvalues > .7), items with factor loadings smaller than the threshold .40 (Field, 2013) were removed from the analysis (items 5, 6, 10 in the original scale, Macaskill & Taylor, 2010), and nine items loaded on two factors accounted for 39.1 % of the total variance. The factorability of the final model was proven by Bartlett's significant test of sphericity $[\chi 2 \ (36) = 184,$ p < 0.001] and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (.65). Cronbach's alpha coefficient was calculated to check the internal consistency of the items and was found to be .73. A summary of the PAF analysis is provided in Table 3.

Table 3 Findings of the Principal Axis Factoring for Autonomous Learning Scale (n = 86)

	Factor 1* Independence of learning	Factor 2* Study habits	h ² **	М	SD
I enjoy new learning experiences.	.850	Habits	.70	3.74	.97
I am open to new ways of doing familiar things.	.534		.38	3.71	.81
I enjoy being set a challenge.	.466		.37	3.26	1.02
I enjoy finding information about new topics on my own.	.428		.20	3.84	.85
My time management is good.		.821	.65	3.51	1.17
I plan my time for study effectively.		.578	.42	3.10	1.13
I frequently find excuses for not getting down to work.***		.491	.51	3.02	1.13
I take responsibility for my learning experiences.****		.489	.51	4.02	.77
I am good at meeting deadlines.		.437	.56	4.02	.89
Mean (SD)	3.54 (.70)	3.64 (.65)			
Percent variance	18.2	20.9			
Cronbach's alpha	.68	.72			

Note. The principal axis factoring extraction method was used in combination with an oblimin rotation, and values smaller than .40 are not presented.

In the fourth part of the survey, students took a 6-item questionnaire on the instructors' (with or without a Ph.D.) use of L1 in online classes. Since the questions in this

^{*} Factor names in the original survey were retained for convenience.

^{**} h² represents communality, which indicates the variance accounted for by all the factors.

^{***} The item was reverse-coded.

^{****} This item was loaded under Factor 1 in the original survey.

questionnaire were exploratory, no model or factor structure was presumed and sought. Only Cronbach's alpha coefficient was calculated for checking internal consistency and found to be .77. Descriptive statistics for the items are provided in Table 4.

Table 4Descriptive Statistics on Professors' L1 use in Pre-recorded Video Lectures (n = 86)

#	Item	М	SD
1	I prefer my professors to use only English (not Turkish) in online classes.	3.36	1.25
2	My professors' use of Turkish in online classes damages my English language development.	2.62	1.24
3	I feel more comfortable in online classes when my professors use Turkish.	2.95	1.12
4	I understand concepts/class content better when professors use Turkish.	3.17	1.08
5	I prefer the professors to use Turkish when the class is boring.	3.26	1.08
6	I prefer explanations for online exams or homework to be in Turkish.	2.81	1.13

The questionnaire aimed to understand students' attitudes to L1 Turkish use in ERL classes. Once items 1 and 2 were reverse-coded, the mean was computed to be 3.04 (n = 86, SD = .80, Sk = -.48, Ku = .10). The skewness and kurtosis values were also below .59 for all items, and are not reported here. An examination of the individual items reveals interesting findings. Forty-three percent of the students (n = 37) strongly agree or agree that English should be the only means of communication in online classes (item 1); however, they (n = 38, 43 %) also strongly agree or agree that the professors should use L1 when the class becomes boring (item 5). Also, half of the students (n = 43, 50 %) either strongly disagree or disagree with the fact that L1 use in online classes will damage their English language development.

Next, to find out whether autonomous learning tendencies and the attitudes to ERL were linked, assumptions for the Pearson product-moment correlation coefficient (PPMCC) analysis were checked. Based on the mean scores for the ALS and the ERLQ, the data was checked for linearity, and no violations of normality was observed as suggested by tenable skewness ($Sk_{LAS} = -.23$, SE = .26; $Sk_{ERL} = .32$, SE = .26) and kurtosis ($Ku_{LAS} = .55$ SE = .51 $Ku_{ERL} = -.10$ SE = .51) values and non-significant Shapiro-Wilk tests ($W_{LAS} = .984$, df = 86, p = .362; $W_{ERL} = .981$, df = 86, p = .255). Table 5 provides a summary of the PPMCC analysis between the overall scores of the ALS and the ERLQ.

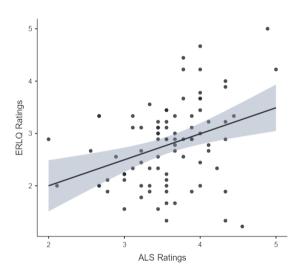
Table 5PPMC Matrix for the ALS and the ERLQ

	the ERLQ-Total
the ALS-Total	.347
M (< 001 (0 (.11.1)	

Note. p < .001 (2-tailed).

Figure 1

The Correlation Between the ERLQ and the ALS Ratings



The analysis indicated a positive significant relationship between the ALS and the ERLQ [r(84) = .347, p = .001], which indicates a medium (Cohen, 1988) to small effect size (See Plonsky & Oswald, 2014 for a discussion). Also, a posthoc analysis of power given the reported parameters using Gpower v.3.1.9.4 (Faul et al., 2009) indicates a power of .92 for this correlation analysis. The linear relationship revealed by the correlation analysis is also presented in Table 5 and Figure 1.

For calculating the correlations across factors in two different questionnaires, first, the assumptions of normality were checked through an examination of skewness and kurtosis values, scatterplots, and normality tests. Although the skewness and kurtosis values were within the normal range for all four factors (two for each), the Shapiro-Wilk tests showed a significant departure from normality (p < .05) for all except for the Factor 1 (Independence of Learning) in the ALS (p = .07), which was confirmed by an examination of the residuals. Therefore, a Spearman's rank-order correlation was run to find out any correlations across the subdimensions of the scales.

The findings revealed a moderate to small significant relationship between the ALS Factor 1 (Independence of Learning) and the ELRQ Factor 1 (Satisfaction) [$r_s(84) = .31$, p = .004]. No other significant correlations were found (p > .05). The effect size interpretations were moderate to small, as informed by Cohen (1988) and Plonsky and Oswald (2014), with a posthoc power estimation of .85 for the present analysis.

All variables included in the background questionnaire were also computed using linear regression analysis to test if any of these variables significantly predicted the ERLQ or the ALS scores. The overall regression was statistically significant with the ratings of the platform accounting for 27% of the variability in the ERLQ ratings $[F(1, 84) = 30.96, p < .001, Adj. R^2 = .26, SE = .68]$

Finally, the data was also analyzed to see if students' attitudes regarding L1 use can be predicted by any variables on the background questionnaire as well as the ratings of ERLQ and the ALS. The regression analysis was conducted once the assumptions were met. The findings revealed that the ERLQ ratings and students' status as to whether they received IEPP together accounted for 18 % of the variability in students' self-reported attitudes to L1 use in ERL classes [F(1, 84) = 8.93, p < .01, $R^2 = .18$, Adj. $R^2 = .16$]. Table 6 below summarized the results of the regression analysis showing the unique contributions of each variable.

Table 6Results of a Multiple Regression Analysis Predicting Attitudes to L1 Use in ERL Classes

В	SE	В	95%	6 CI	Correlations
			L	U	Zero-order
.32	.10	.32	.12	.52	.3
.48	.17	.26	.10	.78	.27
	.32 .48	.32 .10	.32 .10 .32	.32 .10 .32 .12	.32 .10 .32 .12 .52

Note. $R^2/F = .18 / 8.9$, Adj. $R^2 = .16$, p < .01, Cohen's $f^2 = .26$

When the unique and collective contributions of each predictor variable are considered, it can be claimed that not each predictor explains the attitudes to L1 use in ERL classes equally well. When the contribution of the ERLQ ratings is considered as a single predictor, it explains 11 % of the variance [F(1, 84) = 10.53, p < .01, $R^2 = .11$, Adj. $R^2 = .10$, $R^2 = .10$] indicating that the ERLQ is a good predictor by itself. When the IEPP variable is added to the prediction equation already containing ERLQ, the predictive power of the equation increases by about 7 %.

Qualitative Findings

This section aims to complement and corroborate the quantitative findings of the study. The responses of the students to three open-ended survey questions were coded and analyzed using the qualitative data analysis software QDA Miner Lite v.2.0.9. A thematic analysis was conducted as a recursive process by first becoming acquainted with the data, and coding for determining and reviewing the themes. As a final step, the

themes were named and reported by situating them in previous research (for details, see Braun & Clark, 2006).

Of 3 open-ended questions, 2 were about students' emergency remote learning experiences. The other one was about their views regarding professors' use of L1 Turkish in asynchronous video lectures. The resulting themes, codes, and frequencies for the first and second questions [What was worst about ERL (if any)? &What was best about ERL (if any)?] are provided in Table 7, supported by their empirical indicators further below.

Table 7Themes Under the Most Negative Aspects of ERL, Their Codes, and Frequencies

Themes		Subthemes/Codes	f
Technical issues	•	LMS-related issues	
		 Using a low-quality/crashing LMS 	25
		 Restrictions on the number of days for accessing 	3
		the system	
	•	Personal issues	
		 Not having a reliable internet connection 	6
		 Not owning a reliable device 	3
Too much flexibility	•	Lack of any regularity/discipline	7
	•	Flexibility leading to laziness	4
Insufficient • Not being able to communicate/interact		Not being able to communicate/interact	7
interaction	•	Lack of body language	4
	•	Lack of stimulants of a classroom environment	3
	•	No image of the professors	3
Content delivery and	•	Online exams	5
assessment	•	Too long video recordings	3
	•	No class notes	3
Psychological impact	•	Feeling anxious	
		 Not being able to concentrate at home 	5
		 Being concerned about not meeting deadlines 	3
	•	Feeling depressed	
		 Feeling like a computer addict 	3
		 Feeling lonely/isolated 	3

Relevant codes were created and later merged into themes iteratively to describe and interpret the data within the framework of the six-step procedure suggested by Braun and Clark (2006), and also methodologically described by Adu (2019). Five major themes (and sub-themes as needed) emerged as a result of the coding: Technical issues, Too much flexibility, Insufficient interaction, Content delivery and assessment, and Psychological impact. The qualitative analysis helped reveal further aspects of the students' ERL views and experiences which were not sometimes addressed in the close-ended survey questions. One of these aspects was undoubtedly related to technology and its use. The LMS seemed to be the biggest concern as it was the only means of

following the course content. Next, the flexibility of the ERL influenced students' learning in a negative way. As a case in point, student #56 mentioned "the ease" of ERL as the worst aspect of ERL, which was further supported by student #45 who stated that "there is no discipline, no regular class hours, and when you lose the thread of the online classes, you completely space out." Another student (#27) maintained that "since it was not required to attend classes, I always found myself shopping online whenever I intended to watch online recordings of courses." The quotes are interesting in revealing a different perception of flexibility in students' learning habits. Regarding this, some suggestions were having synchronous classes meet at their scheduled time with a certain percentage of attendance requirement being imposed, making attendance obligatory. Aside from the flexibility, students also reported having issues with the means of content delivery and assessment and having to deal with feelings such as anxiety and depression. Three students (#22, 30, and 47) stated that when professors did not turn on their cameras in the asynchronous video lectures, it caused them to feel distant and to stop watching the video recordings. They complained about not being able to interact with their professors and classmates for chatting, asking questions, and maintained that due to the asynchronous mode of conducting classes, they were unable to receive encouragement from their professors as revealed by the following quote: "Nothing can replace interactive, face-to-face learning" (student #30). Finally, students have also reported experiencing some psychological problems related to ERL. They felt anxious in fear that they would not be able to watch the recordings on time, upload their homework assignments in a timely manner, or would miss some important assignments/tasks. One student (#5) said "when the exams approached, I intentionally did not access the system for three days. It was overwhelming and depressing." Other than deadlines, it was clearly a combination of factors affecting the psychological wellbeing of the students including the pandemic effects, being online for extended hours, all of which might have led to the feeling of loneliness.

Regarding the second open-ended question on the survey [What was best about ERL (if any)?], the same procedure was followed, and the following themes and subthemes/codes emerged.

Table 8Themes Under the Most Positive Aspects of ERL, Their Codes, and frequencies

Themes	Subthemes/Codes	f
Flexibility	Ease of access	
	 Being able to access class video content any time 	20
	 Being able to access class video content anywhere 	19
	 Being able to rewatch or rewind the videos 	15
	 Being able to watch them quietly at home 	3
Academic	 A better comprehension of content 	8
contribution	 Improved writing abilities through homework assignments 	7
	 Improved note-taking skills 	3

The students' responses did not show much variety in their positive views of ERL. Two major themes emerged: Flexibility and Academic contribution. The fact that the students were allowed to watch the videos as many times as needed and that they were able to rewind them were found to be very valuable because these features provided the students with the opportunity to take notes and watch the sections for further clarification. One student (#62) stated that she was able to "watch the videos whenever and wherever [she] liked, and was able to rewind the videos when [she] experienced difficulty understanding the lecture." Also, since students had to complete more written homework assignments usually over extended periods, this seemed to have contributed to the development of their writing skills in a positive way as one student (#3) put it: "Of course, the best thing was the homework assignments we had to complete. I really felt I was improving, which was reflected in my grades." So, the students preferred assignments instead of online exams as some (#3, #63, # 42) claimed that they were more "fair" and had a more "long-lasting" effect on their improvement and retention of content.

The last open-ended question on the survey was about the use of L1 Turkish in online classes. The question asked "What do you think about the use of L1 Turkish in ERL classes? Is it ok? Why/why not?" The codes were created as in the previous two procedures, and three themes emerged: Better comprehension, Classroom atmosphere, and Specific purposes.

Table 9Themes Under the Use of L1 Turkish in Pre-Recorded Video Lectures, Their Codes, And Frequencies

Themes	Codes	f
Better	 For clarification of important points only 	29
comprehension	 For complicated topics and classes 	19
	 For explaining unfamiliar terminology 	5
	 As support for L2 comprehension 	3
Classroom	 As an attention gatherer 	5
atmosphere	 For waking up students 	4
	 For boring classes 	3
Specific	 For important announcements/guidelines 	10
purposes	 During technical problems in online classes 	4
_	 If covering content on Turkish culture/Turkish literature 	3

Of the students who expressed their ideas, five students (#5, #43, #55, #57, #76) completely opposed the idea of using L1 Turkish in online classes without providing any explanations; however, one student (#57) said "it does not make any sense to use Turkish because we are studying ELL." Other than this specific comment, given the analysis, the students overall seem to agree that L1 Turkish might be acceptable and even desirable for a variety of purposes. They thought that L1 Turkish may be used for

any occasions where there is a breakdown of communication due to unfamiliar terminology, a complicated concept or topic, and for clarifying and emphasizing important points in class. Also, one student (#9) said L1 should be used "when the class gets boring because then the students start sleeping, and nobody listens to the professor." This indicates that students believe that L1 has the potential to stimulate the students when the classroom atmosphere becomes dull. The use of L1 was further recommended as an aid when technical issues arised. A few students mentioned that when the microphone or some other software lecturers use for recording does not properly work, making the professor incomprehensible, the professor might switch to L1 Turkish to make sure that everyone understands the content. One student (#54) further stated that "there are many classes, and the length of the video recordings are too long, so the professors can keep the sessions shorter and use more Turkish to emphasize the important aspects in shorter videos." To sum up, although students seem to provide various yet overlapping reasons for using L1 in online classes, an empirical indicator by one student (#8) deserves quoting: "if our brains possess the knowledge of two languages, why not use this to our benefit for better communication. I do not see any problems using [either] of them. The professors and we should not be limited to only one choice."

Discussion

The present study sought to explore ELL students' views about ERL, their self-reported degrees of learner autonomy, and lecturers' use of L1 in asynchronous lecture videos using a five-part questionnaire on a convergent design. To better understand each of the constructs in the survey and their relationships, the quantitative ratings of the survey were statistically analyzed, and the qualitative data was examined using QDA Miner Lite to support and further explain the quantitative findings of the study.

First, students' perceptual judgments regarding the ERL were found to be mostly neutral (45 %) with an average score of 3.09 (SD = .97). They were specifically dissatisfied with the LMS, and complained about the excessive workload, which was in line with previous research (Lischer, Safi & Dickson, 2021; Therisa Beena & Sony, 2022). Similarly, regarding their views of ERL, students in previous studies were generally reported to be of negative opinion (Alan et al., 2020; Karakuş et al., 2020; Rahiem, 2020) or had skepticism regarding their ERL experience (Adnan & Anwar, 2020). These findings are also in line with some findings reported by studies conducted prior to the pandemic outbreak (e.g., Özüdoğru & Hişmanoğlu, 2016). Comparing students' satisfaction scores on the distant mode of learning before and after the pandemic outbreak, Arık (2021) demonstrated a decrease in students' ratings in terms of overall satisfaction due to the obligatory status of the ERL classes. Students' responses to open-ended questions further supported the quantitative findings. Technical issues with the LMS were found to be the most frequently mentioned issue by the students, which was in support of previous literature (Durak & Çankaya, 2020; Tulaskar & Turunen, 2021). This is not very suprising given the extraordinary circumstances the pandemic brought together; however, the technical inadequacies or issues, including minor ones, are likely to demotivate the students in online learning context. Therefore, ensuring a well-maintained and functional system should be considered a *sine qua non* for online learning. Regarding the most positive and the most negative aspects of ERL, qualitative findings further indicated technical issues being the most recurrent theme. Similar findings supported the fact the technical issues were critical (Durak & Çankaya, 2020; Öztürk Karataş & Tuncer, 2020), but they did not always constitute the most recurrent theme in different contexts (Hussein et al., 2020). As for the best aspects of ERL, flexibility in terms of availability of lecture videos regardless of time and space takes the lead, which was also supported by previous studies (Durak & Çankaya, 2020; Karim & Hassan, 2020; Öztürk Karataş & Tuncer, 2020; Taşçı, 2021).

The second major research question investigated students' reported level of learner autonomy, and the findings indicated a mean score above 3.5 for both factors of the ALS, which could be considered moderate to high. LA was also found to be positively related to ERLO ratings, which meant that as students' self-reported degree of autonomous learning increased their positive perception of ERL also increased. A further look into whether and how the dimensions of each questionnaire were related demonstrated that there was a moderate to weak significant relationship between the students' Independence of Learning (the ALS Factor 1) and their level of Satisfaction in ERL (the ELRQ Factor 1). Although literature examining ERL in relation to autonomous learning is limited, the findings of the present study corroborate similar research conducted before COVID-19 (Firat, 2016; Güneş, 2018). Results indicated that more autonomous students, as measured by the ALS, had less difficulty in adapting to the new circumstances and thus perceived ERL more positively, which is also consistent with previous research (Taplin, 2000). The relationship between ERL and LA found in this study further supports Moore's (1972, 2019) theory of transactional distance underscoring the role of autonomy. None of the variables (e.g., gender, hours spent on LMS) as measured by the background questions predicted the ALS ratings although previous research using the same scale in its original form reported gender to be a good predictor of LA (Ozer & Yukselir, 2021). However, the sample size might have been small to reveal any such effects.

The third major research question examined the students' attitudes towards instructors' use of L1 in their asynchronous video lectures as a part of their ERL learning. The quantitative findings revealed that the students were neutral in their attitudes (M = 3.04, SD = .80) with half of the students (n = 43, 50 %) thinking that L1 use would damage their English language development. Macaro et al. (2018) reported similar findings in a study conducted in EMI context. The students preferred their course content to be delivered "predominantly" in their L2, and they were tolerant of the use of L1 especially when there is "a breakdown of communication" and "lack of understanding" (p. 17). Also, those with higher ratings of ERLQ reported more positive attitudes towards L1 use. Finally, students who studied at the IEPP for a year were found to be more tolerant of the use of L1 in ERL classes. There may be various reasons for this. Previous research has shown that students' proficiency level affects students' attitudes towards L1 use, with lower proficiency learners being more tolerant (Almohaimeed & Almurshed, 2018; Öz & Karaazmak, 2019). In this study, the students

who did not study at the IEPP were already exempted for passing the beginning-of-term IEPP proficiency exam or for holding an equivalent exam score. So, they were likely to have a higher proficiency although the other group of students, who also matriculated to their degree program, received one-year intensive English. However, to be able to make robust claims regarding the proficiency level of the students who completed the intensive English program in comparison to those who were exempted, a reliable and valid assessment of their English proficiency level is needed. Students' responses to the open-ended question asking them about their view of L1 use in ERL classes further corroborate the quantitative findings. The students mostly expressed views that support the use of L1 mostly, but only for specific purposes. The most recurrent theme was the use of L1 for better comprehension. They supported lecturers' L1 use especially to better understand critical or complex topics or unfamiliar terms. Students were also supportive of L1 use when the lecturers made announcements or provided guidelines for assignments and classroom management, which confirmed previous research (Timuçin & Baytar, 2015). However, the students in Macaro et al. (2018) specifically expressed that they preferred their teachers to use L2 English "when giving instructions for a task or assigning homework" (p. 13). Regarding the use of L1 in classes where the academic content is delivered in L2 English, there has not been a consensus in the literature. It is already known that lower-level L2 learners use their L1 as a crutch to make up for their lack of abilities in their interlanguage, which may unfortunately turn into a habit in the classroom. This is especially not a favorable situation because it may hinder, for instance, L2 speakers' inferencing and strategy use in meaning formation (Macaro, 2017). The present study does not specifically encourage the use of L1 in the classroom, but aims to better understand students' perspectives of L1 use in video lectures. Given that English majors might be expected to function in L2 English in a more competent way than other majors do, a restricted use of L1 use may be expected to help them improve their coping strategies in various communicative situations.

Pedagogical Implications

The findings of the study have various implications for university lecturers, teacher trainers, curriculum designers as well as learning management system developers. First of all, higher education institutions should be provided access to highly functional and user-friendly infrastructure for online learning in an affordable way. More funding might be allocated to improve such systems to minimize the number of technical problems. Similar to orientation programs conducted in traditional education programs, brief hands-on training videos prepared for students and teachers introducing the basics and the dos and donts of online learning and teaching may help them feel more prepared and secure. Given that online learning and teaching have become an integral part of education, teacher education programs should be encouraged to include specific courses on their curriculum, in which the preservice teachers could practice teaching English online and be provided feedback and reflections by their instructors and peers. Such courses may help them experience teaching online in a way that is more effective and enjoyable for the language learners.

Compared to face-to-face classrooms, in online learning environments, it is easier for students to lose track of the class content given the flexibility offered. Therefore, curriculum designers and university lecturers are advised to plan their courses in a way to minimize students' feeling helpless while managing the academic content. This can be achieved by planning assignments in which the learners will work in a collaborative and/or individual manner based on certain projects to be completed. Discussion forums are another way to keep students engaged and on track. Instructors may ask students to post comments and respond to their classmates to encourage timely completion of the readings and other tasks. Depending on the content and the field of study, university instructors might as well come up with their own field-specific yet innovative ways of creating a more engaging online learning environment, which may lead to better learning outcomes. Since the key is to help students feel more engaged and manage their own learning adventure, the strategies and techniques suggested here should not be interpreted as teachers' extra control on the students. In fact, in a successfully designed syllabus, completion of tasks and engagement with the content should come as a natural consequence of learners' autonomous learning.

As for L1 use in online classes as well as face-to-face classrooms, there seems to be no one-size-fits-all solution. While a ban on the use of L1 does not seem realistic and even ideal for all, its overuse should also be avoided. There are various reasons for this. Students miss communication opportunities they may encounter later in their lives (Macaro et al., 2018), and eventually may not be able to reach the automaticity they aim for. This may in the long run affect their future careers by decreasing their competitiveness in the job market and professional life, and eventually, the likelihood of their employability in multinational companies or of winning study abroad scholarships. However, previous research, which was discussed earlier, has also shown various benefits of L1 use in the language classroom (Grim, 2010; Raman & Yigitoglu, 2015). Bearing the benefits and risks in mind and how these might affect the students' goals of language learning, instructors should be allowed to determine how much and in what contexts L1 use may be tolerated without causing injustice to those students who do not speak the L1 in their classrooms. Here, the role of EFL teacher education programs should be underscored as EFL teachers start shaping their philosophies and perspectives of language teaching during their early studies. However, L1 use should not be normally considered an aim in itself in a classroom where the purpose is to teach English or to deliver content in L2 English.

Limitations and Further Research

There are a few limitations to be noted. First, all limitations of studies with self-report measures apply to the current study, as well. Additional methods of data collection which allow for more in-depth analyses such as interviews may be used. Next, the final sample size was relatively small, and the data was limited in scope, so the generalizability of findings should be done with caution. For factor analyses, although there is a commonly established threshold of 100 participants, the present study adopted less strict criteria due to the small sample size. Therefore, as the factor solution diverged

from the original scale and three items had to be removed, the ALS findings should be interpreted wisely. However, it deserves noting that although no items had to be removed, similar adaptations on the same scale were also made in previous research (e.g. Scott et al., 2016). Further studies with higher number of participants might look at the issues raised in this study. One such area of investigation might be the use of L1 in the Turkish EMI context, both online and face-to-face classes using experimental as well as qualitative designs. Using structural equation modeling, a comprehensive look at the predictors of learner autonomy in English majors, and how these are related to success in online learning could also yield interesting findings.

Conclusion

Despite the limitations, the quantitative findings of the study demonstrated that ELL students were neutral in their views of ERL, and lecturers' L1 use in asynchronous lecture videos; however, in terms of perceived LA, their self-ratings were found to be moderate to high. The findings further indicated a positive relationship between ERL and LA as well as ERL and L1 use. Finally, the students who studied at IEPP for a year before matriculation were more tolerant of lecturers' L1 use, and LMS ratings were a good indicator of ERL rating. In addition to showing students' perspectives of ERL during COVID-19, these findings are significant in showing how supporting learners in developing their autonomous learning, which is critical for distance learners, will contribute to their perspectives regarding distance learning. Overall, the present study has extended research into ERL, learner autonomy and L1 use in asynchronous classes by looking at various demographic variables as well as study habits during the ERL transition. It is hoped that more studies with larger sample sizes will help better understand the underlying reasons for students' distant learning tendencies and attitudes, which will eventually lead stakeholders to provide more sustainable and effective distant education models.

Author's Note

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Üniversitede İngiliz Dili Bölümü Öğrencilerinin Acil Uzaktan Öğrenme, Öğrenen Özerkliği ve Asenkron Video Derslerindeki Ana Dil Kullanımına İlişkin Görüş ve Algılarının Araştırılması

Öz

Bu calısmada, üniversite öğrencilerinin acil uzaktan öğrenme, özbildirim voluyla belirlenmis öğrenen özerkliği ve ana dilin (L1) asenkron sınıflarda (önceden kaydedilmiş video derslerinde) kullanımları konusundaki görüş ve algıları incelenmiştir. Katılımcılar ağırlıklı olarak Türkiye'de bir devlet üniversitesinde İngiliz Dili ve Edebiyatı (ELL) okuyan birinci sınıf öğrencilerinden oluşmaktadır. Veriler, kolayda örneklem yöntemi (n = 86) kullanılarak çapraz kesişimli, beş bölümden oluşan web tabanlı bir anket aracılığıyla toplanmıştır. Çalışma, (a) öğrencilerin acil uzaktan öğrenme hakkındaki görüşlerini, (b) onların özbildirimi yoluyla belirlenmiş öğrenen özerkliği düzeylerini, (c) öğrencilerin asenkron video derslerinde öğretim üyelerinin ana dil kullanımına iliskin görüslerini, ve (d) bu değiskenlerin birbiriyle nasıl iliskili olduğunu ve bunun diğer özgeçmiş değişkenleri ile tahmin edilebileceğine dair ilginç bulgular ortaya koymaktadır. Ayrıca nitel sonuçlara göre, öğrencilerin yeni öğrenme deneyimleriyle ilgili görüşleri farklılık gösterdiği görülmüş olup teknik konular, etkileşim eksikliği ve psikolojik problemler çözülmesi gereken en acil konular olarak belirlenmiştir. Öğrencilerin de oldukça özerk olduğu tespit edilmiş ve bunun acil uzaktan öğrenmeye verdikleri puanlarla ilişkili olduğu görülmüştür. Ayrıca, İngiliz Dili ve Edebiyatı öğrencilerinin büyük bir kısmı video derslerinde ana dil kullanımının sınırlı olması koşuluyla kabul edilebilir olduğunu düşünmektedir. Bulguların, yükseköğretim kurumlarında İngilizce anadal eğitimi veren akademisyenlerin yanı sıra öğrenme yönetim sistemi tasarımcılarına da ilgili konularda ışık tutacağı düşünülmektedir.

Anahtar sözcükler: Asenkron Öğrenme, Koronavirüs hastalığı, İngiliz Dili ve Edebiyatı Öğrencileri, Öğrenme Yönetim Sistemi, Kaydedilmiş video dersleri, Türk öğrenciler

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Special Issue: English as a Lingua Franca Practices for Inclusive Multilingual Classrooms (ENRICH)

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Special Issue on English as a Lingua Franca Practices for Inclusive Multilingual Classrooms (ENRICH)

Recent research has highlighted an urgent need to support teachers in addressing and meeting the demands of today's increasingly multilingual classrooms in Europe and even beyond (European Commission, 2017). Considering the current role of English as a lingua franca (ELF), referred to as the most frequently employed means of communication in multilingual and multicultural contexts (Mauranen, 2018; Seidlhofer, 2018), it comes as no surprise that particular emphasis is put on the professional development of English language teachers (ELTs). However, despite being acknowledged, ELF-related issues have not been adequately addressed in most teacher education endeavours across Europe yet (Dewey & Patsko, 2018; Sifakis & Bayyurt, 2018). To this end, the 'English as a Lingua Franca Practices for Inclusive Multilingual Classrooms (ENRICH)' Project has set out first to raise what has been termed as "ELF awareness" (Sifakis, 2019; Sifakis & Bayyurt, 2018) of ELTs and also to help them develop competences essential for integrating ELF into their teaching. With the cooperation of five European partner countries (i.e., Greece, Turkey, Italy, Portugal, and Norway), the ENRICH Project has developed and implemented an innovative and sustainable online Continuous Professional Development (CPD) Course, which aims at equipping ELTs with competences required for adapting their teaching practices in view of the role of ELF in the current multilingual classrooms. The ENRICH CPD Course is based on multi-level, cross-country exploration of teachers' and learners' needs in today's multilingual classrooms and is available on the official website of the Project at: http://enrichproject.eu/. This special issue of BUJE brings together a series of papers presented, as either a plenary talk or an oral presentation, in the event entitled "ELF Day 5: ENRICHing Pedagogical Issues and Concerns in ELF Research". This event, held online on February 27, 2021, was organized by the Boğaziçi University ENRICH project team and dedicated to the ENRICH Project for dissemination purposes. It was indeed the 5th academic event taking place within the context of the ELF-Day seminar series organized by Boğazici University Sociolinguistics Research Group in collaboration with the Department of Foreign Language Education.

The special issue is organized in two complementary parts. While the first part is composed of the articles based on the plenary speeches of the ELF Day 5, the second consists mainly of the papers presented by the ENRICH partners based on the findings gathered through the ENRICH CPD Course. The first article is based on the plenary speech given by Prof. Nicos Sifakis on ELF Day 5. As the coordinator of the ENRICH project, Prof. Sifakis focuses on the fundamental premises and principles guiding the ENRICH Project, particularly its training programme, as well as discussing the concept of what he calls "the ELF state of mind", namely referred to as the outcome of developing teachers' and learners' ELF awareness. In the second article of this section, based on his ELF Day 5 plenary speech, Prof. Kurt Kohn reconsiders the ELT's standard native speaker orientation, suggesting toreplace it with an open, social constructivist orientation which, he argues, provides a pedagogical room for learners of English to develop their own voice as free speakers of English. Kohn also argues that

adopting such a pedagogical lingua franca approach might help ELTs to integrate ELF communication as a "pedagogical game changer" within ELT but they need to be supported in doing so.

The second part, bringing together the ELF Day 5 presentations of the ENRICH partners based on their context-specific findings gathered through the implementation of the ENRICH CPD Course, starts with the article by Lopriore and her colleagues. In this article, the researchers investigate the emerging changes in their participant ELTs' perspectives and practices throughout the course, by looking at their responses to a set of reflective activities in the training programme. Also, through their corpus-based analysis, the researchers explore the ELTs' positioning with regard to their agency and sense-making during such a process of change. The next article by Erduyan, Bektas, and Sentürk focuses on Turkish participant ELTs of the course, more specifically their responses to a set of activities regarding the multilingualism module in the course. Adopting a linguistic ideological perspective on discourse, the researchers analyze the participant ELTs' observations of students' awareness of multilingualism in their classrooms. Their findings highlight three different understandings of multilingualism of teachers, namely immigrant minority multilingualism, regional minority multilingualism, and multilingualism as a result of foreign language instruction at school. In the following article, Kordia presents data coming from the course participants from Greece and discusses how the course promotes ELF awareness of the participant ELTs through reflective activities and constructive dialogue within the course. She also addresses the impact of the course on the ELTs' professional development. The final article in this part is by Lopriore and Tsantila. Although this paper is not included in the ELF Day 5 programme and does not provide data from the ENRICH CPD Course, what it discusses is well in line with the ELF Day 5 agenda and the scope of the articles in this special issue. In brief, based on the data collected through student lesson evaluations and teacher interviews, this article presents samples of ELT material adaptation according to the latest ELF and World Englishes (WEs) research focusing on the context of Italy and Greece. Furthermore, their findings highlight that such attempted modifications as in the study materials are successful in promoting the understanding of ELF-awareness integration in ELT.

To sum up, this special issue aims at introducing readers to recent developments in ELF research, including ELF-aware teaching and teacher development, along with informing them about the findings of the Erasmus+ Project of "ENRICH", particularly those coming from the implementation of the CPD Course developed in its framework. Moreover, through its well-focused scope, the issue aims to give inspiration to further studies on ELF-related issues such as ELF-aware pedagogy and teacher education.

Last but not least, we would like to thank Prof. Yasemin Bayyurt and Assist. Prof. Işıl Erduyan for their meticulous work during the editing process of this special issue. We would also like to thank all the contributors of this special issue for taking the time to write and rewrite parts of their contributions throughout the whole process. We also express our special thanks to the reviewers for providing valuable feedback to the

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Yasemin Bayyurt & Işıl Erduyan Special Issue Guest Editors

Developing Teachers' and Learners' ELF State of Mind: The Principles and Premises of The ENRICH Project

Nicos Sifakis

Abstract

The paper presents four premises and two principles guiding the ENRICH Project, an EU-funded (Erasmus+) project that ran from 2018 to 2021 and developed an innovative online continuous professional development programme aimed at educating teachers of English as a foreign language in raising their own and their learners' ELF awareness. I further discuss my own observations from the extensive training programme with regard to implications of ELF aware teacher education and pedagogy and present the essential ingredients of what I call the "ELF state of mind".

Keywords: English as a Lingua Franca, ELF awareness, teacher education, transformative learning, critical reflection

Article info

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Introduction

The EU-funded ENRICH Project (http://enrichproject.eu, 2018-2021) aimed at raising English language teachers' competence in engaging with multilingual and multicultural EFL (English as a foreign language) teaching and learning contexts. The ENRICH Project's Consortium (which incorporated partners from universities in Italy, Norway, Portugal and Turkey and was coordinated by the Greek partner) developed an extensive and innovative online teacher education programme that involved participant teachers from many different contexts in Europe and the rest of the world in topics and activities that raised their own and their learners' ELF awareness.

In this paper I present what I consider to be the fundamental premises upon which the ENRICH Project's training programme is developed and then present the basic principles that guide it. I then discuss what I consider to be the offspring of this training programme and the result of developing teachers' and learners' ELF awareness, namely, their "ELF state of mind" and discuss further implications for pedagogy and teacher education.

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200 Nicos Sifakis

The Four Premises and Two Principles Guiding the ENRICH Project

The ENRICH Project is based on four fundamental premises. First, that ELF research, which initially began as an innovative analysis of non-native speaker discourse, soon proved to be an interesting and progressively extremely persuasive perspective of drawing insights for communication in English globally. This rendered necessary the next "logical" step: the inevitable link with the English language teaching (ELT) and, particularly, the English as a foreign language (EFL) teaching and learning context. In other words, the ever-growing ELF-related research has been perceived to raise implications for ELT and EFL (Sifakis, 2007, Seidlhofer, 2011).

The second premise is intrinsically linked to the very nature of ELF itself. Its fluidity, as research in ELF interactions for more than two decades has convincingly shown (e.g., Seidlhofer, 2011), implies that ELF is essentially non-teachable. For ELF to be teachable its linguistic, pragmatic and sociocultural characteristics would have to be "constrained" to a relatively small number of forms that would then inform pedagogy in very specific ways. This can range from the selection and adaptation of reading and listening inputs to the design of appropriate tasks for learners to the development of specific procedures and tests that would measure learners' competence levels. As this this not the case with ELF, it follows that, in order to consider integrating it with the ELT/EFL classroom, we would have to make specific decisions regarding pedagogy that would draw on insights from ELF research, and particularly ELF discourse analysis (Cogo & Dewey, 2012). These insights refer to every aspect of ELF, from observable lexico-grammatical features that deviate from standard English norms (such as the omission of the third person -s in certain contexts by certain ELF speakers) to the various socio-pragmatic accommodation strategies employed by successful ELF speakers in different interactional settings aiming to facilitate intelligibility and comprehensibility (such as rephrasing or paraphrasing).

The third premise is related to the pedagogical forms that the above implications of ELF for ELT or EFL contexts can take. More specifically, as research in ELF makes the link with the ELT/EFL context necessary (premise 1), but as ELF itself is not directly teachable (premise 2), it was necessary to develop a comprehensive framework that would convincingly support the linking between ELF-related insights and ELT/EFL. Such a framework needed to be theoretically sound (i.e., with reference to established propositions regarding conceptual understandings of communication and pedagogy) and practically informative (i.e., with specific suggestions and obtainable outcomes regarding instructional methodology and teacher education practice). More specifically, the framework that was adopted, called ELF awareness (Sifakis, 2019, Sifakis & Bayyurt, 2018), referred to two concerns: (a) ways of engaging with findings and insights in ELF, but also World Englishes (WE) and English as an international language (EIL), and (b) ways of engaging teachers in small action research projects of their own choice and development, by prompting them to design and teach lessons that impacted their immediate teaching context and drawing some reflective conclusions from this experience.

The final premise is linked to the need to draw on other, similar projects that took place in the recent past that could inform decisions made with regard to the two concerns (a and b) of the second premise just described. The ELF awareness framework used insights from research in ELF, WE and EIL to first prompt participant teachers' reflective critical thinking and progressively involve them in action research. A similar approach was explored in the teacher education projects run by Yasemin Bayyurt and Nicos Sifakis at Bogazici University between 2012 and 2015 (Bayyurt & Sifakis 2015a, 2015b, Sifakis & Bayyurt, 2015) and the project developed by Stefania Kordia for the purposes of her PhD research (Kordia, 2015).

Taking the above premises as a starting point, the Consortium of the ENRICH project addressed the challenges of teacher education by designing and exploring a continuous professional development programme (CPD) that was governed by two broad principles:

Principle 1: That the first priority and primary concern in teacher education programmes that adopt the ELF awareness framework is the focus on participant teachers' attitudes. Research in attitudes has been at the epicentre of ELF research since the early 2000s (for an earlier review, see Jenkins, 2007). There is a good reason for that. The concerns and issues that ELF discourse analysis research raised challenged established notions regarding the prevalence of native speaker norms as both a guide for ensuring successful interactions involving non-native users of English and as the cornerstone of ELT/EFL pedagogy. Different stakeholders had widely different, and mainly negative (at least in the earlier part of this research) perceptions of these concerns and many saw ELF at worst as an unnecessary and irrelevant area of study that held little concern for formal ELT settings (e.g., Ferguson, 2009, Sewell, 2012, Swan, 2012) and at best as a challenge to established knowledge and pedagogical experience that merited further attention (e.g., Hino, 2020). Although learners' and teachers' perspectives change and evolve as the years go by and as ELF research becomes more widespread and deeper and therefore more convincing and, inevitably, more relevant for ELT practitioners, working around learners' and teachers' perspectives regarding ELFrelated concerns is considered by the ELF awareness framework to play a central role in integrating ELF within ELT/EFL. More specifically, ELF-aware activities prompt teacher trainees and learners to reflect critically about their deeper convictions regarding issues that are well established in traditional EFL (such as the roles of native speakers).

Principle 2: That the teacher education approach adopted is essentially non-interventionist. In the ENRICH CPD, participant teachers are presented with information and insights provided by the extensive research carried out within the ELF, WE and EIL. However, they are not instructed to follow specific directions in applying these insights in their teaching context. As ENRICH CPD participants came mainly from Europe but also from many other places around the world, the teaching contexts involved were very different, each with its own very specific idiosyncrasies. It would be ill-advised for the CPD developers to pretend to know these teachers' different teaching contexts better than the teachers themselves and offer them all the answers to issues and problems that may arise in each context. In the ENRICH CPD, participant teachers are

202 Nicos Sifakis

invited to engage with ELF, WE and EIL research insights by means of carrying out activities that prompt them to link such insights with (a) their current ongoing teaching practice and (b) any current or previous experience they may have as teachers, users and learners of English. The aim is to guide them in grappling with both the content of ELF/EIL/WE research, but also bring to the fore their own reactions, perceptions and understandings drawn from current and previous experiences so that they can move on to the phase of developing original ELF-aware lessons that would be relevant for and acceptable in each specific teaching context. It is important to underline that participant teachers' responses to the activities and their lesson plan descriptions, justifications and evaluations were not commented upon or evaluated in any way by the ENRICH teacher educators (i.e., members of the ENRICH Consortium who were involved in the development and implementation of the CPD). The only feedback that participant teachers received was from fellow participants, and this often led to very interesting discussions (on specific activities) in the CPD's online Forum.

Developing the ELF State of Mind: Being an ELF User versus Becoming an ELF-Aware User

The principles and premises presented above provide the basis for developing a continuous professional development programme that focuses on developing what I call teachers' "ELF state of mind". The ELF state of mind is two-tiered. The first tier focuses on the ELF user and determines the decisions and actions ELF users make when being involved in a specific ELF interaction (i.e., an interaction with other native or non-native users). The second tier focuses on the ELT or EFL educational (teaching and learning) context that is socio-culturally but also historically defined with reference to certain pedagogical principles and priorities (see above). I refer to the first tier as the state of "being" an ELF user, and the second tier as that of "becoming" an ELF-aware user. As these two tiers refer to two distinct facets of the ELF "experience", the former on the interactional, the latter on the pedagogical, it follows that they can be independently studied. However, in the ELF awareness framework both tiers play a significant role in shaping the ELF state of mind of teachers and students (and other stakeholders, of course). In this sense, the fact that the two facets of user and learner are interconnected has special significance for the ELT classroom, as the teacher can research the extent to which their learners are already cognizant of these two roles and ready to be exposed to inputs and tasks that would raise their ELF awareness even further.

What follows below is a number of observations that I have made from studying the ways in which the ELF awareness framework has been incorporated within the ENRICH CPD.

• The state of being an ELF user does not necessarily imply any form of ELF awareness. ELF users are either effective or ineffective in their ELF interactions, and this is disconnected from any form of formal awareness of ELF or of their own attitudes towards ELF-related concerns.

- The state of being an ELF user can be improved upon when the user is educated on ELF concerns. EFL learners who are also ELF users, but essentially unaware of this or negatively predisposed towards it, can become ELF-aware by being involved in activities that make them critically reflect on the nature of ELF interactions, the accommodation strategies that are at play and the problems of adhering to native speaker norms while preparing for such interactions.
- ELF users can be ELF aware without necessarily being ELF informed. The process of formally informing learners about ELF issues and concerns may have the same purpose as that of ELF awareness (Dewey & Pineda, 2020, Seidlhofer & Widdowson, 2020), but runs the risk of adopting a top-down perspective that focuses primarily on ELF rather than on the affordances and constraints of each local teaching and learning context. The ELF awareness approach adopts an essentially bottom-up perspective that is constrained by local teaching and learning contextual conditions (e.g., Sifakis, 2009). It prompts teachers to design appropriate activities that draw from the ELF, but also from the World Englishes and EIL (English as an international language) research literatures to critically engage learners in referring to their own experience as users of English. The aim is to come to terms with examples from ELF interactions and problematize their own textbook's approach to teaching English.
- EFL learners can also choose to become ELF aware, depending on the target situation they wish to reach. As pointed out earlier, not all learners have the same level of readiness to engage in the demanding and critically reflective ELF awareness procedure. At the same time, a significant number of learners seek to receive EFL lessons with the express aim of passing a particular high-stakes examination, or with a view to visiting or migrating to an Inner Circle country (e.g., the UK). This means that the psychological makeup of these learners is such that they may not facilitate the integration of ELF aware processes.
- The extent and process of integrating ELF aware practices and processes within specific ELT/EFL contexts should be decided by the informed practitioner. In light of the above, it is up to the teacher to decide to what extent integrating ELF aware practices in a particular teaching context is possible. As has been shown above, the issues and concerns involved in raising ELF awareness has important advantages for learning that should not be overlooked (e.g., raising awareness about the role of English in interactions globally, the importance of intercultural competence, the need for accommodation strategies in communications with other interlocutors, etc.). What is more, the role of the teacher in this is crucial. Teachers should be informed about ELF-related concerns, but they should also be well versed in using needs analysis tools that will provide them with the data necessary to understand the learning profile and attitudes of their learners as well as of other

204 Nicos Sifakis

stakeholders (parents, sponsors, etc.) with regard to such concerns. In the final analysis, informed teachers will develop the specific "mixture" of ELF awareness activities that will blend well with both the specific teaching context and their learners' idiosyncrasies. In this way, ELF aware practices should not be imposed upon learners in a one-size-fits-all manner but should be the result of research and decision-making by the informed practitioner.

• Incorporating metacognitive and metalinguistic activities in typical EFL situations can address many of the concerns raised in linking ELF with EFL. At the level of EFL teaching, such activities can be added to existing courseware without disrupting teacher's day-to-day practices and without challenging the target situation. This means that teachers do not see the process of raising their learners' ELF awareness as a threat to their established practices but as a way of further boosting their intercultural communicative competence. In this sense, metacognitive and metalinguistic activities have also been used in the ENRICH CPD as a means of boosting learners' confidence as ELF users and teachers' self-perceived identity as reflective practitioners.

Conclusion

In this paper I have described the fundamental premises upon which the ENRICH Project's innovative online continuous professional development programme has been based and the essential principles that have guided it. I have also presented the ways in which the ELF awareness framework has been incorporated within the ENRICH training programme and have described the essential features of what I have called the ELF state of mind, with specific implications for pedagogy and teacher education.

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Öğretmenlerin ve Öğrencilerin ODİ Zihin Halini Geliştirmek: ENRICH Projesinin İlkeleri ve Önermeleri

Öz

Bu makalede, AB tarafından finanse edilen (Erasmus+) ENRICH Projesi'ne rehberlik eden dört önerme ve iki ilke sunulmaktadır. 2018-2021 yılları arasında gerçekleştirilen ENRICH projesi kapsamında, İngilizce öğretmenlerini kendilerinin ve öğrencilerinin Ortak Dil Olarak İngilizce (ODİ) farkındalığını geliştirme konusunda eğitmeyi amaçlayan yenilikçi bir çevrimiçi sürekli mesleki gelişim programı geliştirilmiştir. Ayrıca bu yazıda, ODİ bilinçli öğretmen eğitimi ve pedagojisinin etkilerine ilişkin geliştirilen kapsamlı eğitim programına dair kendi gözlemlerimi tartışıyor ve "ODİ zihin hali" olarak bahsettiğim kavramın temel bileşenlerini sunuyorum.

Anahtar Kelimeler: Ortal Dil Olarak İngilizce (ODİ), ODİ-farkındalığı, öğretmen eğitimi, dönüştürücü öğrenme, eleştirel düşünce

ELF Communication: From Pedagogical Catalyst to **ELT Game Changer**

Kurt Kohn

Abstract

Raising speaker-learners' and their teachers' awareness of the possibilities and challenges of authentic ELF communication is a powerful catalyst in the process of understanding what it means to be out in the wild. But where do they turn for orientation when it comes to their own spoken and written productions? From a social constructivist perspective, I argue that ELT's standard native speaker orientation is not the problem. Rather, what counts is what speaker-learners are allowed and encouraged to do with it. Against this backdrop, I propose a pedagogical lingua franca approach that moves ELF communication from a position outside ELT to a game changer position inside ELT and helps learners develop their own voice as emancipated non-native speakers of English.

Keywords: ELF awareness, ELF pedagogy, pedagogical lingua franca, social constructivism, speaker-learner emancipation

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Introduction

The search for pedagogical implications of ELF communication begins with the observation that ELF speakers are obviously able to communicate successfully despite and even because of bold and creative deviations from the standard native speaker English (SNSE) they have been taught in the ELT classroom. As Seidlhofer and Widdowson (2017, p. 32-33) emphasize, "incompetent users [of SNSE] can be capable communicators and indeed their capability in many ways depends on their incompetence." Variability, heterogeneity, and fluidity are key qualities commonly mentioned in descriptions of authentic ELF communication (Cogo & Dewey, 2011). This is quite the opposite of the communicative classroom interactions learners of English generally engage in, closely controlled and streamlined by a focus on SNSE and themes and material designed upon the model of native speaker varieties and cultures. What are the pedagogical implications of this discrepancy between SNSE as the preferred teaching model in ELT and the deviating realities of authentic ELF communication? This question touches on a complex mix of conflicting traditions, views and assumptions. To clarify the issues involved, I propose to take a closer look at

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208 Kurt Kohn

three sub-questions that are of particular importance for an ELF-aware pedagogical innovation of ELT:

- 1. What can be learned from recorded ELF communication?
- 2. Is an SNSE orientation incompatible with successful ELF communication?
- 3. How can participation in ELF communication be made available as part of ELT practices?

The first and the third questions address different modes of exposure to ELF communication that are pedagogically both necessary and complementary. The second question concerns the pedagogical status and role of SNSE. It holds the key to whether it will be possible for ELT and ELF to find a common ground that helps them dispel their mutual suspicions and misgivings and become brothers in arms (Kohn, 2019).

In the following sections, I will address these questions in three steps: ELF communication as a pedagogical catalyst, a social constructivist perspective on SNSE as a teaching model, and ELF communication as an ELT game changer.

ELF Communication as a Pedagogical Catalyst

As regards the first questions, we can state that raising awareness of the possibilities and challenges of authentic ELF communication is a powerful catalyst in the process of understanding what it means for speaker-learners of English to be out in the wild. The issues involved have been explored and discussed in many publications from and around the ENRICH project (http://enrichproject.eu) and related initiatives (Hall et al., 2013; Sifakis, 2019; Sifakis et al., 2018). Being exposed to and reflecting on ELF-speakers' recorded communicative interactions can have a thoroughly comforting and encouraging effect. It shows speaker-learners that they are not alone with their communicative struggles and that it is possible for them to succeed despite shortcomings in their perceived linguistic-communicative competence. This helps them accept and tolerate others and themselves as they are. As a result, it also reassures their confidence in their capabilities and increases their readiness to communicate in English. Another important gain concerns opportunities for realistic comprehension practice across a wide range of manifestations of English characterized by unfamiliar pronunciations, sentence structures, lexical uses, and discourse organizations. In addition, reflective exposure to recorded ELF communication enables learners to evaluate interaction strategies with regard to preferred and dispreferred options and to develop and refine their sense of the essentially cooperative and empathetic nature of communication.

The value of ELF awareness raising largely depends on the extent to which the ELF manifestations that speaker-learners are exposed to are in line with their own communication needs and purposes. To be pedagogically suitable, the selected ELF awareness material and activities should reflect the local linguacultural and communicative conditions with which speaker-learners of the envisaged target group are

likely to be confronted. Considering Widdowson's (1998) reconceptualization of authenticity, we can say that it is crucial for them to *perceive* the measures that are taken to raise their ELF awareness as authentic for themselves. Relevant selection criteria may concern the kind of spoken and written communicative interactions, the communication partners involved, their special manifestations of English, the cultural settings in which their interactions are embedded, the topics they communicate about, the communicative problems and challenges they encounter, and the attitudes and strategic skills they deploy (Lopriore & Vettorel, 2016; Vettorel, 2018).

So far, we have talked about learning from ELF communication in terms of strengthening communicative confidence, improving comprehension skills, and attending to the strategic, cooperative and empathetic qualities of communicative interaction. But there is another objective crucially important for ELF-oriented communicative competence development. It concerns the kind of English speakerlearners aim to acquire for their own spoken and written productions. Where do they turn for orientation? From an ELT perspective, the obvious answer is SNSE. From an ELF perspective the advice is less straightforward. ELF-aware pedagogical suggestions generally emphasize the pedagogical value of exposure to authentic ELF communication while, at the same time, casting doubt on the pedagogical value of SNSE. Representative of this line of thought is Kiczkowiak and Lowe's (2018) "Teaching English as a lingua franca. The journey from EFL to ELF". Emphasising the need for "raising our students' awareness that conformity with 'native speaker' norms is not always the most desirable goal", they argue for "exposing our learners to a wide range of language models, so that they are adequately prepared for the diversity of Englishes they will encounter outside the class" (p. 23). Similar views have been around since ELF became a topic of pedagogical debate (e.g. Kirkpatrick, 2014).

All these suggestions for an ELF improvement of ELT have in common that they make a convincing case for the need to help speaker-learners become familiar with the linguistic and sociocultural manifestations of ELF interaction. Regarding how to best improve speaker-learners' ELF production competence, however, these statements are far less clear. When confronted with this throughout positive depiction of ELF communication, many participants in my university seminars and teacher education workshops expressed their confusion and bewilderment. The message they heard was to drop SNSE as a target repertoire and to favour instead linguistic means of expression emerging from ELF productions. One of the teacher educators I worked with even expressed her concern about being told "to teach incorrect English". At the same time, she admitted to the many deviations from SNSE in authentic communication and was perfectly ready to accept them not only in the natural habitat of ELF communication but also in content and language integrated learning (CLIL) or in more communicative phases of classroom activities. This ambivalent fluctuation between SNSE and manifestations of ELF is in line with empirical studies showing that teachers often entertain a 'plurilithic' attitude, e.g., when they expect target norms to be followed in the classroom but tolerate deviations in everyday communication (Hall et al., 2017). A look at other areas of learning and teaching, e.g. in arts or music, shows that the coexistence of seemingly conflicting criteria of assessment is a more general 210 Kurt Kohn

phenomenon and can be seen as reflecting the strategically dynamic heterogeneity of human nature and behaviour.

So, it appears that teachers' plurilithic attitude towards balancing the gap between their SNSE preference and the realities of authentic communication points to something hidden behind the scene. To better understand what this is all about, I will now take a social constructivist look at the pedagogical concept of SNSE and its role in ELF communication.

A Social Constructivist Perspective on SNSE as a Teaching Model

It all begins with the question of how speaker-learners acquire a given target language, in our case English. That is, how do they build up a repertoire of linguistic means of expression they deem suitable for their communicative and communal needs and purposes. According to a social constructivist understanding of communication and learning, they achieve this by actually creating their own MY English version of the target repertoire in their minds, hearts and behaviour (Kohn, 2018). They are owners of English by creative construction. The cognitive, emotional and behavioural processes involved in MY English development are both individual and social. They are individual because speaker-learners are the ones who do it, and no one can communicate and learn for them. They are social because of the sociolinguistic community practices of participation and collaboration in which speaker-learners are situated. The direction in which the social constructivist acquisition and communicative use of the target repertoire evolves is influenced by a number of shaping forces. The usual suspects include

- the input speaker-learners are exposed to, in particular, teaching material and communicative contributions by their teachers, fellow students, or other interlocutors.
- where they come from, in particular, their own mono- or multi-linguacultural background,
- how they proceed, in particular, their learning approach, their attitude and motivation, and the effort they invest.

In addition to these three types of forces, there is yet another one that deserves our attention and which is generally overlooked in theories of language learning and approaches to language teaching. It concerns the requirements of communicative and communal success speaker-learners impose on their own communication and learning. This goes far beyond mere intelligibility, which is often mentioned as a key criterion of successful ELF communication and, it should be added, is usually judged by ELF researchers from outside the communicative situation. Seen from the speaker-learners' internal perspective, things look different and it is quite obvious that the satisfaction they experience with their own communicative achievements depends on a lot more than intelligibility. It may, for instance, be important for them to

- express their intended meanings,
- be understood.
- understand others.
- speak like members of a certain community by which they want to be recognized,
- establish and ensure empathetic and cooperative rapport with their communication partners,
- comply with certain learning objectives.

The personal requirements of success speaker-learners entertain are a reflection of their communicative and communal needs and purposes both in general and in relation to a certain situation. This is where teachers' and students' plurilithic attitudes have their origin and justification. Personal requirements of success explain why it is possible, even natural to accept certain forms in situation A but not in situation B. It's horses for courses! Evolving and changing throughout speaker-learners' life-long situated language acquisition journey, personal requirements of communicative and communal success play a key role as beacons of orientation in their communicative practices and, in consequence, their communicative competence development. It is by trying to meet them that speaker-learners exercise their autonomy.

This leaves us with an interesting question: Are speaker-learners entirely free to pick their requirements as they want? Of course not. In order to be successful in their communication and learning endeavours, they need to consider the communication and learning contexts in which they want to succeed and the criteria and requirements of success that are imposed on them from the outside. In authentic ELF encounters, external requirements of success may be set by the interlocutors or by certain conditions and purposes of the interaction. In the ELT classroom, it is the curriculum and the assessment requirements that should not be ignored. In this connection, it is important for teachers to understand that the requirements of success that are imposed from the outside, be it the criteria and objectives specified in the curriculum or the situational characteristics and conditions of a certain ELF encounter, can impact speaker-learners' behaviour and learning progress only in so far as they have been internalized and incorporated in their personal requirement profiles. Allowing and enabling speaker-learners to develop their own stance on externally given criteria and requirements of success is an essential element of quality teaching.

But there is more. Teaching English from a social constructivist perspective involves a fundamental shift in HOW the language is taught. With the communicative turn in language learning and teaching, deviations from the target model may now be more acceptable than before, but getting things "right" is often still considered the better option. Such a STRICT orientation towards the target language model ignores the two fundamental social constructivist conditions of language learning mentioned above:

a) speaker-learners can only acquire a given target model by creating their own MY English version of it;

212 Kurt Kohn

b) the processes involved are mediated by the speaker-learners' personal requirements of communicative and communal success.

These conditions do not depend on a specific target model. They are valid regardless of whether the language taught is some kind of standard English, some World English variety or an L1-based similect (Mauranen, 2012). Speaker-learners inevitably deviate from their target model. In terms of processing, their conformities with the model and their deviations from it have the same origin in their social constructivist creativity and capability for language. Seen from the inside, conformities and deviations are both evidence of what speaker-learners are capable of doing.

A social constructivist understanding of communication and language learning enables and requires teachers to take a more OPEN and holistic look at what speakerlearners aim for and are eventually able to achieve. It also throws a new light on the frequently voiced criticism of ELT being normative (Dewey, 2012). As it turns out, the problem is not the choice of a SNSE target repertoire as such. Rather, things go wrong with what speaker-learners are allowed or not allowed to do with it (also see Seidlhofer, 2011, chap. 8). Instead of evaluating speaker-learners in terms of how close they get to the target repertoire, they should be given sufficient leeway and opportunities to activate their available resources, creative capabilities and requirements of success in their endeavour to appropriate the target repertoire and thereby to develop their own voice as emancipated non-native speakers of English (Kohn, 2020a). It is this kind of emancipation that is evoked in Widdowson's (2003) account of language proficiency: "You are proficient in a language to the extent that you possess it, make it your own, bend it to your will, assert yourself through it rather than simply submit to the dictates of its form" (p. 42). With its social constructivist reconceptualization, ELT becomes pedagogically sensitive to speaker-learners' inherent need and capability for emancipation. This is what makes ELT receptive to the pedagogical implications of ELF communication emphasized in studies on teachers' ELF-aware attitudes (Bayyurt et al., 2019; Cogo & Siqueira, 2017) and in the context of ELF-aware teacher education (Sifakis et al., 2018). It also creates a pedagogical basis for the decolonializing perspective discussed by Siqueira (2020).

An essential framework condition for putting this social constructivist integration and reconciliation of ELT and ELF (Kohn, 2019) into practice is a learning environment that provides access to authentic ELF communication as part of ELT practice. With this, I come to the third and final part of my paper.

ELF Communication as an ELT Game Changer

In ELT curricula in German secondary schools, ELF is explicitly mentioned as an area of authentic communication relevant in a wide range of intercultural encounters from business, politics and administration to social media and travel, and it is strongly emphasized that the students should be prepared for this kind of interaction. This is pretty much where the good news ends. What is missing is a pedagogical concept that

goes beyond the generally implemented communicative approach by adopting a social constructivist perspective on ELT with space for speaker-learners' emancipatory ELF involvement. What can be done? In the Erasmus+ project TeCoLa (http://tecola.eu) and its predecessor TILA (http://tilaproject.eu), we opted for an experiential authentication strategy. Inspired by a social constructivist understanding of communication and language learning and its implications for language teaching, we designed and implemented a pedagogical lingua franca (PLF) approach as an ELF extension of communicative language teaching (CLT). The focus is on communication tasks that give students and their teachers an immersive experience of ELF communication and of what it takes to be successful. In a PLF approach, students of different linguacultural backgrounds communicate in small groups or pairs using their shared target language as a pedagogical lingua franca. With these interactions being firmly embedded in the speaker-learners' regular ELT class activities, ELF communication moves from a position outside ELT to what I consider a game changer position within ELT.

In our case studies, the PLF meetings were implemented as intercultural virtual exchanges supported by online communication and collaboration tools and tasks made available in the TeCoLa environment (see the Teacher Resources section on the TeCoLa website). The telecollaboration tools included in particular the videoconferencing platform BigBlueButton, a virtual world specifically designed for TeCoLa, and the digital wall Padlet. The online pedagogical lingua franca interactions were embedded in a blended learning design with preparatory and follow-up activities in class. The participants involved students and teachers from secondary and upper-primary schools in Germany, Greece, Spain, The Netherlands, and Taiwan. The communicative tasks the students were asked to carry out concerned exploring and discussing topics of low intercultural load such as "Breakfast", "Waste avoidance" or "An interesting sport". Although most of our exchanges were in English, it should be emphasized that the pedagogical lingua franca approach can be used with any foreign target language. In our studies, for instance, we also implemented exchanges in German (Kohn & Hoffstaedter, 2017).

When a few years ago I first mentioned the phrase "pedagogical lingua franca" (Kohn, 2018), I was asked why I had decided to use the term "pedagogical". At that time, the reason I gave was that the ELF activities were all situated in a pedagogical context. In the meantime, it has become evident that there is a lot more to it. In our case studies, we were able to establish that a PLF exchange gives students the opportunity to experience and practise agency, cooperativity and empathetic rapport as key qualities of communicative interaction (Kohn & Hoffstaedter, 2017). But it also became obvious that beneficial gains very much depended on the pedagogical mentoring support students received from their teacher(s) during task preparation and task follow-up (Kohn, 2020b, chap. 5). While a substantial part of pedagogical mentoring was needed for pedagogical organization and technological issues, its essential contribution concerned making the students aware of the special conditions of a pedagogical lingua franca exchange and the rich learning opportunities it provided. Pedagogical mentoring tasks that emerged as particularly relevant included helping speaker-learners perceive their communication and language learning activities in a social constructivist light.

214 Kurt Kohn

They need to understand that they are ultimately responsible for their own communicative performance and its situational appropriateness and that their personal requirements of communicative and communal success play a key role in how they exercise their responsibility. This again makes it necessary for speaker-learners to become aware of and negotiate their requirements of success in relation to the given situation, which includes the preferences and capabilities of their communication partner(s), and also in relation to the learning objectives set by their teacher(s).

In addition, speaker-learners' attention should be directed to the verbal and non-verbal techniques and strategies of communication monitoring. They should understand why monitoring is needed for successful communication and how communication monitoring contributes to communication learning (Kohn, 2020b, chap. 4). In this connection, the following observations from our case studies were particularly interesting. First, the students' explicit communication monitoring was predominantly cautious and restrained, quite similar to the monitoring behaviour known from everyday communication. That is, some of their own and their partners' comprehension and production problems might have been noticed but were left unattended, presumably because of a 'let it pass' or 'wait and see' strategy or because of cultural conventions of politeness. Second, there was a strong bias towards self-oriented communication monitoring. Partner orientation was mostly limited to comprehension, with little attention to the partner's struggle for expression. Third, there were no attempts to monitor the exchanges with regard to their cooperative and empathetic qualities. These observations identify an important challenge and task for pedagogical mentoring. Speaker-learners need to be made aware of the benefits of communication monitoring for communication learning, and they need to be encouraged to intensify and extend their communication monitoring practices beyond what they are used to from everyday communication. When engaging in communication monitoring, speaker-learners should look beyond their immediate communicative satisfaction and consider the consequences for improving their own and their partners' ELF communication learning. Again, the necessary orientation and guidance is provided by their personal requirements of communicative and communal success.

Conclusion

Reflective exposure to recordings of ELF communication can serve as a powerful catalyst for speaker-learners to develop their ELF competence. Beneficial learning effects may include, in particular, awareness of what it is like to be out in the wild, communicative confidence in their own resources and strategically creative capabilities, a sense of the value of cooperativity and empathy and, last but not least, comprehension practice. For acquiring ELF-related production competence, exposure to other speaker-learners' performance is less helpful. What is needed is active participation in ELF encounters and, most importantly, a direction in which to go. The advice commonly found in publications and debates about ELF pedagogy is to be aware of ELT's normative SNSE orientation and to familiarize oneself with ELF communication instead. In my own account, I argue for a social constructivist understanding of speaker-

learners as principal agents of their communication and language learning who cannot help creating their own MY English version of the English taught, guided by their personal requirements of communicative and communal success. This conceptualization strongly suggests to replace ELT's still fairly strict target language orientation by an open, social constructivist orientation with sufficient pedagogical room for LEARNERS of English to develop their own voice as emancipated SPEAKERS of English. It should be emphasized that changing from a strict to an open target language orientation has a social constructivist origin and is not motivated by the nature of ELF communication. Rather, a social constructivist revision of language learning and teaching is relevant for ELF pedagogy by making it possible to integrate ELF communication as a pedagogical game changer within ELT. The necessary communicative framework is provided by a pedagogical lingua franca approach. It enables speaker-learners to engage in intercultural lingua franca exchanges in a pedagogical context and supported by pedagogical mentoring interventions. The actual implementation is facilitated by a virtual learning environment.

Regarding teacher education, it is important to extend the focus beyond raising awareness of ELF communication to include issues of learning and teaching languages. Teachers should be encouraged to understand ELT from a social constructivist perspective so as to be able to adopt a pedagogical lingua franca approach as part of their regular ELT classes. A key element in this connection is pedagogical mentoring specifically with attention to speaker-learners' requirements of communicative and communal success and the learning potential of communication monitoring. In addition, teachers should be supported to explore online tools and environments and their pedagogical affordances for intercultural virtual exchange. To ensure sustainable results, it is advisable to closely integrate all teacher education measures into the teachers' everyday teaching practices.

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216 Kurt Kohn

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ODİ İletişimi: Pedagojik Katalizörden ODİ Oyun Değiştiriciye

Öz

Konuşmacı-öğrenicilerin ve öğretmenlerinin gerçek ODİ (ortak dil olarak İngilizce) iletişiminin olasılıkları ve zorlukları hakkında farkındalıklarını artırmak, gerçek iletişimle karşılaşacakları vahşi doğada olmanın ne demek olduğunu anlama sürecinde güçlü bir katalizördür. Ancak konu kendi sözlü ve yazılı üretimlerine gelince, ne yapmaktadırlar? Sosyal yapılandırmacı bir bakış açısından, İngilizce öğretiminde standart anadili konuşmacı yöneliminin sorun olmadığını savunmaktayım. Aksine, önemli olan, konuşmacı-öğrenicilerin bununla ne yapmasına izin verildiği ve teşvik edildiğidir. Bu arka plana karşı, ODİ iletişimini İngilizce öğretimi dışındaki bir konumdan İngilizce öğretimi içinde ezber bozan bir konuma taşıyan ve öğrencilerin özgür, anadili İngilizce olmayan kişiler olarak kendi seslerini geliştirmelerine yardımcı olan pedagojik bir ortak dil yaklaşımı öneriyorum.

Anahtar Kelimeler: İngiliz Dili Öğretimi (İDÖ), ODİ farkındalığı, pedagojik ortak dil yaklaşımı, BENİM İngilizcem, konuşmacı-öğrenci özgürlüğü

Unveiling Teachers' Personal Responses to Innovation

Lucilla Lopriore^a, Alessandra Cannelli^b, Valeria Fiasco^c and Silvia Sperti^d

Abstract

When awareness of the current plurality of English and of its implications for teaching is raised in teacher education courses, this perspective will afterwards emerge in teachers' classrooms. Teachers' ELF awareness was enhanced in the ENRICH course through reflective activities and in the forum where teachers shared personal views and beliefs about language learning and teaching within an ELF aware approach. In order to investigate the changes occurring during the course, a specific lens was used to analyze a group of participant teachers' shift in perspective through their interventions when responding to reflective activities. A corpus-based discourse analysis of teachers' language unveiled their positioning in terms of both their agency and their sense-making in a process of change.

Keywords: ELF awareness, discourse analysis, Corpus-based, Corpus-driven, reflection

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Introduction

As a result of increasing global mobility, the sociolinguistic reality of English, and its different realisations, the growing diffusion of World Englishes (WEs) and of English as a Lingua Franca (ELF) have become - in the last two decades - much more complex and controversial than those of other languages in the world (Graddol, 2006; Pennycook, 2006; Lopriore, 2016). Issues of identity, standards, proficiency levels, intercultural communication and language awareness of English language learners and teachers, demand for a paradigmatic orientation and a reconsideration of English language education and classroom practice (Bayyurt & Sifakis, 2015; Bayyurt & Dewey, 2020; Gimenez et al., 2017; Jenkins et al., 2011; Llurda, 2004, 2018; Llurda & Mocanu, 2018;

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Lopriore, 2016, Lopriore, 2017; Mauranen, 2012; Seidlhofer, 2009, 2011; Sifakis, 2019). Influenced by these emerging global realities, EFL practitioners are thus required to consider their learners' current needs, interests and language use, usually transcending classroom boundaries, and to eventually revisit their instructional practices in order to sustain their learners helping them to cope with their individual linguacultural requirements.

This process of individual change cannot be left to teachers' personal initiatives only, rather it requires a joint collaborative action through specifically designed teacher education courses based upon a reflective approach, as it emerges in the existing literature (Freeman, 2016; Freeman & Johnson, 1998; Ketelaar, 2012; Maughan et al., 2012; Schön, 1983), and, hopefully, sustained by specific language policies. If awareness of the current plurality of English is raised in teacher education courses, there are good chances that this perspective will be adopted afterwards in the classroom, when teachers work with their students.

The ENRICH Project

The first teacher education course devised and implemented within the emerging plurilingual landscapes and current English language teaching and learning realities, in five different countries in Europe and in the Mediterranean area, was the Erasmus+ "English as a Lingua Franca Practices for Inclusive Multilingual Classrooms" (ENRICH, 2020). The on-line 5-month course was meant to develop participants' own understanding of the role of English as a lingua franca in multilingual classrooms through an innovative ELF-aware pedagogy (Sifakis, 2019; Sifakis & Bayyurt, 2018).

The Professional Development Course "ENRICH" had been conceived on the basis of the findings of an extensive Needs Analysis carried out in five countries (Greece, Italy, Norway, Portugal and Turkey) and investigating EL teachers' (over 600) as well as learners' (over 500), current habits and perceived needs. The PDC was mainly geared at empowering English language teachers to integrate the current role of English as a Lingua Franca in their multilingual classrooms, thus to fundamentally rethink and revisit their teaching as well as its object, that is ENGLISH, thanks to activities and peer exchanges. Teachers' ELF awareness was enhanced through reflective activities and within the ENRICH course forum where, all along the course duration, the participant teachers were offered opportunities to share their views and personal beliefs as for English language learning and teaching within an ELF aware approach.

The ELF-aware teacher education approach adopted within the ENRICH professional development course was aimed at sustaining English language teachers (ELTs) to fundamentally rethink their own teaching and challenge their personal beliefs about English language teaching; this would have helped them develop a meaningful cognitive and attitudinal change in view of recent developments in ELF research. But

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e http://enrichproject.eu/moodle/

bringing about a personal change inevitably includes a re-appreciation of one's beliefs, attitudes, and assumptions about language and language teaching. The existing literature about teachers' and learners' beliefs unveils several challenges, mainly because beliefs are not directly observable, because we cannot just walk into the classroom and 'observe' beliefs; we can indirectly observe beliefs or shifts in perspective only through questionnaires or reflective activities (Borg, 2012, as cited in Birello, 2012, p. 89). In recent years the topic of language teachers' beliefs has attracted considerable research interest, mostly on the relationship between teachers' beliefs and practices that is generally considered as a complex one. A number of such studies focus in part on the relationship between beliefs and practices (Basturkmen, 2012; Birello, 2012), but there are still very few studies that examine practicing teacher beliefs of ELF (Dewey & Pineda, 2020; Llurda & Mocanu, 2018) and on ELF assessment, but a small sample of studies focusing on Turkey, Poland, Portugal and China shows us that teachers are already exploring and learning about ELF.

The ENRICH course was thus chosen as the most suitable inset course for investigating whether a collaborative action through specifically designed reflective activities would facilitate a transition from traditional teaching habits as well as sustain changes in teachers' attitudes and beliefs.

The Research Study^f

The initial hypotheses behind this study, proposed by the Italian partners^g in the ENRICH Project, claimed that:

- a) the participant teachers' responses to a course leading to a profoundly innovative change in their practice all along the course duration, were going to challenge teachers' initial resistance to innovations, thus unveiling deeply held beliefs and daily routines;
- b) the reflective approach adopted in the course activities and stimulated by the course forum discussions, would have enhanced participant teachers' language awareness and would have gradually led to a change in teachers' attitudes and classroom practice;
- c) changes, or absence of change, would have been revealed in the discourse and in the language used by participant teachers in their responses within the activities and in the comments in the course forum.

Research Questions

^fThe first findings of the study were presented - on 27/02/2021 - by the Roma Tre ENRICH team, at the "ELF Day 5: ENRICHing Pedagogical Issues and Concerns in ELF Research" organized by Boğaziçi University ENRICH Erasmus+ project team.

The hypotheses generated two main research questions:

R.Q.1. Does a PDC mainly geared at empowering EL teachers to integrate the current role of ELF in their multilingual classrooms and to fundamentally rethink the object of their teaching, enhance positive changes or trigger teachers' resistance?

R.Q.2. Would a change in teachers' attitude, awareness, agency and ownership emerge in teachers' responses to the course input and activities along the course duration? When and How?

Sample

The sample of participant teachers that was chosen for this study was initially constituted by the entire group of those who had enrolled in the course led by the ENRICH Italian partners, but later on in the research only those who had completed the whole course were investigated in more detail. The final group was constituted by 21 teachers: 19 female and two male; 17 Italians, 4 non-Italian (1 from Ukraina, 2 from Pakistan, 1 from Qatar). Three participants had a PhD, 3 an MA, the majority, except for three, had a national teaching qualification. The participants' age range varied: the two thirds of the group was composed by teachers whose age range was between 36 and 55, definitively a group of mature teachers. The group had a very diverse composition in terms of teaching experience, seven teachers had been teaching between 11 and 15 yrs, four between 6 and 10 yrs, four between 21 and 25, two between 26 and 30, only one over 30 yrs and three had taught for less than 3 years. The types and levels of schools the participants taught in were almost equally distributed among primary, middle school, high school and university, except for three cases of teachers who were either just retired, one, or involved in temporary jobs on more than one school type, two; this equal distribution accounted for a genuine exchange of participants' diverse opinions during the activities that compensated some teachers' lack of specific experience in some school types and levels, and thus contributed to their sharing of ideas and experiences. Almost all the participants' schools had between 10 % and 25% multilingual population.

Methodology

The main actions undertaken during the study were the following:

- To first identify most significant reflective activities along the course;
- To build up a corpus of teachers' responses within the selected activities;
- To look for language instantiations that would unveil teachers' positioning and agency, e.g. the use of: Modals; Verbs of Mental perception; Attitudes; Opinions; Words; Adverbs.

generate ENRICH Italian partners – Lucilla Lopriore, Silvia Sperti, Valeria Fiasco and Alessandra Cannelli - work at the University of Roma Tre.

- To interrogate the corpus through Sketch Engine^h, using tools such as Word lists, Key words, Concordances, and N-grams;
- To identify features of changes in teachers' positioning, agency & ownership in a longitudinal perspective.

Tools

In order to investigate whether participant teachers had undergone any significant change during the course and to identify what type of change had occurred, a specific lens was used to monitor and analyze in depth the participant teachers and their shift in perspective: a "corpus-based discourse analysis" (Flowerdew, 2012). The analysis of the corpus of participant teachers' interventions and responses - carried out through SketchEngine - could unveil participants' positioning in terms of their agency, their identity and their sense-making as taking place within a process of change (Keteelar et al., 2012).

The study was thus carried out through the analysis of teachers' discourse, as it emerged within their interventions when responding to the course activities, specifically those questioning their ELF awareness and the implications of introducing a diverse perspective in their English language courses.

Corpus Design

For the purpose of investigating this change, a small corpus of approximately 18.000 words created from the sample of course participants' responses, was built and investigated. The corpus is made up of texts gathered from the ENRICH course forums in relation to teachers' interventions when responding to a set of selected activities, specifically those questioning their ELF awareness. On the whole, the corpus amounts to a total of 17,626 words and 19,540 tokens. The corpus is not large, but as de Haan (2011) maintains "the suitability of the sample depends on the specific study that is undertaken". In this case, the study focuses on a sample of teachers' responses in the course activities and in the forum. This kind of short textsⁱ is suitable for smaller corpora because they can still yield statistically reliable results on frequency and distribution despite the small size of the corpus (Bolasco, 2013). As for the inner structure that composes the corpus, seven reflective activities related to five crucial course sections – such as the role of ELF, the implications and challenges of ELF-aware teaching, for teachers and for learners - were selected and taken into consideration, as represented in Table 1.

hhttps://www.sketchengine.eu/ Sketch Engine is the tool to explore how language works. Its algorithms analyze authentic texts of billions of words (text corpora) to identify instantly what is typical in language and what is rare, unusual or emerging usage.

Collections of short texts are defined by Bolasco (2013:65) as fragment-texts, e.g. advertisements, surveys, tweets, sms, chats, e-mails.

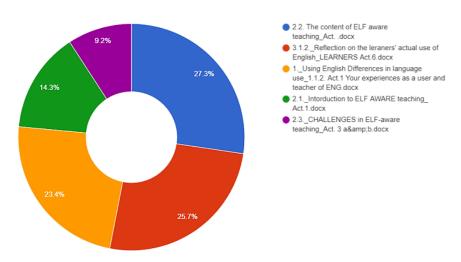
Table 1Sampling Frame of the Corpus

Number of the section	Name of the section	Activity chosen	Content of the activity
1 1.1.2.	Using English and the key issues in using ELF	1	Looking at the real world and realizing how English is used, by whom, under what circumstances and with what competences.
2.1.	ELF-aware teaching	1	Defining the concept of 'ELF awareness'.
2.1.	ELF-aware teaching	1	Defining the concept of 'ELF awareness'.
2.2.	The content of ELF- aware teaching	1 and 3	The kind and types of input that could be employed in English Language Teaching (ELT) activities which integrate insights gained from English as a Lingua Franca (ELF).
2.3.	The challenges in ELF- aware teaching	3 and 4	Participants are invited to think about themselves as learners and teachers, about their choice and use of methods and approaches within new linguistic landscapes and pedagogical approaches.
3.1.2.	Learners	6	A section devoted to raise teachers' awareness of central aspects of multilingualism and what it takes to help students develop into competent and confident users of English.

The distribution of data across the five corpus sections is uneven as it emerges in the following figure. In particular, section 2.2. - devoted to the types of input that could be employed in ELT activities integrating ELF - is the richest one including most of the words (27.3 %) of the corpus. The second most numerous section is 3.1.2. (25.7 %), the one concerning teacher's commitment in making students competent and confident users of English, followed by section 1. and section 1.1.2. (23.4 %) regarding the use of English and the key issues in using ELF. The distribution of data across the three largest sections is quite balanced, while the last two sections are definitely smaller because of a moderate degree of participation by Italian teachers in the forum of these two activities (especially the one about the challenges of ELF-aware teaching), therefore the amount of data for these sections was limited. At the same time, it was important to explore these two sections because it was here that teachers learn how to integrate ELF in their current EFL practice. In particular, section 2.1. (14.3 %) concerned the introduction to ELF-aware teaching and section 2.3. (9.2 %) regarded the challenges in ELF-aware teaching.

Figure 1

Data Distribution Across the Five Corpus Secions



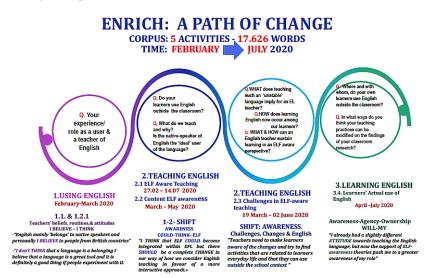
In constructing a representative corpus, the researcher should have a good "sampling frame" of the population or, in other words, "an operational distribution of the population, an itemized listing of population members from which a representative sample can be chosen" (Biber, 1993, p. 243). The five sections and the related activities were selected to build a representative corpus typifying teachers' positioning and agency. In addition, this kind of data was consistent with our research hypothesis suggesting a possible positive change in teachers' attitudes and opinions along the course.

As far as approaches to corpus work are concerned, in this piece of research both the corpus-based and the corpus-driven approach were employed. The former was used to analyze words and sentences of interest and to describe what emerged from the activities selected on the basis of our initial hypothesis, by using concordances, collocates and clusters. The latter was adopted to explore the corpus via the wordlist, the keyword lists and the n-grams in order to gain a broader perspective on the topics and the trends of the corpus.

Analysing the Corpus: A Path of Change?

Figure 2

A Path of Change



The overall analysis, as portrayed in Figure 2, was meant to monitor and analyze teachers' responses to the course following the 'path of change' participant teachers had gone through in a longitudinal perspective, according to the order of the main course components: from the "Using English" to "Teaching English" and to the last one, "Learning English". In each of the three main components the activities chosen were the ones regarded as the most significant ones for activating changes, that is for example, the one on "Teachers' beliefs, routines and attitudes", carried out at the beginning of the course, where we expected to find participants using verbs such as: "I believe" I think", "I don't think". The longitudinal analysis took then into consideration the most relevant component, the one on "Teaching English", where most activities and forum discussion - such as "ELF aware teaching", or "Challenges of ELF aware teaching" - were geared at eliciting teachers' positioning, and where we expected to identify traces of changes and of a shift in perspective taking place through the participants' use of modals and of ELF related lexis emerging in their discourse. In the last component "Learning English", participants were asked to consider their learners and possible practical implementations of an ELF-aware approach, through activities eliciting participants' agency, awareness and ownership, that would unveil shifts in their understanding and commitment to the innovation brought about by the course, through their use of "will" or of "my", for example. The corpus thus allowed to have a closer view at the language choices made by the participants and to relate them to the change they were undergoing during the 5-month course.

Unveiling Occurring Changes

The corpus was explored and investigated by way of SketchEngine^j, a valuable research tool that offers the chance to consult about 500 corpora and to build your own corpus taking advantage of the tools offered by the platform like the wordlist, the keywords, and the possibility to explore collocations and concordances.

As for corpus construction, SketchEngine enables the user to upload a corpus composed of a single file or a corpus made up of several files. The second option also offers the opportunity to carry out a user-friendly textual analysis through the help of metadata and it is the one chosen for the present study. The subdivision of corpus data into different files allowed to see how many documents, tokens or words there are in the corpus in texts downloaded from each CPD section. To sum up, each of the five CPD sections under investigation was included in a separate file which was then individually uploaded on SketchEngine in order to compile the corpus.

Wordlist

Afterwards, the main tools offered by the platform were used to perform the analysis. More specifically the wordlist, a tool that shows the frequency of various lexical items in a corpus, was used. Looking at the corpus wordlist, without any kind of sort, words like English, language, students, think, ELF, teaching, learning and the pronouns I, they and We clearly emerged. The wordlist was also sorted into grammatical categories, i.e., nouns, verbs and adjectives, and what emerged was the evidence of a positive attitude towards this new teaching perspective, especially in the adjective list where many positive adjectives could be observed, e.g., aware, possible, useful, necessary, new, good.

Key-words

The second tool used to conduct the investigation was the keyword list, a tool that unveils what is typical of your own corpus if compared with another one and also reveals what the theme of your corpus is. The keywords showed the main topics of the corpus and confirmed what had already emerged from the analysis of the most frequent words. The most significant single keywords emerging from this investigation were ELF, ELF-aware, beliefs, changes, personal, whilst among the most relevant multi-word terms, the following are worth mentioning: native speaker, native-like competence, ELF perspective, different language, rich multilingual context. On the whole, the keywords seemed to reflect a trend indicating an increase in ELF-awareness of the course participants.

j https://www.sketchengine.eu/

Concordancer

On the basis of the findings reported in this contribution, the investigation of the corpus brought into focus participants' use of modal verbs. This fact suggested a possible change in teachers' attitudes towards English language learning and teaching within an ELF aware approach all along the course. In order to analyze the use and the function of modals the concordancer, a multi-purpose tool that shows all the occurrences of a word or a pattern in the context in which it occurs, was used. Each concordance line includes the node word, i.e., the word being studied, positioned in the middle of the line; the node word allows to observe the words which are used before and after it. In our investigation, the attention was posed upon should and will, carefully observing which pronouns preceded the modals and it was found that the main pronouns used were: I and we that reflect teachers' own position and beliefs and they that reflects what teachers say and think about their students. More specifically, we searched for should or will and then we sorted the results on the left-hand side of the sentence to identify the most frequent pronouns used, as shown in the two Concordance tables below.

Figure 3

Concordance Table 1 - I + should



Figure 4

Concordance Table 2 - I + will

12	① doc#0 ced user of English but unfortunately, in spite of tons of courses at a proficiency level, I	11	never be really proficient as I would like, not having the opportunity to live for a long tim
13	\bigcirc doc#2 nt, the language of the origins, even if it obviously changes itself as a living language, I	11	be always attracted by British native speakers, but the concept of English as a Lingua F
14	① doc#2 :t of EFL towards ELF-awarness in my teaching path.	11	have to search materials which will help me in class, because course and text books are
15	\bigcirc doc#2 S accent or pronunciation is the norm to which we should always aim at <s> And I</s>	11	be glad to show them that in 2020 English is something more that . <s> I think one ε</s>
16	\bigcirc doc#4 hink of the wordlesson learned I was unable to get my students to do the survey but I	will	definitely do this as a first lesson when back to school in whatever shape or form.
17	$\hfill \bigcirc$ doc#4 µing and getting to grips with activity types but as they say, practice makes perfect, so I	will	start immediately Also, I will definitely include some sort of ELF-awareness activities in I
18	① doc#4 · activity types but as they say, practice makes perfect, so I will start immediately Also, I	will	definitely include some sort of ELF-awareness activities in my teacher training programs
19	\bigcirc doc#4 ruse they feel ashamed especially the weak students. <s> I think that in the future I</s>	will	explore my students multi language competence at the start of the school year as a hat
20	① doc#4 just five out of seventeen. <s> I've found this research very interesting, that's why I</s>	'II	complete it in September and all the families have agreed. <s> From the answers I</s>

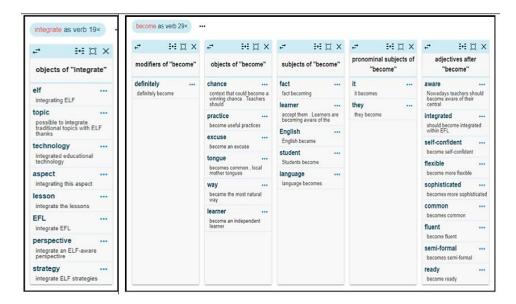
WordSketch

Afterwards, based on what was found in the previous searches, the investigation followed focusing on some of the most significant verbs, looking particularly at their

collocates in order to explore which topics and concepts were linked to the actions reflected in the verbs, such as: foster, believe, become, develop, engage, integrate. This analysis was carried out using the WordSketch tool on SketchEngine which gives a clear instantiation of words' behaviour and their lexical preferences, as in the collocation table of integrate and of become below. The overall emerging results indicated change and a positive attitude towards teaching and learning English as the main concepts emerging from the CPD course.

Figure 5

Collocations 1 – Integrate and Become



n-grams

The investigation of teachers' attitudes and beliefs eventually focused on the analysis of the n-grams, i.e., multi-word expressions, to get a general overview of what came out of the corpus as a result of the path followed by the teachers during the course. This analysis was carried out using the n-gram tool on SketchEngine and selecting n-grams made up of 3, 4 or 5 words to explore the most significant sentences in the corpus in order to envisage teachers' main thoughts during the course, e.g. they (the students) use English outside the classroom, they (the students) are exposed to (English), (teaching through) an ELF-aware perspective, English belongs to (me, us, all citizens).

Analysing the Corpus: What is Unveiled by the Study

Words in the Wordlist

The Wordlist tool in Sketch Engine generates frequency lists of various kinds. In this case the software has generated the list of the most frequent words in our corpus. Usually, this type of frequency list shows grammar words as the most frequent ones.

In our sample, instead, words such as English, language, use, students, think, namely not grammar words but some specific corpus words, already appear in this phase of the analysis.

The Wordlist shows that the most frequent content words are English, language, students, think, different, ELF, teaching, learning. This means that teachers are using many content words to express their opinions. Throughout the course they have received innovative inputs and materials which have triggered a reflective process in their mind. The frequent use of content words, referring to the teaching context, in their replies can be interpreted as a signal of awareness and of positioning towards the main issues raised during the course modules, as confirmed in the following examples from the first part of the corpus:

- (1) I need to study everyday, to listen and to read, and I do it by myself reading books, following lessons on Youtube or on websites. I have friends from Australia, the U.K, The U.S.A., Malta, and we often interact thanks to social media. I'm definitely at home if I define myself as an *ELF speaker*.
- (2) Other aspects that make the language I produce *different* include the country I find myself in, the place of the interaction, the culture of the people, the *different* home languages spoken within the group, and how *English* is spoken by most of the group I am talking to. Also, the use and 'interference' of other languages will impact on how I use *English* in both my professional and private life.

The following steps of the analysis, conducted by means of other Sketch Engine tools, have further shed light on this assumption.

Words in Keywords List

The "Keywords" list of Sketch Engine provides the list of words that appear more frequently in the focus corpus than in the reference corpus. They can be used to identify what is specific to our corpus in comparison with another corpus (a reference corpus, in this case English Web 2015/enTenTen15, a much larger general corpus). Hence, in a second step, it was decided to compare the corpus with a another one by identifying what is unique and significant in the first corpus.

This confirms the corpus specificity and the result of the investigation is divided into two lists: the keywords list containing single-word items and the terms list containing multiword items.

As shown in table below, the keywords list results are quite revealing. In the first 40 single-word keywords significant terms appear, such as: ELF, ELF-aware, lingua franca, non-native, ELF-awareness, metalinguistic, metacognitive, researchaction, intelligibility, translanguaging, multilingual.

Keywords

First features of changes are unveiled in the respondents and teachers' attitude, awareness and agency emerge in their responses to the course inputs and activities in a diachronic perspective.

On the other hand, the appearance of words like extramural, communicative, videogame, E-twinning, task-based, TikTok, Kahoot, gamify, competence, mindedness testify a growing consciousness of the most recent contributions to language teaching coming from outside the classroom. Teachers start considering new tools and inputs in building their teaching materials as well as in revisiting their lesson planning. This is also confirmed by the first ten multi-words terms detected in the corpus, like: native-like competence, ELF perspective, mother tongue, (rich) multilingual context, lingua franca, (authentic) life tool.

Once again, features of changes appear here: starting from the conformity to a standard model, to what is 'native', teachers talk about multilingualism, authenticity, lingua franca, social networks, moving towards ELF-awareness, as confirmed in the following examples from the corpus where key-terms are highlighted:

- (3) I think that every *authentic experience* of English, with real motivation, enriches the lesson context. I think integration would be fine. They certainly use English on *social networks like TikTok, Instagram*. In my context it is very useful because it is affected by a strong migration flow strongly support the *integration of the ELF with the ELF*.
- (4) I believe that teachers should use *ELF* when they teach English, and integration could be the good solution. Living in a *multilingual context* where English and Arabic are mostly used for interactions, students mainly use English in the classroom when interacting with teachers or while working on a task
- (5) They (the learners) do it at home, usually in the evening after finishing their homework. They try their best to get the message across. They often use body language and *translanguaging*, especially face to face, and other *accommodation strategies*.

Modals Analysis

Modal verbs are used for several reasons: to give a degree of probability, to express possibilities or to perform various social functions, such as expressing politeness or indirectness. Modality can be expressed with two different pragmalinguistic functions: a deontic modality conveying commissive and directive intentionality, expressing a use related to social interaction (Halliday, 1994); and an epistemic modality, communicating logical conclusion, possibility, expectation, giving an interpretation of reality.

For this reason, Sketch Engine was used to sample the use of the most frequent modals in the corpus. More precisely, in order to better define and contextualize the use of modal verbs in the corpus, we interrogated the software to explore the "Concordance" tool and examine examples of use in context. The concordance is the most powerful tool in this software with a variety of search options. It is used to find examples of a word, lemma, phrase, tag or even a complex grammatical or lexical structure. The results are displayed in the context of use, in the form of a concordance. The concordance can be sorted, filtered, counted and processed further to obtain the desired result. We decided to find modal verbs and display the results in context in the form of a concordance.

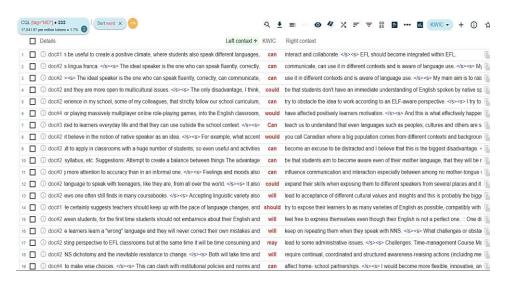
The analysis confirmed that modal verbs are frequently used in the reflective activities regarding:

- 1) Using English: teachers' beliefs, routines, expectations & attitudes (Your experience/role as a user & a teacher of English);
- 2) Teaching English: ELF-aware teaching (Do your learners use English outside the classroom? What do we teach and why? Is the native speaker of English the 'ideal' user of the language?);
- 3) Teaching English: the challenges in ELF-aware teaching (What does teaching such an 'unstable' language imply for an EL teacher? How does learning English now occur among our learners? What and how can an English teacher sustain learning in an ELF aware perspective?);
- 4) Learning English: learners' actual use of English (Where and with whom, do your own learners use English outside the classroom? In what ways do you think your teaching practices can be modified on the findings of your classroom research?).

In the figure below - a screenshot from Sketch Engine - the central column shows the most used modal verbs: can, could, would, should, mostly occurring in the second phase of the course, when a shift in teachers' perspective was most probably occurring, signalled by the use of these modal verbs that highlight some sort of resistance and doubt at the beginning, but move towards a change in the last part of the course.

Figure 6

Modals



Modality is employed in teachers' comments especially in the first part of the course when teachers were stimulated to consider their personal experiences/role as a user & a teacher of English, e.g. the use of 'can' in deontic (expressing ability) as well in epistemic modality (expressing possibility) is particularly frequent:

- (6) Sometimes I feel that something is missing, there are some aspect of the language: idioms, collocations, that are very complicated to acquire especially if you (like me) don't live in an English speaking country, but I am satisfied with my English I *can* communicate with everybody and I have no problem understanding native and non-native speakers and for this reason, I think English belongs mainly to native speakers who use it instinctively, but it is also a great tool for us, non-native speakers, that use it to communicate.
- (7) I think I am a life-long learner so I *cannot* say my English is a certain level and I do not need to study it anymore, everyday I find a new word, a new idiom, a new structure I *can* learn and teach. English is a work-in-progress for me.
- (8) I *can* say together with my learners that we have the 'right' to think that English 'belongs' to us because it is the language we use to communicate in class during the lessons but also just to ask answer information. That's the only language they are required to use so English should belong to us.

In the section of the CPD about ELF awareness, teachers were encouraged to reflect on how the EFL teaching can be enriched to address more effectively the needs of the learners in an ELF-aware perspective. And here again, we can notice a shift in the language used by the teachers, as confirmed by the following examples where several modals are highlighted:

- (9) The only disadvantage, I think, *could* be that students don't have an immediate understanding of English spoken by native speakers. But, they *need* some time and they *will* be able to understand and communicate with them! Integration is the best and challenging way to teach English.
- (10) According to my personal experience in my school, some of my colleagues, that strictly follow our school curriculum, *can* try to obstacle the idea to work according to an ELF-aware perspective.
- (11) So I think that there could be the possibility that the learners learn a "wrong" language and they *will* never correct their own mistakes and *will* keep on repeating them when they speak with NNS. What challenges or obstacles *could* there be and how *could* you overcome them? ELF is not included in the National Curriculum so there is no specific methodology for teachers if they want to teach it.
- (12) The only disadvantage is that usually we instructors *have to* complete our courses within a certain limit of time. ELF *will* surely give an interesting perspective to EFL classrooms but at the same time it *will* be time consuming and *may* lead to some administrative issues.
- (13) As I previously mentioned, teachers *need to* make learners aware of the changes and try to find activities that are related to learners' everyday life and that they *can* use outside the school context. *Can* teach us to understand that even languages such as peoples, cultures and others are susceptible to change and evolve. They are closely linked to the dynamic flows of human life. I think something is changing, but it is still too little.
- (14) Teaching *must* be a flexible process and students *should* utilize it to its maximum. I think that my students use English outside our EFL classroom. Nowadays they have chances to use English outside schools, some of them play videogames and instructions, directions and all the nouns are in English, then when they organize competitions among them they are using English in a different context.

Modal verbs were therefore particularly used in the reflective activities about teaching English, in the middle of the course. Here and in the following examples "I" is always referred to the teacher and "they" always refers to the learners.

The concordance results show the use of "will" by teachers answering the reflective questions about their learners and here again we notice a shift in the language

used by the teachers, as confirmed by the following significant examples where "will" and other modals are highlighted and used with different degrees of modulation and modalization (Halliday, 1994):

- (15) Learners enjoy using English as a tool of communication on these forums as they are learning something new in a friendly way. At the same time, they are not afraid to make mistakes. If my learners are comfortable in learning English this way, I *can* incorporate these forums in my teaching to grasp their attention and make learning in class meaningful.
- (16) I would be more appreciative of cultural diversity and exploit multiculturalism in my teaching context. The change in my attitude will also influence learners' beliefs and convictions.
- (17) I *will* keep into account how important it is to be 'close' to students and their extramural activities and how much they enjoy using ICT in class, such as Kahoot, Padlet, Moodle quiz, etc. I feel this *will* motivate students to be more active in class and effectively use ELF.
- (18) I am already implementing a more ELF-aware perspective in my teaching practices ... my lessons are now more ELF inspired even if I am still struggling and getting to grips with activity types but as they say, practice makes perfect, so I will start immediately Also, I will definitely include some sort of ELF-awareness activities in my teacher training programmes both CLIL and ELT and hopefully will be able to advocate ELF as a principled approach in language learning and teaching.
- (19) I think that in the future I *will* explore my students multi language competence at the start of the school year as a habit I generally do it but like conversation time and not with specific purposes which I found really inspiring. I *should* include more activities that allow them to bring their extramural experiences with English inside the classroom and share these experiences with the other students.
- (20) I *should* include more activities that allow them to bring their extramural experiences with English inside the classroom and share these experiences with the other students.
- (21) If we talk about this in class and come up with ways to create a balance between English and local languages translanguaging, students *will* feel more comfortable and motivated to learn the language.
- (22) My teaching practice *will* take into account the use my students do of English outside the classroom via different media such as music, television and gaming. I have understood that my students are more motivated to learn English via their extramural activities than via classroom English. Especially

gaming is, in my opinion, a great source for language learning. I will gamify my teaching in the future incorporating more extramural English in my lessons.

- (23) I think I *should* make it a habit to explore my students multilanguage competence at the start of our course I've done it in the past but not with every class. I *should* try to include activities that allow them to bring their outside experiences with English inside the classroom as well as motivate those who already have an extramural experience of English it could inspire students who don't have it as well. I *should* give those students who don't have as many changes to practice English outside the classroom suggestions on how to make the most of the chances they *might* have to maximize their use of English.
- (24) I expected by the fact that they mainly use English passively listening and reading, but I was surprised by the fact that some students write diaries and stories in English on social media such as Tumblr. I *should* find ways to engage my students in speaking and writing activities, so that they *can* develop their productive skills as well, because otherwise they *won't* be able to communicate, they need to experience real-life situations actively.
- (25) I think I *should* use more and more authentic tasks where they *can* feel motivated to achieve an outcome. In this way they have the opportunity to feel more motivated in getting involved in genuine communication.

As confirmed by the previous quotations (1 to 25), modality is a perfect marker of the speaker's judgmental and attitudinal positioning. Intentionality, expectations, commitment, and propositions are signaled and highlighted by the use of both deontic and epistemic modality.

In the following section, modal verbs are further explored with the aim of detecting changes in teachers' attitudes, in terms of both their agency and their positioning in a process of transition, in a diachronic perspective.

Teachers and Learners: Changing Perspectives

The analysis of teachers' responses to the course revealed signs of change particularly in their responses in the transition from the third section, where they were asked to identify the challenges of an ELF aware approach and how they could sustain learning using this approach, to the fourth and last section where they were asked how their teaching practices could be modified bearing in mind their learners.

Teachers' Commitment: I will

Teachers discovered new ways of teaching through their learners' actions, outside the classroom. and admitted that they would like to start bringing it into their classrooms as it emerges in the statement below.

I find these activities for my upper secondary school students, a concrete way to progress in English. My teaching practice *will* take into account the use my students do of *English outside the classroom via different media* such as music, television and gaming. I have understood that my students are more motivated to learn English via their extramural activities than via classroom English.

Teachers' responses unveil teachers' awareness of the relevance of being close to their learners and to their extramural activities as well as of using apps students enjoy using. Their commitment emerges in the use of "I will keep into account", "I will take into account the use my students do of English outside the classroom".

Teachers' awareness of the changes induced - in their views and beliefs about the language they teach - by their participation to the course and their 'agency' in taking initiatives to change their practice, emerge in their statements as in the first one where the teacher describes his gradual transition.

I'll be always attracted by British native speakers, but the concept of English as a Lingua Franca gives the learner/speaker much more ease and tolerance toward him/herself while learning.

My lessons are now more ELF inspired even if I am still struggling and getting to grips with activity types but as they say, practice makes perfect, so I will start immediately.

The teacher suggests to create a balance between English and local languages, through translanguaging, so students will feel more comfortable and turn their 'passive' "tendency to listen to music or watching YouTube videos" into an active one.

I think that in the future I will explore my students multi language competence at the start of the school year as a habit I generally do it but like conversation time and not with specific purposes which I found really inspiring.

I find these activities for my upper secondary school students, a concrete way to progress in English. My teaching practice will take into account the use my students do of English outside the classroom via different media such as music, television and gaming. I have understood that my students are more motivated to learn English via their extramural activities than via classroom English.

Teachers speak about what an ELF aware approach would represent for their learners. Teachers' ownership of the "innovative" approach and their agency clearly emerge in their considerations about advantages for their learners if specific actions are taken in their teaching, as in the first statement where the teacher describes the ELF aware approach as an 'added value' and supports it by quoting the difference between coursebook standard English and the English learners will be mostly exposed to outside the classroom.

This innovative approach represents for our students an *added value* cause the English they *will* talk *out the classroom* and after the course is different from the English English or standard English presented in traditional textbooks.

The second statement where the teacher starts making suggestions, that is his agency, underlines the relevance for students who will become aware even of their mother language, and will be more flexible and keener to language modifications:

The *advantage* can be that students aim *to become aware even of their mother language*, that they *will* be *more flexible and keen to language modifications* and that they can better understand language variations.

In the third statement, where the teacher underlines learners' attitude changes, where they will have a go at using the language if they are alone or nobody else in the group speaks English, and they will use paralinguistic strategies and will also translanguage at times without being aware of it.

So, if we talk about this in class and come up with ways to create a balance between *English and local languages translanguaging, students will feel more comfortable and* motivated to learn the language. My students use English *passively* they tend to listen to music, watch films and younger students watch YouTube videos.

Conclusions

The initial hypotheses of the study were mostly confirmed by the results of the corpus analysis, as the participant teachers' responses to a course aimed at inducing an innovative change in their practice all along the course duration, *de facto* challenged teachers' initial resistance to innovations. The discourse analysis of the participants unveiled deeply held beliefs about their daily routines. The reflective approach - adopted in the course activities and stimulated by the course forum discussions - enhanced participant teachers' language awareness and a progressive shift in their attitudes that led to a personal commitment for modifying their classroom practice, as the use of modals revealed. Changes in the language used by participant teachers in their responses within the activities and in the comments in the course forum were thus monitored and investigated.

The 'longitudinal' dimension of the analysis of the corpus unveiled how EL teachers not only actively position themselves in relation to an innovation as the integration of ELF in their classrooms, but they also undergo a change in terms of ownership of that innovation when asked to reflect on its integration into their routine.

Both the CPD reflective activities and the «innovative» innovation itself of ELF-awareness, triggered teachers' responses from an identity perspective and unveiled a degree of agency in their commitment.

Lastly, the choice of using a corpus-based discourse analysis proved as a powerful tool to investigate teachers' gradual appropriation and appreciation of the innovation. It offered an opportunity to actively engage in exploring how language choices can unveil participants' views and beliefs as well as openness to change; an opportunity to be shared with teachers as well as a tool in order to enhance the importance of language awareness.

The gradual shift in teachers' positioning might be ascribable both to the type of innovation, of the CPD construct, but also to the emerging linguistic landscapes where the current role of English is inevitably posing new challenges particularly in terms of teacher education and of language policies. Language policies should sustain the successful implementation of innovations, thus scaffolding and sustaining teachers' ownership, agency and in translating the innovations into their own practice.

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Öğretmenlerin Yeniliğe Yönelik Kişisel Yaklaşımlarını Ortaya Çıkarmak

Öz

Öğretmen eğitimi derslerinde, İngilizcenin mevcut çeşitliliği ve bunun öğretim üzerindeki etkileri konusunda farkındalık oluşturulduğunda, bu bakış açısı daha sonra öğretmenlerin sınıflarında görülecektir. ENRICH eğitiminde düşündürücü etkinliklerle ve öğretmenlerin ortak dil olarak İngilizce (ODİ) farkındalığına sahip bir yaklaşım içinde dil öğrenimi ve öğretimi hakkında kişisel görüş ve inançlarını paylaştığı forumda, öğretmenlerin ODİ farkındalığı artıldı. Eğitim sırasında meydana gelen değişiklikleri araştırmak için, bir grup katılınıcı öğretmenin düşündürücü etkinliklere yanıt verirkenki müdahaleleri yoluyla bakış açılarındaki değişimi analiz etmek için belirli bir mercek kullanıldı. Öğretmenlerin diline ilişkin derlem temelli bir söylem analizi, öğretmenlerin değişim sürecinde hem faillik hem de anlam çıkarımı açısından konumlanmalarını ortaya çıkardı.

Anahtar Kelimeler: ODİ- farkındalığı, söylem analizi, derlem-tabanlı, derlem-odaklı, yansıtma

Language Teachers' Responses to Multilingual Classrooms: A Linguistic Ideological Perspective

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Abstract

The present study aims to explore English language teachers' (ELTs) responses to a set of activities regarding multilingualism on an online Continuous Professional Development (CPD) course platform. The CPD was developed in the framework of the Erasmus+ Project, ENRICH (English as a Lingua Franca Practices for Inclusive Multilingual Classrooms) designed to cater for in-service ELTs across five countries and composed of various online modules. Our focus in this paper is on the Multilingualism module of the course that was completed by 15 ELTs working in state schools in Turkey. Taking a linguistic ideological perspective on discourse, we analyzed responses given to two questions embedded in one of the activities in the Multilingualism in the Classroom section of the module regarding teachers' observations of students' awareness of multilingualism in their classrooms. As our findings suggest, Turkish ELTs' responses can be analyzed in three groups each of which suggests a different understanding of multilingualism: a) immigrant minority multilingualism, b) regional minority multilingualism, and c) multilingualism as a result of foreign language instruction at school. We depict in our analyses how each of these categories are intertwined with teachers' linguistic ideologies.

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Introduction

English language classrooms across the globe have become increasingly multilingual in the past few decades in line with accelerated migration flows due to globalization. In the context of Europe, this changing demographic profile has resulted in the addition of migrant and refugee languages to the already existing groups of regional and minority languages^d that are spoken by students and/or their parents. Extra and Gorter (2001; 2008) and Extra and Yağmur (2013) analyze the first group as *immigrant minority* (IM) languages and the second group as *regional minority* (RM) languages, a distinction that we will adopt in this paper. Besides these languages, students in European schools also learn a range of additional languages at school that are mostly spoken in Europe. While European schools have had a long tradition of foreign language instruction, the 'mother

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d https://www.europarl.europa.eu/RegData/etudes/BRIE/2016/589794/EPRS_BRI(2016)589794_EN.pdf

tongue plus two languages' principle with the incentive of the European Council in 2002 has been reflected in curricula widely across the continent. In this picture, English has become the most widely offered foreign language in European schools and thus an indispensable part of students' multilingual repertoires.

The present paper analyzes linguistic ideologies that English language teachers (ELTs) in Turkey hold about these three types of multilingualism in their increasingly diverse classrooms in state schools. Drawing on data collected within the framework of the Continuous Professional Development (CPD) component of the Erasmus+ project, ENRICH (English as a Lingua Franca Practices for Inclusive Multilingual Classrooms), we investigate how ELTs describe their take on multilingualism in response to two questions on the "Multilingualism in the Classroom" section of the online module "Multilingualism." Below, we first present a brief review of literature on linguistic ideologies and on multilingual classroom pedagogies respectively. We will then move onto reporting on the study and its findings.

Literature Review

Language Ideologies

Since its inception as a field of study in applied linguistics, language ideologies have been defined and studied in a variety of ways (e.g. Silverstein, 1998; Woolard, 1998). As Kroskrity's (2010) definition suggests, language ideologies are "beliefs, feelings, and conceptions about language structure and use which often index the political economic interests of individual speakers, ethnic and other groups, and nation states" (p. 192). Based on this definition, Kroskrity (2010, pp. 195-201) identifies four layers that shape our understanding of language ideologies. In the first place, language ideologies are productions of societies and they serve to confirm what is believed to be good, ethical or aesthetic about language or discourse in each society. Secondly, language ideologies are plural. Each society can be divided into smaller communities along socioeconomic, ethnic, political, gender lines, among others, and each can create its own set of norms and values about languages. Thirdly, Kroskrity (2010) argues, local language ideologies are not known by all members in a community. Some ideologies need to be identified in practice based on members' identities and relationships. Finally, language ideologies are diverse in a community in line with the diversity in sociocultural practices, but the community members tend to work together to produce these ideologies.

Against this background, research focusing on language classrooms have depicted numerous findings related to the workings of language ideologies. One important finding is the mediating role of the teacher in the dissemination of language ideologies in the classroom. Teachers' role in this context can involve the mediation of larger discourses in the classroom such as monolingual ideologies. For instance, Razfar (2005) demonstrates how language ideologies in multilingual ELL classrooms permeate the teacher-student talk through the simple conversational strategy of repair. Likewise,

Showstack (2017) depicts how stance-taking in interaction can illuminate the language ideologies in play in heritage language classrooms. Language ideologies in these studies are shown to be brought into the classroom through teachers' role in mediating the classroom pedagogies. At the policy level, Henderson (2017) depicts how teachers' ideologies are affected by local policies, and the hegemonic and counter-hegemonic discourses that come with them. Spotti (2011), for instance, focuses on modernist linguistic ideologies in play in immigrant minority classrooms in the Netherlands and depicts the complexity of multilingualism through looking at it as polycentric semiotic performances.

In sum, language ideologies in classrooms are entrenched within multiplicity of factors that include language policies and societal discourses. In the case of multilingual classroom realities, the pedagogies designed and implemented by schools and teachers play an important role in these factors, which we will turn to next.

Multilingual Classroom Pedagogies

Faced with the unprecedented diversity particularly brought by IM students into their classrooms, ELTs today are required to adopt and implement new pedagogies in their teaching. As Alisaari et al. (2019) state, far from being sufficient in meeting modern classrooms' multilingual realities, traditional pedagogies "strengthen monolingual ideologies and tend to identify acceptable and unacceptable languages for multilingualism" (p. 49). To this end, the European Commission calls for the development of multilingual pedagogies to be employed in schools (EC, 2018). The need for multilingual pedagogies has long been acknowledged by multilingualism scholars. It is widely suggested that the entire linguistic repertoire of a multilingual learner should be taken into consideration as a resource for more effective teaching (e.g., Cenoz & Gorter, 2015; Cummins, 2019; Garcia & Wei, 2014). Of particular importance, equipped with English, an international lingua franca, ELTs are considered to have an advantage in incorporating their students' multilingualism in teaching. That is, they can utilize English as a mediation tool to narrow the gap between their learners' different languages, thus enhancing the appreciation of multilingual practices in their classes (Hufeisen & Neuner, 2004).

Teachers play a crucial role in fostering multilingualism and implementing multilingual pedagogies in their classrooms (De Angelis, 2011; Haukas, 2016); and their decisions and actions exert a strong influence on their learners (Lasagabaster & Huguet, 2007). As Henderson (2017) puts it, despite being closely related to numerous factors, what is happening in the classroom depends on the teachers who "are at the methodological heart of language policy implementation" (p. 21). Since the pedagogical decisions and actions of teachers are largely shaped by their awareness, beliefs, and attitudes (Borg, 2006), it is essential to uncover their understanding of and beliefs about multilingualism and multilingual pedagogies in order to study it more comprehensively.

Indeed, there has been a growing interest in exploring the views of teachers, working in either ELT or other disciplines, on their learners' multilingualism and/or the use of multilingual pedagogies in the classroom. A number of studies in this realm have been conducted with teachers working in various European countries, like Italy, UK, and Austria (De Angelis, 2011), France (Young, 2014), Poland (Otwinowska, 2014), Norway (Burner & Carlsen, 2019; Haukas, 2016), Finland (Illman & Pietila, 2018), Sweden (Lundberg, 2019), and Spain (Portoles & Marti, 2020). These studies reveal that teachers' beliefs and practices are still rooted in traditional pedagogies; even if they acknowledge the potential of multilingualism for their learners, they still believe that languages should be kept and taught separately. They also illuminate the prevalence of English-only policies in the teachers' practices (cf. Otwinowska, 2017). In Inbar-Lourie's (2010) words, embracing monolingual pedagogies "equates 'good teaching' with exclusive or nearly exclusive target language use" (p. 351). Thus, it seems to be clear that students' linguistic repertoires mostly represent a silent entity against the linguistic diversity in today's classrooms. In addition, these findings point to a gap between policy- and research-based recommendations and their implementation in teaching. That is, although findings obtained from recent research on multilingualism suggest numerous benefits of the incorporation of learners' whole linguistic repertoire in teaching, they have been only partially transferred into real classrooms.

Despite yielding common findings, the studies cited above put forth different explanations while discussing their results, thus highlighting the uniqueness of each country's sociolinguistic context. Each country has different education systems, different constellations of languages, and different policies regarding the use of these languages in teaching. The ENRICH project provides insights into the uniqueness of local contexts by focusing on ELTs from five different countries. In this particular paper, we aim to explore ELTs' language ideologies and their pedagogical thinking about their students' multilingualism in the Turkish educational context. In the next section, we continue with detailing our methodology.

Methodology

The data analyzed in this paper were obtained from Turkish ELTs who participated in an Erasmus+ project, ENRICH (English as a Lingua Franca Practices for Inclusive Multilingual Classrooms), between February 2020 and June 2020. The main objective of ENRICH was to train English language teachers (ELTs) across 5 European countries (Greece, Italy, Norway, Portugal, and Turkey) on how to integrate ELF practices into multilingual classrooms. One component of the project is an online Continuous Professional Development (CPD) course that partners developed and implemented. The course employed competence-oriented, collaborative, reflective and Internet-based learning tasks as well as mentoring support. This Moodle-based course consists of the following sections: (1) Introduction (2) Learning English (3) Using English (4) Teaching English (5) Final Assignment and (6) Course Evaluation. Sections 2, 3, and 4 are further divided into topics that the teachers access separately. For instance, section 3, Using English, is further divided as Key issues, English as a Lingua Franca, Defining

ELF, ELF Discourse, Communication Strategies, Multilingualism, Linguistic Diversity, Migration, and Translanguaging.

Each of these topics starts with a short instructional video on theoretical and practical matters related to developing an ELF-aware pedagogy. A series of activities and links to other videos and websites are integrated into the videos. Participants are required to watch these videos and complete the activities on the Moodle platform where the videos are embedded. Participants are also free to navigate across the activities and complete them on their own time without following a certain order. Video lectures consist of multiple activities and the participants are not required to complete all the activities in one topic. However, to complete a module successfully, one activity in each topic is compulsory. At the end of the course, the participating teachers are expected to complete a final assignment where they are asked to plan and execute an ELF-aware lesson.

In the present study, we focus solely on Turkish ELTs as course participants and analyze their responses to a single topic within the section Using English, Multilingualism. This topic, as well, required the participants to watch an instructional video and complete four activities integrated into it. We provide a list of these activities in the Appendix. As there was no order in completing the course components, participants' submission of responses to the activities in this section spanned two months (March 7, 2020 - May 8, 2020). The Turkish ELTs completed all four activities integrated in the topic of Multilingualism. For the purposes of this paper, we have analyzed the responses given to the fourth activity in the Multilingualism section of our CPD, titled "Multilingualism in the Classroom." This activity poses two open-ended questions to the teachers:

- 1. Can you find some real-life examples from your own classes that are evidence of students' awareness of their own multilingualism?
- 2. How can these examples be understood with reference to the way that you teach?

15 out of 31 participants completed this activity by answering both of these questions. The answers ranged between 45 to 215 words in length, after discarding one with a one-sentence response. Table 1 presents information on participant demographics.

Table 1 Participant Demographic Information (n = 31)

Gender	#	Age	#	Qualification	#	Years of Teaching Experience	#	Type of School	#
Female	25	26-35	20	BA	22	2-5	3	Secondary	14
Male	5	36-45	10	MA	8	6-10	16	High School	15
Other	1	46-55	1	Other	1	11-20	7	Adult Education Center	1
						21 or more	5	Science and Art	1

After compiling the entries in response to the two questions from the teachers, we took a grounded approach in coding our data (cf. Saldaña, 2015). However, as we particularly aimed to inquire three types of multilingualism as constructs, we employed initial coding that would help us with beginning analytic decisions with respect to these categories in the data set. Based on these initial codes, we further coded the themes and categories in the accounts that showed recurring patterns and that "are more abstract, general, and simultaneously analytically incisive than many initial codes that they subsume" (Charmaz & Belgrave, 2012, p. 356). To this end, for instance, we coded specific references to languages separately (e.g. Kurdish) and constructed the theme RM based on these codes. Below in the analyses, we depict the three categories that we set out to investigate and that emerged in our data set.

Findings

Regional Minority (RM) Multilingualism in the Classroom

As in the case of Europe, where the designation of some languages as RM languages and the national languages as official languages dates back to the nation-state formation of the 19th century (Extra & Gorter, 2001), in Turkey, too, this hierarchy started with the foundation of the Turkish Republic as a nation-state in 1923. Since then, all non-Turkish languages spoken by minorities have been kept outside the mainstream education system. Yağmur (2001) estimates the number of these languages to be 42 based on the Ethnologue website. Although minority languages in Turkey cannot be regionally compartmentalized today due to internal migration and rapid urbanization, the regional distinction in their origins is retained.

To this end, some responses that we gathered from the teachers with respect to the multilingualism in their classrooms focused on the RM languages in Turkey as spoken by students in the ELF classrooms. As most of the teachers teach in urban schools in big cities, they randomly have students from non-Turkish speaking home environments in their classrooms. In this respect, some of the teachers have occasionally referred to the second most-widely spoken language in Turkey, Kurdish. As in other large cities, İstanbul, too has a large Kurdish population who have continuously migrated from the southeast of Turkey since the 1950s.

Mr. Mehmet'se account belowf indicates the natural role that Kurdish plays in the social interactions involving multilingual Kurdish students in his English classroom. It also emphasizes the mediator role that students play in his interactions with the parents:

A couple of times, when I greeted my classes in English/Turkish, some of my Kurdish students greeted me in Kurdish in return. Also, some of the parents

^e All teacher names used in this paper are pseudonyms.

f The original content and format of the posts are retained as they are.

don't speak Turkish well and in parents' meeting, my students becomes a mediator between the teachers and their parents. (Mehmet, March 8, 2020)

Remarkably, Mr. Mehmet's account positions Kurdish as a neutral language against the background of the polarized history of this largest minority language in Turkey. The example that he gives reveals how his students seem to find a discursive space in his classroom and comfortably use Kurdish in greetings.

In some responses, meanwhile, Kurdish as a minority language is juxtaposed against the immigrant languages in Turkey in terms of their representation in the classroom. An interesting account that we have obtained here comes from a teacher who compared the case of Kurdish students with that of Russian or Syrian students:

After the earthquake in Van in 2011, I had Kurdish students. The parents didn't know Turkish so the students help us to communicate. Now, I have multilingual students. Their mothers are usually from Russia or sometimes both parents are from Syria or Iraq but the parents can speak Turkish as well. In classes, they teach us some simple words especially greetings and numbers. (Merve, April 18, 2020)

In her account, as in the case of Mehmet above, Ms. Merve takes a neutral stance against her Kurdish-speaking students and their parents, and contrasts her Kurdish speaking students with the IM students. Remarkably, she uses the term 'multilinguals' for the IM students in her class, but not for Kurdish speaking English learners. Her account further reveals a welcoming attitude towards IM students' languages in her class.

The accounts we have retrieved with respect to the regional minority languages of Turkey as represented in the classroom do not indicate a strong ideological stance. While this might be related to the context and the question that is posed, it might also be because the teachers refrained from being vocal in a highly stigmatized language like Kurdish. What is more remarkable in these accounts is the comparison of a regional minority language with an immigrant minority language. Despite excluding the former from the multilingualism definition, the teachers seem to use multilingualism for the latter.

Immigrant Multilingualism in the Classroom

The IM languages in the case of Turkey refer to languages spoken by immigrants of the last four decades. As İçduygu and Aksel (2012) describe, irregular migration from neighboring countries to Turkey started in the late 1970s with Iranian immigrants escaping the 1979 revolution in Iran. This was followed by the massive migration of the 1980s in the form of asylum seekers from Iraq and Bulgaria, and concurrently, economically motivated migration from the Soviet Republics. In the last ten years, Syrians have become an indispensable part of the IM profile in Turkey. Therefore, the RM multilingualism and IM multilingualism in Turkey show distinct characteristics.

As their responses to the forum questions suggest, most of the teachers in this study use multilingualism to describe students with immigrant backgrounds. When they need to state the lack of IM students in their classrooms, they can comfortably use the designation monolingual:

My students are monolingual. We don't have any immigrant students in our school. So I won't be able to give an example (...) But if it can be an example, apart from English, my students have German classes, and they rarely use German words speaking English. I stop and ask them to continue in English. (Aslı, March 17, 2020)

Ms. Aslı's account points to a few lines of thought that are connected to discourses on multilingualism in Turkey. In the first place, she clearly equates multilingualism with immigrant students and because there are not any immigrants in her school, she designates her students as monolinguals. The inherent multilingualism of the Turkish society is not a factor in Ms. Aslı's rationalization. Besides, Ms. Aslı seems to exclude foreign languages taught in her school, English and German, from her understanding of multilingualism, as well. Although, like all other participants, she has been teaching at later grade levels to students with at least six years of experience of learning English or other foreign languages at school, she seems to designate EFL students clearly as monolinguals. Her final statement further depicts how she subscribes to monolingual ideologies by separating these two languages.

While saving the designation 'multilingual' for IM students, the teachers often refer to the most recent migrant groups to Turkey: Syrian, Iraqis, and Arabs. Drawing on some real-life examples, teachers appear to be welcoming to the multilinguality of these students in their classes. Following is what Ms. Nisa has to say in response to the two questions posed in Activity 4:

I work at the science and art center. There are two immigrant students in our institution (one from Iraq and one from Syria). My students are in the 4th and 5th grades. Their level of English is basic. My Iraqi student is in 5th grade and has a lot of interest foreign language. She is willing to communicate with her friends and attend the lesson. In one of the English activities, she first finished and said in her own language "hooray, I succeeded, I was the first to finish" then she looked at us and said in English "look at me, I one," Of course the English sentence was not correct, but she could easily tell us the situation with her screaming, body language and facial expression. Such examples show that I positively welcome multilingualism in a foreign language. Although the number of multilanguage students in a foreign language is low, we do not fool as a class when they use it and try to understand what it means. He sees this as a source of motivation for other students in the class. Because they see they can communicate with the foreigner without having to use the correct language in English. (Nisa, March 25, 2020)

As she also writes, Ms. Nisa's account reveals her positive attitude towards multilingualism in her classes, again using the term exclusively for IM students. She seems to embrace the multilingualism of these students by providing space for them to express themselves not only multilingually but multimodally, as well. In addition, she sees this as an opportunity for her Turkish students to communicate in English without feeling the need to speak correctly. Her use of the descriptor "foreigner" further attests to her egalitarian perspective on the immigrant students in her class, putting them all in the same category with other foreign people in Turkey. Her perspective on the embracing role of English is also similar to Ms. Ayse's account above.

Adopting a similarly positive attitude, Ms. Yasemin explains how she is open to their code-mixing in her classes, and gives the following example:

I am from Turkey and some of my students are from Syria and their mother tongue is Arabic and religion is Islam. When they speak in English, they often prefer saying the word 'İnşallah' in the middle of the conversation which is used in both Arabic and Turkish instead of using alternative similar expressions in English. I do not interrupt their conversation as long as they feel comfortable during their speech. (Yasemin, March 7, 2020)

Contrary to Ms. Aslı's perspective in the first excerpt above, Ms. Yasemin seems to be comfortable with students' code-mixing in the classroom. Framing it as a matter of students' cultural background, she exemplifies the Turkish/Arabic *inşallah* that is inserted in Syrian students' discourse in English. She seems to see this cognate use as a natural part of classroom interaction.

Teachers further commented on the shared culture between Turkish and Arabic students in the EFL classes. Here, too, language enters the picture:

In multilingual classrooms students especially Arabs tend to talk about their culture, food and cities. As Turkey borrowed a lot of Arabic words in the past they build positive attitude towards culture and the language. In break time I see students form a group and speak their own language which is very new thing in our school. (Burcu, March 27, 2020)

Ms. Burcu takes a positive view on Arab students' bringing their cultural background into the classroom. Referring to her Turkish students by third person plural, she recounts on providing a space for them in class to discover their Arab peers' cultures and language. Remarkably, as a state-school employee who has been used to monolingual interactions among students at her school, Ms. Burcu also writes about her observation of Arabic-speaking students speaking Arabic among themselves in the break times as a new scene at school.

Ms. Burcu further writes about a Karaoke Contest that she organized to raise awareness about the multilingualism in her class:

As I see that different countries students like to be respected, known by others, I organized a 'Karaoke Contest' and Arab students joined with their own language not English. Besides there were groups formed by half Turkish half Arab singing Arabic. I sometimes see that students wrote Turkish names and mottos in Arabic alphabet on white board which makes a positive transition between cultures. Thus I believe that in multilingual classes including all and blending them makes a positive effect. (Burcu, March 27, 2020)

Ms. Burcu's account of the Karaoke contest, in which Arab students sang in Arabic and some Turkish students joined them, and her observation of Turkish students practicing Arabic script on the board all attest to her positive attitude towards immigrant students' multilingualism in the classroom as much as the space she provides for the transition between cultures, as she names it. In her final evaluative statement, she summarizes this all as "including all and blending them," which she believes has a positive effect on the students.

The linguistic ideologies toward immigrant multilingualism in the EFL classrooms as participants' accounts reveal pose a contrast to the stigmatization of recently arrived immigrants in Turkey. The participating teachers all seem to be accommodating immigrant students' multilingual repertoires in their lessons and they seem to be aware of the construction of multilingualism in classroom discourse. Their flexible attitude to code-mixing that their Arabic- speaking students commit in the lessons is likely to be a part of their approach to code-mixing in general that they allow in their classes heavily populated by Turkish students, as well. Their references to the commonalities between Arabic and Turkish further attest to their positive attitudes towards Arabic as spoken by their students.

As these accounts also suggest, teachers designate multilingualism as a separate category from what they experience in their EFL classrooms. Although their Turkish students are learning two foreign languages at school, they still consider these students as monolinguals. They seem to save the term multilingual for immigrant students who are raised as multilinguals and contrast them with their students raised as monolingual Turkish speakers. These accounts indicate how the teachers subscribe to the traditional discourses of monolingualism and separation of languages. But they also indicate teachers' subscription to the traditional discourses of multilingualism that are based on the premise of equal competence across the languages in one's multilingual repertoire.

Multilingualism as a Result of Foreign Language Instruction at School

Finally, we analyze multilingualism as a result of foreign language instruction in Turkish schools as emerged in our data with respect to ELTs' understanding of ML, as well. In this case, the multilingual repertoires usually include foreign languages such as German and French as taught regularly in some state schools in Turkey. Multilingualism for the teachers in our study concerns the multiple foreign languages that students are

taught at school. In Turkey, alongside English, German and French, -recently Spanish, as well- have been traditionally taught in state schools. In this quote, Mr. Emre directly draws on this variety:

Well in my case, most teenagers are also interested in many languages and take courses like German, French and Spanish as additional languages. This helps me to make comparisons among them, which adds up to their metalinguistic awareness. Thus, they are able to be easily familiar with various linguistic and cultural contexts. I find multilingualism motivating for my lessons as I can give examples from their third or fourth languages, depending on the grades. Also, they use English as a means to bridge the gap when their French or German fails at naturalistic interactions. (Emre, April 23, 2020)

Different than the rest of the answers, Mr. Emre's take on multilingualism centers on the metalinguistic awareness that it might raise among his students, which he thinks will ease students' familiarity with other "linguistic and cultural contexts." Mr. Emre further suggests a role that English plays that has not been remarked by any other participant: that of bridging the gap in students' interactions in the other foreign languages that they use.

Mr. Emre's accounts subscribe to linguistic ideologies that place Western/European languages at an equal footing, without assuming any hierarchical relationship among them. Influential in this perspective is the fact that all of these languages are known to be taught at schools in Turkey as foreign languages. Remarkably, ELF, for Mr. Emre does not seem to have a special or more powerful status than the other foreign languages.

Discussion

The multilingualism module of the ENRICH CPD course makes a distinction between RM and IM languages while designating English as an indispensable part of the ML repertoires. Still, our findings suggest that Turkish ELTs approach multilingualism in conventional ways, saving it for immigrant minorities' depictions exclusively. Remarkably, they also exclude RMs from this picture, and do not consider RM students in their English classes as multilinguals, either. This suggests, despite participating in a CPD module, teachers' conceptualizations of multilingualism are still bound by traditional ideologies about languages and speakers that have longstanding political motivations. While excluding RM multilingualism from the picture, they seem to subscribe to monolingual ideologies in Turkey in which RM languages have not been depicted as part of the multilingual repertoires at all. Their focus being on IM languages as spoken by their immigrant students further depicts how they save this definition exclusively for the more recently arrived migrants in their classrooms. Against this background, the only exception to this dichotomy seems to be about multilingualism as induced by foreign language instruction at schools. A possible interpretation of this finding might be the relatively more neutral assignment of the term multilingualism in English to a construct that has not been named in Turkish at all, the multilingualism as induced by the foreign language instruction at schools.

Teaching much more linguistically diverse classrooms today than in the past, ELTs show heightened awareness of multilingualism. This study has showcased how this awareness makes itself visible in the case of responses to a CPD program. However, further research from the actual classrooms can enlighten how teachers shape multilingual pedagogies in their classrooms. In the case of countries like Turkey where RM and IM students can be found in the same classrooms, ELTs' pedagogical differences might be very informative for further research and policy making.

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Dil Öğretmenlerinin Çokdilli Sınıflara Yaklaşımları: Dilsel İdeolojik Bir Perspektif

Öz

Bu çalışma, çevrimiçi bir Sürekli Mesleki Gelişim (SMG) kurs platformunda çok dillilik ile ilgili bir dizi etkinliğe İngilizce öğretmenlerinin verdiği yanıtları araştırmayı amaçlamaktadır. Sözkonusu SMG, beş ülkede hizmet içi İngilizce öğretmenlerine hitap etmek üzere tasarlanan ve çeşitli çevrimiçi modüllerden oluşan ENRICH (Ortak Dil Olarak İngilizce'nin Kapsayıcı Çokdilli Sınıflarda Kullanım Pratikleri) adlı Erasmus+ Projesi çerçevesinde geliştirilmiştir. Bu makalenin odak noktası, Türkiye'deki devlet okullarında çalışan 15 İngilizce öğretmeni tarafından tamamlanan kursun Çokdillilik modülünün Sınıfla Çokdillilik bölümündeki etkinliklerden biri içinde yer alan iki soruya öğretmenlerin verdikleri yanıtlardır. Söylem analizi uygulanarak ele alınan bu yanıtlarda öğretmenlerin öğrencilerinin çok dillilik farkındalığına ilişkin gözlemleri dilbilimselideolojik bir bakış açısıyla incelenmiştir. Ortaya çıkan bulgular, Türk İngilizce öğretmenlerinin yanıtlarını her biri farklı birer çokdillilik anlayışını öneren üç gruba ayırmayı işaret eder: a) göçmen azınlık çokdilliliği, b) bölgesel azınlık çokdilliliği, c) İngilizce dışındaki çokdillilik ve d) okuldaki yabancı dil eğitimin bir sonucu olarak çok dillilik. Analizlerde bu kategorilerin her birinin öğretmenlerin dilsel ideolojileriyle nasıl iç içe geçtiğini gösterilmektedir.

Anahtar Kelimeler: Çokdillilik, dil ideolojileri, öğretmen eğitimi

Appendix

FACULTY INVENTORY	STUDENT INVENTORY							
(Chickering & Gamson, 1987)	(Oberst, 1995)							
Student-Faculty Contact								
tSFC1 I encourage students to ask questions. sSFC3 I question my professor when I disagree with what								
tsrc1 rencourage students to ask questions.	said.							
tSFC2 I share my past experiences, attitudes, and values with	sSFC5 I find out about my professors- what else they teach,							
students.	areas of expertise, and other areas of interest.							
tSFC4 I serve as a mentor or informal advisor to students.	sSFC1 I look for opportunities to develop informal							
to the title as a mentor of informal advisor to students.	relationships with one or more of my professors.							
Cooperation among Students								
tCAS1 I ask students to tell each other about their interests	sCAS1 I try to get to know my classmates.							
and backgrounds.	SCAST I try to get to know my classifiates.							
tCAS2 I encourage my students to prepare together for	sCAS2 I study with other students in my courses.							
classes or exams.	3C/152 I study with other students in my courses.							
tCAS4 I ask my students to explain difficult ideas to each	sCAS4 I assist other students when I they ask me for help.							
other.	serio i i assist other students when I they ask me for help.							
tCAS5 I encourage my students to praise each other for their	sCAS5 I tell other students when they have done good work.							
accomplishments.	series ren oner stadents when they have done good work							
Active I	.earning							
tAL2 I ask my students to summarize similarities and	sAL2 I question the assumptions of the materials in my							
differences among different mathematical methods.	courses.							
tAL3 I ask my students to relate outside events or activities	sAL3 I try to relate outside events or activities to the subject							
to the topics covered in my courses.	covered in my courses.							
tAL4 I give my students concrete, real-life situations to	sAL4 I seek real world experiences to supplement my							
analyze.	courses.							
Prompt 1	Feedback							
tPF5 I give my students written comments on their strengths	sPF1 When I get feedback from my professors on exams,							
and weaknesses on exams and papers.	papers, or other class work, I review their responses to assess							
1 1	my strengths and weaknesses.							
tPF4 I ask my students to schedule conferences with me to	sPF2 I talk over feedback with my professors as soon as							
discuss their progress.	possible if anything is not clear.							
Time Ma	nagement							
tTM1 I expect my students to complete their assignments	sTM1 I complete my assignments promptly.							
promptly.								
tTM2 I underscore the importance of regular work, steady	sTM4 I maintain a regular study schedule to keep up with							
application, sound self-pacing, and scheduling.	my classes.							
tTM3 I explain to my students the consequences of non-	sTM5 I attend class on a regular basis.							
attendance.	TOMAC Y C '11 C '12 Y							
tTM5 I meet with students who fall behind to discuss their	sTM6 I confer with my professor if I am concerned about							
study habits, schedules, and other commitments.	keeping up with a particular class.							
	ectations							
tHE2 I emphasize the importance of holding high standards	sHE5 I consciously think about the trade-offs between the							
for academic achievement.	things I do to learn and the things I do to achieve a grade.							
tHE3 I make clear my expectations orally and in writing at	sHE2 I try to get clear information about my instructors'							
the beginning of each course. goals.								
Respect Diversity								
tRD2 I discourage snide remarks, sarcasm, kidding, and	sRD1 I try not to embarrass other students							
other behaviors that embarrass other students.	aDD2 I compaignally adjust may be min - 1-1-1 t-							
tRD3 I use diverse teaching activities to address a broad spectrum of students.	sRD2 I consciously adjust my learning habits to							
tRD4 I integrate new knowledge about underrepresented	accommodate the teaching practices of my professors. sRD5 I support my professors when they include the content							
populations into my courses.	of their courses the contributions or interests of							
populations into my courses.	underrepresented populations.							
	underrepresened populations.							

Note. Oberst provided permission to reprint.

Transforming into an ELF-Aware Reflective Practitioner Through the ENRICH CPD Course: Insights from Greece (and Beyond)

Stefania Kordia

Abstract

This article aims at offering an insight into the ways in which ELF awareness was promoted through the Continuous Professional Development (CPD) Course which has been developed in the framework of the ENRICH Project. After describing the construct of ELF awareness, the content and structure of the Course is presented, highlighting the role of reflection and constructive dialogue in transforming into an ELF-aware teacher. Afterwards, indicative data coming from participants from Greece and other countries are discussed, with reference to the impact that the Course has had on them in terms of their professional development.

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Keywords: ELF awareness, ENRICH Project, reflection, reflective practice

Introduction

A lot of emphasis has recently been placed on the need for a paradigm shift in English language teaching, in view of the role of English as a Lingua Franca (henceforth, ELF). In this regard, the construct of ELF awareness (Sifakis, 2019) has been put forward as a comprehensive framework for empowering English language teachers to integrate ELF in their classrooms, to the extent that the characteristics of their local context make this task necessary, possible and feasible (Sifakis & Bayyurt, 2018).

This paper presents an online Continuous Professional Development (CPD) Course with an explicit intent to help English teachers raise their ELF awareness. The Course has been developed in the framework of the EU-funded ENRICH Project ("English as a Lingua Franca Practices for Inclusive Multilingual Classrooms") and, in 2020, it was implemented by the ENRICH Partners with 249 participants from various countries. These participants were allocated to different groups, according to their nationality.

The paper is divided in two parts. In the first part, after briefly presenting recent research work in the field of ELF, the theoretical background of the Course is described in relation to the construct of ELF awareness. It is argued that the promotion of ELF awareness essentially involves engaging in reflection on one's experience, as well as in constructive dialogue with others, about using, teaching and learning English

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nowadays. The ways in which the principles and processes of ELF awareness were integrated in the Course are afterwards described. Special emphasis is placed on the content and structure of the Course, as well as on the reflective activities that the participants were involved in.

On this basis, the second part of the paper focuses on a study exploring the journey that the participants coming from Greece (as well as participants from other countries who joined the Greek group) went through towards raising their ELF awareness. The profile of the participants and the methodology that was employed are first described, followed by the findings of the study. The discussion focuses on the content of the reflection that the participants engaged in throughout the Course concerning the role of ELF in their own classroom, as well as on the impact that, according to their own evaluation, the Course has had on them. The paper ends with a range of suggestions concerning future research on ELF awareness.

Literature Review

English as a Lingua Franca

Broadly defined as a contact language which speakers with different linguacultural backgrounds choose to resort to in order to communicate with each other (Seidlhofer, 2018), ELF has been the subject of increasingly active scholarly debate for more than two decades. Although it constitutes a relative new field of study, ELF has already brought about a "revolution" (Jenkins, 2015, p. 50) in the way that a number of issues have traditionally been perceived. As Seidlhofer and Widdowson (2020, p. 324) note, two main trajectories can be identified in ELF research, namely the sociolinguistic one and the pedagogic one, both of which call for a reconceptualization of respective views and practices, from perpetuating a predominantly native-speaker-oriented perspective towards adopting a perspective that embraces the plurilithic nature of English.

Concerning sociolinguistics, empirical research has developed into various directions, enriching our understanding of how ELF works and why (for an overview of sociolinguistic studies on ELF, see contributions in Jenkins et al., 2018). Valuable insights have been provided, for instance, as regards phonology (e.g., Matsumoto, 2011), lexico-grammar (e.g., Hall et al., 2017), and pragmatics (e.g., Cogo & Pitzl, 2016), as well as the role of ELF in intercultural communication (e.g., Baker, 2015) and multilingual exchanges (e.g., Cogo, 2018). What this research has principally pointed out is that, as an inherently flexible means of communication, ELF is "beyond description" (Jenkins, 2015, p. 15) and that the competent interlocutor in ELF is "no longer someone who has 'mastered' the forms of a particular native variety" (Jenkins, 2011, p. 931). Instead, it is someone who is able to appropriate or even 'transform' the language *in situ*, according to the demands of each particular interaction he or she is participating in (Cogo & Dewey, 2012). The significance of communicative strategies (e.g., Björkman, 2014), accommodation (e.g., Cogo & House, 2018), translanguaging

(e.g., Jenkins, 2015) and linguistic creativity (e.g., Widdowson, 2019) has, in this respect, been emphasized.

Research on pedagogic matters draws heavily on the findings of sociolinguistic studies and focuses on the ways in which these findings may inform all areas surrounding teaching and learning (see Rose et al., 2021 for a recent review of ELF pedagogic research). A growing body of work explores the pertinence of ELF, for instance, for language curricula (e.g., Rose & Galloway, 2019), instructional materials (e.g., Vettorel, 2018), classroom practices (e.g., Kordia, 2020), language assessment (e.g., Kouvdou & Tsagari, 2018), and, of course, teacher education (e.g., Dewey & Patsko, 2018). Much research has also been conducted on the perceptions of various stakeholders towards ELF-related issues, including learners (e.g., Ishikawa, 2017) and teachers of English (e.g., Dewey & Pineda, 2020). Pedagogic research highlights, most importantly, that there is a "mismatch between what is taught in classrooms and how English functions outside of the classroom" (Rose et al., 2021, pp. 158-159). This very serious observation accentuates the urgent need for change in teachers' normative views and practices (e.g., Dewey, 2012) in order for them to be able to help their learners build their confidence and self-concept as users of English (Sifakis, 2019) and promote their communicative capability in ELF (Seidlhofer & Widdowson, 2018).

ELF Awareness

In the light of the above, the construct of ELF awareness (Sifakis, 2019) provides a comprehensive and coherent framework for integrating ELF in teaching and learning. Although it may refer to all stakeholders (such as, materials developers), this framework is of paramount interest to teachers and teacher educators. Taking into account the fact that ELF is 'beyond description' and, therefore, "not teachable" (Sifakis, 2019, p. 289) the way that typical linguistic varieties can be, the ELF-aware framework favours the integration of ELF within current teaching practices, to the extent that the local context demands it. Sifakis and Bayyurt (2018) note that this is a fundamentally developmental process which involves:

engaging with ELF research and developing one's own understanding of the ways in which it can be integrated in one's classroom context, through a continuous process of critical reflection, design, implementation and evaluation of instructional activities that reflect and localize one's interpretation of the ELF construct. (p. 459)

Sifakis (2019) further clarifies this process by describing three interrelated components of ELF awareness. These components illustrate, on the one hand, what the main content areas of ELF-aware teacher education may be and, on the other, how teaching and learning inside the classroom could be enriched to cater for the learners' ELF-related needs. As Sifakis (2019, p. 291) argues, these components are the following:

a) Awareness of language and language use, which refers the eclectic features and functions of ELF discourse, including the underlying reasons

why ELF may relate to and/or differ from native-speaker English, as well as one's own assumptions about language and communication.

- b) Awareness of instructional practice, which refers to what a teacher does (or does not do) inside the classroom to achieve one's goals, including how ELF has (or has not) been incorporated into one's teaching practices, and the underlying reasons why this is so, with reference to one's local context and one's convictions about effective teaching.
- c) Awareness of learning, which refers to the potential significance of ELF usage for language learning, including the role of personal experience in employing English in various contexts, as well as one's concept of the image of the language learner (or self-concept, in the case of learners themselves).

The description of ELF awareness, as briefly provided above, suggests that this process goes far beyond awareness of ELF. Knowing, for example, about various communicative strategies and then showing the learners how they can use them is not enough. What is necessary is to adopt a critical approach towards all aspects related to using, teaching and learning English (Cogo et al., in press). For Sifakis (2019, p.296), ELF-aware teaching includes, therefore, an ecological perspective, meaning that a teacher needs to be critically aware of as many parameters shaping one's local context as possible in order to be able to discern the extent to which, and the ways in which, ELF should and/or could be integrated into it. Such parameters may refer, for instance, to school culture, curriculum specifications, expectations by other stakeholders (e.g., learners' parents) and, of course, the learners' actual needs and requirements, which, when viewed in connection with one's linguistic and metalinguistic knowledge of ELF, may indeed take new forms and meanings.

This brings us to another key aspect of ELF-aware teaching, that is, reflection, which is precisely what may empower an individual bring about change in one's views and practices (Mezirow, 2000). What the above-mentioned definition by Sifakis and Bayyurt essentially implies is that, for a teacher, raising one's ELF awareness involves engaging, on the one hand, in reflection on personal experience as a user and a teacher of English so as to identify and, if necessary, re-consider potentially normative assumptions that have been influencing one's way of thinking and acting, and, on that basis, to formulate a self-driven interpretation of ELF and its role in one's context. On the other hand, it involves engaging in reflective practice, that is, in applying insights generated through reflection, by developing, implementing and evaluating ELF-aware action plans in one's classroom. These action plans, in turn, need to foster the learners' reflection on their own experience as a basis for the promotion of their ELF-related communication skills, along the lines of the three components of ELF awareness. Reflective dialogue among teachers, and, accordingly, among learners, plays a crucial role; it is through our contact with beliefs, feelings and behaviours of others that we may begin to recognize and question our own (Mezirow, 2003). This multifaceted and ongoing reflective process is inherently transformative (Mezirow, 2000), in that, by making the individual's inner world the centre of attention, it adds a preeminent metacognitive dimension to the ELF awareness construct (Sifakis & Kordia, 2019, 2020).

The ENRICH CPD Course

Key Background Information

As mentioned in the Introduction, the ENRICH CPD Course has been developed in the framework of the "English as a Lingua Franca Practices for Inclusive Multilingual Classrooms – ENRICH" Project (2018-2021). The main aim of the Project was the establishment of a high-quality online educational infrastructure which would empower English teachers from around the world to integrate ELF in their teaching context, along the lines of the ELF awareness construct. To this end, ENRICH brought together the expertise and experience of various researchers and teacher educators from Greece, Italy, Norway, Portugal and Turkey, coordinated by the Hellenic Open University (Greece)^a.

The development of the CPD Course was based on a comprehensive literature review on sociolinguistic and pedagogic concerns of ELF, as briefly described earlier in this paper, as well as on the findings of a systematic study of the ELF-related views, practices and needs of English language teachers and learners (e.g., Lopriore et al., 2021), which was also conducted in the framework of ENRICH. 620 teachers, 505 adolescent learners (aged 14-17) and 90 young learners (aged 11-13) from the partner countries took part in that study. Two key conclusions were reached confirming and enriching previous research. First, it was revealed that the learners, including young ones, employed ELF quite frequently in their personal lives but felt that their out-ofclass experience, although contributing to their learning to a considerable extent, was not incorporated in their in-class activities. Second, it was shown that teachers tended to prioritize native-speaker English, for instance, as regards pronunciation, culture and language assessment. However, they seemed to be fairly open-minded with regard to the inclusion of global issues in their teaching through innovative methods and practices, which indicated the need for raising their awareness of the value, for instance, of Content and Language Integrated Learning (CLIL) and Information and Communication Technologies (ICT) in integrating ELF in teaching and learning.

Content and Structure

On this basis, the ENRICH Partners aimed at creating a sound educational environment within which teachers could develop as ELF-aware reflective practitioners, capable of tailoring their teaching to their learners' needs and requirements. The ENRICH CPD Course lasts for 20 weeks (involving 300 hours of estimated workload) and it includes

^a The Partner Organisations of the ENRICH Project include the Roma Tre University (Italy), the Boğaziçi University (Turkey), the University of Lisbon (Portugal), the Oslo Metropolitan University (Norway) and the Computer Technology Institute and Press "Diophantus" (Greece).

30 sections in total, aiming to promote the participants' ELF awareness in a way that is as systematic and inclusive as possible. It is hosted in a Moodle platform (http://enrichproject.eu/), which has been appropriately customized to suit the purposes of the Course.

As expected, it begins with an Introduction, where the key objectives and processes of the Course are described. This section also includes an Introductory Questionnaire, which focuses on exploring the participants' profile, including their demographic information. Then, there are twenty-six separate, albeit interrelated, sections, which constitute the main body of the Course. These are divided into three broad categories, namely Using English, Teaching English and Learning English, according to the three components of the construct of ELF awareness. Each section in these categories focuses on a different topic each time, such as the role of intelligibility and translanguaging in using English, the role of culture in teaching English and the role of the learners' needs and of other contextual parameters, as identified through the literature review of ELF research on sociolinguistic and pedagogic matters and, of course, the ENRICH study on the views, practices and needs of teachers and learners. The main input source in these sections is a video lecture prepared by the ENRICH Partners specifically for the purposes of this Course, with essential information about the topic addressed each time. Special emphasis is placed in every video lecture, of course, on fostering the participants' reflection on their experience as users and teachers of English. To this end, the sections also incorporate a range of reflective activities urging them to engage actively with the content of the Course (through, for example, multiple-matching activities) and, above all, to interact with one another by sharing views, experiences and ideas through special forums. Extra useful videos of authentic ELF discourse and supplementary resources and materials (such as, a glossary) are also provided, for the participants' reference.

On the basis of their engagement with the video lectures and the reflective activities, the participants are invited near the end to move towards reflective practice in their classrooms. Their Final Assignment, therefore, asks them to develop, implement and evaluate an ELF-aware lesson plan, in which they may put into practice their own understanding of the role of ELF in their teaching situation and gain a more comprehensive picture of the benefits, challenges and opportunities of ELF-aware teaching. Peer-reviewing each other's Final Assignment and providing constructive feedback is a crucial aspect of this process. The Course ends with an Evaluation questionnaire, where the participants discuss the benefits of their ENRICH experience in terms of their own professional development.

In the light of the above, a key dimension of the CPD Course needs to be highlighted, referring to its flexible design. Besides the Introduction, at the beginning of the Course, and the Final Assignment and the Evaluation at the end of it, the rest of the sections have been developed in the Moodle platform in such a way so that the participants may engage with them either in a linear or a non-linear manner. This implies that they may choose not only how much of the content of the Course they can work on, but also in what order they can do so, depending on their own educational

needs and priorities. Figure 1 illustrates the overall layout of the CPD Course as appearing on the home page of the Moodle platform, where each 'bubble' is clickable and re-directs the participants to the corresponding section. An overview of the syllabus of the Course in a linear order is provided in Table 1.

Figure 1

The Homepage of the ENRICH CPD Course

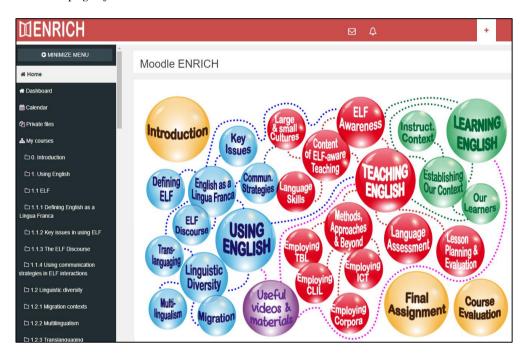


Table 1The Syllabus of the ENRICH CPD Course

Category	Sections and sub-sections				
0. Introduction	Introductory Questionnaire				
 Using English 	1.1 ELF				
	1.1.1 Defining English as a Lingua Franca				
	1.1.2 Key issues in using ELF				
	1.1.3 The ELF discourse				
	1.1.4 Using communication strategies in ELF interactions				
	1.2 Linguistic diversity				
	1.2.1 Migration contexts				
	1.2.2 Multilingualism				
	1.2.3 Translanguaging				
Teaching English	2.1 ELF-awareness / ELF-aware teaching				
	2.2 The content of ELF-aware teaching				
	2.2.1 Language skills: Oracy and literacy				
	2.2.2 Large and small cultures in English language teaching (ELT)				
	2.3 Methods, approaches and beyond				
	2.3.1 Employing Task-Based Learning (TBL)				
	2.3.2 Employing Content and Language Integrated Learning (CLIL)				
	2.3.3 Employing Information and Communication Technologies				
	(ICT)				
	2.3.4 Employing corpora for language learning				
	2.4 Language assessment				
	2.5 Lesson planning & evaluation				
Learning English	3.1 Establishing out context				
	3.1.1 Our instructional context				
	3.1.2 Our learners				
Useful videos and	Supplementary resources				
other materials					
Final Assignment	Development, implementation, evaluation of lesson plans				
	Peer-reviewing of lesson plans				
6. Evaluation	Evaluation Questionnaire				

Methodology

Research Aims

The ENRICH CPD Course was implemented in 2020 (from February 2020 to June 2020) with 249 participants in total. These participants were allocated to different groups according to their nationality but, of course, they interacted with each other in the various forums of the Course. Each group was mentored by a different ENRICH Partner, whose role was mainly to encourage the participants to engage in reflective dialogue. The study presented hereafter focuses on the participants who belonged to the Greek group, which, besides teachers from Greece, also included teachers from countries outside the ENRICH consortium who wished to participate in the Course.

Being part of a larger research project exploring the participants' overall developmental experience, including, for example, the ELF-aware elements of the lesson plans which they designed, implemented and evaluated near the end of the Course, as well as the nature of their actual teaching practices in their classrooms after their participation in ENRICH, the present study aims at offering a concise account of their reflective journey during the Course towards raising their ELF awareness. To this end, the study is exploratory in nature and intends to provide preliminary answers to the following main questions:

- a) How did the participants' perceptions about the role of ELF in using, teaching and learning English evolve throughout the Course?
- b) How did the participants evaluate, in the end, the impact of the Course in terms of their professional development?

The Participants' Profile

The group consisted of fifty-eight in-service teachers of English, in total. Taking advantage of the flexibility of the course design, they engaged with those sections of the CPD Course that, in their view, best matched their professional development needs, in the order that they wished. Twenty-eight participants chose to complete the whole Course, following the sequence suggested to them through the Moodle platform. Due to space constraints, the present study focuses only on those participants.

That group consisted of twenty-six women (92.86%) and two men (7.14%). Twenty-three of them (82.14%) came from various areas in Greece, such as, Athens, Thessaloniki, and Crete, and five participants (17.86%) came from other countries, namely Brazil, Argentina, Germany and the United Kingdom. That said, it was a rather diverse group in terms of age, teaching experience and educational background. According to their responses to the Introductory Questionnaire, four of them (14.29%) were between 26 and 35 years of age, eight (28.57%) between 36 and 45, thirteen (46.43%) between 46 and 55, and three participants (10.71%) were over 55. Accordingly, three participants (10.71%) had been teaching for 2 to 5 years, one participant (3.57 %) for 6 to 10 years, eleven (39.29%) for 11 to 20 years, and thirteen participants (46.43%) for more than 21 years. They also taught in a range of different settings, from state school classes with young learners to universities and other institutions with classes with adult learners. Regarding their typical qualifications, nine of the participants (32.14%) had a bachelor's degree in teaching English, seventeen (60.71%) held a master's degree and two of them (7.14%) had completed a doctorate. Finally, nineteen participants (67.86%) had not attended another programme or seminar on topics similar to those included in the ENRICH CPD Course before. Nine participants (32.14%) had previously heard about ELF, for example, in conferences, which, as they argued, motivated them to enroll in this Course, as well.

Data Collection and Analysis

Both qualitative and quantitative data have been gathered for the purposes of this study. In order to address the first research question, qualitative data have been employed coming from the responses to the reflective questions that the participants provided in the various forums of the CPD Course, in the sections belonging to the Using English, Teaching English and Learning English categories. Qualitative content analysis was conducted using the MAXQDA software, which involved coding the data to identify themes that the overall meaning of the data may refer to (Creswell, 2014). Five main themes have been generated through this process: a) Personal experience in using English; b) Ownership of English; c) Variability in ELF discourse; d) The learners as users of ELF; and e) Integration of ELF-awareness in the classroom. Addressing the second research question has involved analyzing the quantitative data that the participants provided in the Evaluation questionnaire at the end of the Course. Due to the small sample size, descriptive statistical analysis was conducted through Microsoft Excel 365. Qualitative data collected through the same questionnaire are also used in this paper to further clarify the findings.

Findings and Discussion

Perceptions About the Role of ELF in Using, Teaching and Learning English

As mentioned before, the group of the participants was quite diverse. This implies that, during their involvement with the CPD materials and activities, each of them had to draw on his or her own knowledge, work experience and educational background to make sense of ELF and its relevance to his or her particular local context. That said, the participants seem to have followed a fairly common path towards ELF awareness, irrespective, for example, of their nationality, years of teaching experience and, even, their typical qualifications.

As it was also identified in the ENRICH study on teachers' views, practices and needs, most of the participants began the CPD Course with a range of native-speaker-oriented assumptions but, at the same time, recognized the value of establishing effective communication in real-life interactions. These assumptions were particularly evident when discussing their personal experience in using English in various contexts and what they had come to believe about the essence of 'correct English' and 'good English'. The indicative dialogue between Juliab and Sara below illustrates that, while they placed emphasis on correctness in relation to native-speaker English, they drew a distinction between achieving one's communicative purposes and adhering to the 'idealized' normative usage of English:

^b Pseudonyms have been used throughout the paper so as to ensure the participants' anonymity.

Standard English [is] an idealization, it is almost non-existent [but] it is used as a benchmark against which to measure accuracy [...]. Correct English and Good English: To me, they both refer to approximating as much as possible to Standard English. In other words, using English "like a native", even aiming at becoming a native. (Julia)

Standard English is culture specific [...]. Correct English is using the language without grammatical mistakes, following the Standard English norms, and good English means employing all resources available to achieve the communicative goal. (Sara)

As indicated in their reflections, that distinction, however, influenced their perceptions about their role as teachers of English to a great extent. While their personal interactions in ELF provided hints about what communication in such contexts involves, their aim inside the classroom was predominantly to teach native-speaker English and, in a way, to act as a custodian of the native speaker for their learners (Sifakis, 2009). Distinguishing between one's role as a teacher and one's role as a user of English, Manos summarises in a very interesting way the perceptions that he and his colleagues share about their English inside and outside the classroom and, on this basis, he makes another distinction, this time between using English to teach the learners how to be accurate and using English to communicate:

English in the classroom [...] is different from that with friends [...], it is more 'technical' ('grammar-specific'), (more or less) formal/informal depending on the content of a lesson or an activity, while in the latter case it is more 'easygoing', vernacular/ colloquial and personal [...]. The reasons for interacting/communicating are also hugely different - in the first case it is mostly for pedagogical reasons (for my learners to essentially/ultimately 'learn' [...]), while in the second it is purely for communication reasons (to exchange personal news, feelings, attitudes, reactions etc.). (Manos)

The more the participants engaged with the CPD sections that discussed the use of ELF nowadays, the more evident it became that they started identifying and re-considering deep normative assumptions pertaining to the ownership of English. Raising one's awareness of how languages evolve and why was, in this respect, instrumental in terms of moving from the 'ideal' of the native speaker towards the image of the non-native speaker as a language user who is just as legitimate and valued. This movement also entailed an emergent appreciation of the new roles for teachers and learners that emerge from ELF. In their dialogue on this matter, Lisa and Artemis highlight that 'owing' English is a personal right and that non-native speakers, including teachers and learners, are entitled to feel that English 'belongs' to them as well, even if dominant ideologies may suggest otherwise:

I'd like to quote Kramsch [who] says, the "foreign language is there for me to appropriate, but it will never be mine, because it has always already belonged to others" [...]. I think that anybody has the right to think whatever they like

regarding their relationship to a language, in this case English. It is a personal matter, even intimate, I would say. (Lisa)

[Yes], but if one considers that it is spoken by more than 430 million people, no one can deny that all those people who use it develop it, reshape it and, in a way, own it. Teachers and learners belong to those people and, therefore, own the language. (Artemis)

As the participants progressively engaged with more demanding issues related to the variability in ELF discourse, the changes that the English language landscape is undergoing and the essence of 'owning' a language became clearer. Viewing the inherent unpredictability and creativity of communication in ELF as a liberating force, the participants managed to identify the serious implications not only for them but also for their learners. In the following quotes, Nora, for instance, underlines the intricate relationship between language appropriation and freedom from native-speaker-oriented constraints (Cogo & Dewey, 2012), while Eleni adds another crucial parameter to their reflective dialogue: the unconventional and innovative spirit that learners of English exhibit when they combine their linguistic resources to re-create both English and their mother tongue in a way that makes sense to them:

ELF to me means freedom. It's empowering to be more concerned with the message, than with 'native' standards of the language. Considering that the language is alive, ELF means I can acknowledge my right to [...] change it, to make it serve me, instead of me serving it. (Nora)

[See] the word 'unpaictable' and 'unpaictability'; to a native speaker it means nothing but to the Greek learner of English it refers to a person being awesome and their awesomeness [by] combining a Greek idiomatic/slang word with English [...]; [It] is a way for the learners to make the language their own, to render it more to their own liking and, also, to make it more 'personal' to them. (Eleni)

More systematic reflection on what may make ELF interactions 'tick', including, for instance, the use of translanguaging and meaning-negotiation strategies, in relation to their own local context helped the participants gain a more comprehensive picture of their learners as users of ELF. Specifying where, how, with whom and why their learners employ English in their personal or professional life brought about, on the one hand, a change in the way they view them, that is, from passive learners and mere recipients of the teaching content — or, else, as 'teachees', in Seidlhofer's and Widdowson's terms (2018) — to active users of a language which is anything but foreign to them. On the other hand, it suggested a re-consideration of their teaching practices in the classroom. Serious concerns were, in this regard, raised by the participants about the effectiveness of native-speaker-oriented aspects of their teaching, the different behaviours and attitudes of the learners inside and outside the classroom and, of course, the extent to which their own practices had to be modified to incorporate their new insights about their learners.

In the dialogue below, Anna shares her amazement about how the overall demeanour of her learners shifts when they do not feel the pressure of the native-speaker ideal, while Nora expresses her distress about her own learners' normative attitudes and their consequences in their psychology and their self-concept as users:

[O]utside the classroom [they] feel free to use the language [...]. They are more confident in expressing themselves without the fear of being reminded of errors or of being criticized for not sounding like a native speaker [...]. I was amazed [...]. [In] the classroom, [they] feel embarrassed or unwilling to participate while [...] with their peers from other countries they become active users of the language. (Anna)

[My learners] still seem to be haunted by the native stereotype. Four said they feel incompetent for not sounding native. Five said they feel embarrassed by their accent and five that they feel embarrassed by L1 influence in their [English]. I think I was very naive [...], the answers [...] showed me I still have to work more on it. (Nora)

Sharing Nora's feeling that things in the classroom needed to change in order to address the learners' needs as users of ELF and, this way, bridge the gap between in-class and out-of-class learning experiences, the participants started to explore options and possibilities concerning the integration of ELF-awareness in the classroom. Their engagement with the topics discussed in the CPD sections on Teaching English was indeed more than fruitful. As most of them highlighted, transforming a traditional native-speaker-oriented classroom into an ELF-aware teaching environment primarily involved enriching one's practices in two ways: first, by employing authentic materials, such as videos, which illustrate real-life communication in ELF contexts and, second, by involving the learners in a reflective dialogue among themselves.

As Kelly and Nora argue below, the benefits from this kind of enrichment, which they had not thought of before, would be enormous; the learners would be able to develop their communication skills while drawing on their own experience as users of ELF and, at the same time, free themselves from native-speaker-oriented assumptions promoted, for example, through their courseware:

To be honest, I have never used such authentic materials [...]. However, this would be a successful way to introduce accommodation strategies in our classes [...]. Learners can have the opportunity to reflect [...], become aware of their personal use of strategies [and] understand what they are and how they can be useful. (Kelly)

Making students aware of ELF can both lower the pressure to resemble a 'native' speaker and make them more tolerant of other Englishes [...]. To be honest, I had never thought about it [...], how coursebooks could reinforce native-speaker bias. (Nora)

In what ways, though, could the learners' ELF awareness be promoted in practice? Drawing on the linguistic, metalinguistic and metacognitive aspects of this construct, as illustrated in its three components discussed earlier in this paper, Stella suggests a range of reflective questions that she would integrate in a typical listening and speaking lesson in order to engage her learners in a reflective dialogue in the light of a video of an authentic ELF interaction:

What do you think about the English of the speakers in the video? Why? What similarities or differences can you find between you and them? Do you think people, including the teacher, expect you to sound like a native speaker? Why? Do you want to sound like a native speaker? Why or Why not? What does 'good English' mean to and why?

Undoubtedly, these are very demanding questions, even for adults. What matters the most, however, is creating a safe environment within the classroom within which the learners may feel free to share their views and experiences and engage in activities that contribute to their development both as users of English and as individuals. This is precisely what the ENRICH CPD Course aimed at empowering the participants to do in their local contexts and, as the discussion of their reflections may show, their journey towards ELF awareness was, in this regard, more than beneficial.

The Impact of the ENRICH CPD Course

Indeed, the participants' responses at the end of the Course confirm that their ENRICH experience had a highly positive impact on them in terms of their professional development. Table 2 provides an overview of the results of the participants' evaluation concerning the areas that, in their view, they developed through their participation in the Course. As all of them agreed or strongly agreed, the benefits included the promotion of their knowledge (100% in total), their teaching skills (96.4%), their critical thinking (96.4%), their self-confidence as teachers (92.4%), as well as their sense of belonging to a wider educational community sharing the same vison and the same concerns as regards teaching and learning English nowadays (85.7% in total). As this Table shows, none of them felt that the Course did not contribute to their development in any way, which further illustrates how educational and influential that experience was for the participants, including those who were quite experienced and well-educated.

That said, when urged to share their overall impression of the Course and what their participation in it meant for them, each of the participants focused on one or more of the areas above, according to what they felt was more important on a personal level. With regard to their knowledge, emphasis was placed on the usefulness of various sections, including those referring to the ELF discourse, the role of culture in teaching and learning and the contextual parameters, such as the learners' needs, that may affect teaching decisions. Broadening their knowledge on these issues was tightly related to the enhancement of their teaching skills, for instance, when it comes to employing translanguing and ICT so as to bring ELF into the classroom. As Nancy argues below,

gaining an enriched teaching perspective also implied in her case a re-consideration of previous teaching practices, which was exactly what she needed at that point in her professional life:

The course has [helped me] expand my knowledge on various linguistic issues, view teaching from a more creative, dynamic perspective, improve my teaching skills in terms of the use of innovative teaching tools and, of course, [...] re-think my teaching practices in order to enrich them, which was exactly what I was looking for at this point of my career. (Nancy)

Table 2

The Impact of the ENRICH CPD Course

	Development of knowledge		Development of teaching skills		Development of critical thinking		Development of self- confidence		Development of community	
	N	%	N	%	N	%	N	%	N	%
Strongly agree	22	78.6%	21	75.0%	22	78.6%	19	67.9%	15	53.6%
Agree	6	21.4%	6	21.4%	5	17.9%	7	25.0%	9	32.1%
Neutral	0	0.0%	1	3.6%	1	3.6%	2	7.1%	3	10.7%
Disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	3.6%
Strongly disagree	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	28	100%	28	100%	28	100%	28	100%	28	100%

Along the same lines, various participants highlighted how important it was for them to develop their critical thinking skills in relation to ELF. They described, in this respect, the transformative dimension of their experience in the Course, which entailed a highly demanding process of self-criticism and personal re-construction of one's personal interpretation of his or her professional role (Sifakis & Kordia, 2019, 2020). For Christina, that process meant breaking out of her comfort zone and liberating herself from her normative assumptions, which, as she notes, is a collective, rather than a purely individual, endeavour:

What impressed me was my effort to leave my comfort zone and break free from my prejudices regarding native-speakerism and conforming to norms. This goes to show that collective work along with sustained effort really pays off and is conducive to teachers' professional development. (Christina)

The promotion of their knowledge base, teaching skills and critical thinking contributed, as well, to the enhancement of their sense of efficacy, for instance, in creating ELF-aware activities for their learners that help them notice, reflect on and engage more effectively in communication in ELF contexts. According to several participants, raising

their self-confidence and self-esteem was one of the most important benefits for them in their attempt to improve themselves as teachers of English. As Dimitra points out, that is crucial in terms of the development of her learners:

This Course really gave me a boost as a teacher. [It] helped me rethink my teaching practices [and] gave me awareness of all the issues concerning teaching and learning the language! It really helped me a lot, [it] gave me confidence to continue and become a better teacher [...]. My learners will certainly gain a lot from [integrating] ELF in their lessons. (Dimitra)

Last but not least, the participants' responses indicated the significance of belonging to a professional network which provides a supporting environment within which you may not only openly express your ideas and worries as a teacher but also learn and improve yourself through constructive dialogue with others. The establishment of an active community of ELF-aware reflective practitioners has been one of the major goals of the ENRICH Project. In Evi's words, it is exactly through the pioneering spirit of the members of such a community that an ELF-aware educational reform may indeed take place:

This Course has helped me meet [...] so many colleagues who have the same passion for and openness to ELF, share our ideas, and learn from one another [...]. This Course is pioneering, and, consequently, we are the pioneers in our kind of learning how to incorporate ELF into our teaching practices. (Evi)

Conclusion and Implications for Future Research

The present article has focused on the ways in which ELF awareness has been promoted through the CPD Course of the ENRICH Project. To that end, the content of the Course has been described in relation to the principles and processes of the construct of ELF awareness and indicative data that participants generated throughout and at the end of the Course have been presented. What these data mainly indicate is that transforming into an ELF-aware teacher is far from a straightforward task; it involves engaging in a demanding but extremely productive process of self-reflection and dialogue with others which eventually may lead to a re-definition of the role that you want to enact in the classroom and, in turn, a re-appreciation of the desired learning outcomes of your teaching practices.

In the light of the above, this paper seeks to further highlight the significance of empirical research in terms of deepening our understanding of what the development of ELF awareness may mean in practice. The longitudinal study that is being carried out in the framework of ENRICH, only a small part of which has been described in this paper, aims, in this respect, to respond to highly justified recent calls (e.g., Cogo et al., in press; Rose et al., 2021) for documenting, reporting on and, eventually, measuring the effects of ELF-aware teacher education programmes, on the one hand, on teachers'

perceptions in relation to ELF and, on the other, on their actual interventions in their classrooms. The findings of ENRICH and, needless to say, of relevant research projects which are or will be hopefully undertaken within different contexts by ELF researchers, including teacher educators and teachers themselves, will, above all, be crucial in the development of a framework for determining what 'good ELF-aware practices' imply, to be used not as a way for assessing teachers' (and learners') performance but, rather, as a valuable tool for fostering their development. Just like in the process of raising one's ELF awareness, it is through reflective and constructive dialogue on issues of common research interest that our understanding of this construct may advance.

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276 Stefania Kordia

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278 Stefania Kordia

ENRICH Sürekli Mesleki Gelişim Kursu Aracılığıyla Ortak Dil Olarak İngilizce'nin Farkındalığına Sahip Bir Uygulayıcıya Dönüşmek: Yunanistan'dan (ve Ötesinden) İçgörüler

Öz

Bu makale, ENRICH (Ortak Dil Olarak İngilizce'nin Kapsayıcı Çokdilli Sınıflarda Kullanım Pratikleri) projesi kapsamında geliştirilen Sürekli Mesleki Gelişim (SMG) kursu aracılığıyla Ortak Dil Olarak İngilizce (ODİ) farkındalığının nasıl teşvik edildiğine ilişkin bir bakış açısı sunmayı amaçlamaktadır. ODİ farkındalığının yapısını tanımladıktan sonra, ODİ farkındalığına sahip bir öğretmene dönüşmede yansıma ve yapıcı diyaloğun rolünü vurgulayarak kursun içeriği ve yapısı sunulmaktadır. Daha sonra, Yunanistan ve diğer ülkelerden katılımcılardan gelen gösterge niteliğindeki veriler kursun mesleki gelişim açısından onlar üzerindeki etkisine atıfta bulunarak tartışılmaktadır.

Anahtar Kelimeler: Ortak Dil Olarak İngilizce (ODİ) Farkındalığı, ENRICH Projesi, aksetme, yansıtıcı uygulama

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Adapting ELT coursebooks listening materials within an ELF-aware perspective: Voices from Greek and Italian classrooms

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Abstract

This contribution, drawing on the ELF-awareness perspective (Sifakis, 2019), emphasises the need for ELT materials adaptation within the latest ELF and WEs literature and research. Focusing on listening, it showcases adaptations of existing materials in EFL coursebooks used in Italy and Greece and presents data collected through student lesson-evaluations and teacher interviews. The adaptations comprise: a) replacement of prefabricated listening inputs with authentic spoken discourse encountered outside the classroom situation, b) design of follow-up tasks stimulating students' involvement in authentic interactions, and c) inclusion of reflective questions that can trigger teachers' and learners' awareness regarding language use, learning and instructional practices. Findings, indicating that the attempted modifications were successful, provide insights in enhancing our understanding of ELF-awareness integration in ELT.

 ${\it Keywords:}\ A daptations, listening, ELF-awareness, reflective\ practices.$

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Introduction

Research on ELF and its presence in ELT course-books (Siqueira, 2015; Tsantila & Georgountzou, 2017; Vettorel & Lopriore, 2013) has revealed that ELT course-books, with some exceptions, still represent native-speaker (NS) norms and cultures, which emphasises the need of a more focused integration and/or modifications of inputs and tasks that portray interactions involving native (N) and nonnative (NN) users of English in the various multifaceted contexts. Given that listening is closely linked with intelligibility (Bayyurt, 2018; Pickering, 2006) and comprehensibility, issues of crucial importance in interactants' effective communication, the design of listening inputs and tasks in which 'real', and not prefabricated, language patterns should be integrated in ELT practices is particularly significant. Learners can thus be exposed to authentic, produced for non-pedagogical purposes (Gilmore, 2007; Nunan, 1989), discourse, engage in activities that allow them to go beyond the mere, superficial, comprehension of content to a deeper appreciation and reflection of the function of English as a global

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language and as an effective means of interaction among N and NN speakers. This contribution, drawing on ELF-awareness (Sifakis, 2019), aims to address the above needs. It presents listening materials and tasks modifications which reflect the global nature of English and attempt to promote learners' and teachers' awareness of language and language use as well as awareness of learning and instructional practices.

ELF and ELT

Undoubtedly, English is increasingly spoken as a foreign or as an additional language by over 1.200.000 nonnative speakers (NNS) (Eberhard et al., 2020). This further corroborates that English, functions as "contact language" (Firth, 1996, p. 240) "among speakers of different L1s for whom [being the only [communicative medium of choice, it is not[only] adopted but adapted by its users" (Seidlhofer, 2011, p. 7).

Therefore, this global and growing spread of English (Kirkpatrick, 2007; Jenkins, 2015), has inevitably challenged the norm-bound status of English. These challenges have affected teaching and learning traditions which demand for a shift from the traditional form focused EFL/ESL teaching to the actual focus on the "use" of the language, language teaching, materials development, and language teacher education (Jenkins, 2015; Seidlhofer, 2011; Cogo & Dewey, 2012; Sifakis & Bayyurt, 2018; Lopriore & Vettorel, 2019). It is essential then that teaching practices should be reconsidered accordingly, should they aim at raising learners' awareness not only of the diversity of 'World Englishes' (WEs) but also of the new realities regarding the multilingual and multicultural identities of the school population (European Commission, 2019). Consequently, for a more 'realistic' representation of this divergent nature of English in EFL/ESL classrooms, the NN teachers' roles need to be reconsidered so that learners' L2 awareness is enhanced. Considering the above, an ELF-aware teacher education will serve as a springboard for ESOLers' development as effective pedagogues as it is explained below in our study.

An ELF-Aware Pedagogical Perspective

ELF awareness is defined as "the process of engaging with ELF research and developing one's own understanding of the ways in which it can be integrated in one's classroom context, through a continuous process of critical reflection, design, implementation and evaluation of instructional activities that reflect and localize one's interpretation of the ELF construct' (Sifakis and Bayyurt, 2018, p. 459).

According to the above definition, ELF-awareness can be raised among teachers and learners. Therefore, it can be argued that ELF-aware pedagogues should:

a) reflect upon the aspects of language "normativity, appropriateness, comprehensibility, ownership of English by N and NN users alike" (Sifakis, 2019),

- b) evaluate, adapt, implement, reflect, and re-consider the appropriateness and effectiveness of their hitherto instructional practices and class materials in relation to the peculiarities of their own, local, "culture-specific" (Holliday & Cooke, 1982, p.128) contexts,
- expose to and engage learners with authentic communication which relates to their own interests.

Thus, learners and practitioners can address ELF-awareness as follows. First, by introducing real-life, authentic language use, frequently deviating from standard forms, they develop their language sensitivity skills, notice (Schmidt, 2010) the linguistic features present in the discourse, consider what is, or is not, important in effective communication, and eventually raise their "awareness of language and language use" (our emphasis) (Sifakis, 2019, p. 291).

Secondly, by engaging in reflective evaluation of their classroom practices, ELT practitioners develop an "awareness [of the validity of their own] instructional practices", (Sifakis, 2019, p.292).

Finally, by involving learners in authentic, inside or outside the EFL classroom, communication connected with their own interests, experiences, they raise their *learners' awareness of learning* and turn them into self-confident and successful language users (Seidlhofer, 2011).

ELT Coursebooks & Material Adaptation

One of the most powerful tools in ELT are the coursebooks. Having represented almost all the main changes in language teaching methodology (Richards, 2014), coursebooks "can act as agents of change, encouraging teachers to alter some of their traditional practices" (MacKay, 2012, p.71) in order to respond to practitioners' and learners' needs.

In many ways, coursebooks have regularly and significantly instigated changes in teaching habits and offered tools for novel forms of learning. But, in the last 15 years, despite the widely acknowledged global nature of the English language and the research in ELF and WEs, coursebooks have only partly included new forms of Englishes (Galloway, 2018; Galloway & Rose, 2014; Vettorel & Lopriore, 2013) and/or NN cultural representations. In Leung's and Lewkowicz' (2018) words:

...although current course-books aim to enhance learners' social language by including authentic materials and encouraging students to use language to express views and opinions, these two dimensions of social language are not sufficient to truly prepare students for dealing with the complexities of real-life language (p. 66).

Coursebooks, therefore, in order to address the above limitations and in response to the changing 'states' of "English in the world" (Leung, 2017), may be gradually adjusted to different international contexts (Waters, 2012; McDonough et al., 2013) "by local classroom teachers [who can] "determine how such materials will be realized in a classroom" (Mackay, 2012, p. 76). Coursebooks, therefore, may offer a springboard for teachers who can rely on them but further adapt and develop their contents. They can, for example, integrate authentic on-line resources and excerpts from TV series, devise appropriate tasks, and/or engage learners in activities in which they are asked to notice (Schmidt, 2010) variable uses of English in oral interactions. Consequently, coursebooks could "look at the multilayered nature of interaction and [English] language use, in all their complexities" (van Lier, 2004, p.1) and be adapted in manners that the 'local' would meet the 'global'.

It is towards this direction that integration of ELF-awareness in course material can contribute through instructional practices that aim to raise awareness of the use of the English language among learners and enhance learning.

ELF and Listening

Listening is a highly engaging cognitive activity involving active processes of decoding and message construction (Vandergrift, 2004), thus, closely connected with intelligibility (Bayyurt, 2018; Pickering, 2006) and effective communication. Hence, teachers should carefully monitor the design of listening activities which can expose learners to authentic N and NN interactions and enable them to develop a deeper appreciation of the function of English as an effective means of cross-cultural communication.

Listening is, thus, selected as the focus of the designed lesson plans after we examined relevant research on ELF and its interconnection with aural comprehension (Galloway and Rose, 2014; Vandergrift, 2004), intelligibility, accommodation, and comprehensibility (Jenkins, 2000) rather than adherence to NS norms and accuracy.

As listening can be examined from different perspectives, we decided to connect listening with two aspects: material authenticity and relevance to learners.

Authenticity

Authenticity and its connection with ELT have been thoroughly explored and discussed over the last forty years (Garton & Graves, 2014; Gilmore, 2007; Widdowson, 1996). Authenticity has also been widely discussed within the latest WEs and ELF research (Thorn, 2013). In this case, authenticity emphasizes ELT stakeholders' need to focus on their social and local contexts, trust teachers' own experience and develop appropriate localized materials for specific language groups (Gilmore, 2007). Teachers, particularly non-native English-speaking Teachers (NNESTs) can thus use spontaneous, natural, and

diverse authentic texts, such as newspapers and magazines, radio and TV broadcasts, or internet material to 'provide the best source of rich and varied [real life] input for language learners' (Mishan, 2005, p. 41). Learners' attention can then be drawn on features of genuine speech, [i.e., natural rhythm and intonation, natural starts and stops, hesitations, etc] (Tomlinson, 2010, p. 83), raise their awareness of how language is used, and stimulate their 'whole-brain processing' which can result in more durable learning' (Mishan, 2005, pp. 41-42).

This notion of authenticity thus provides a new role and a different function to local teachers who would become the 'local and legitimate authors' in classroom-based curriculum and teaching materials development (Lopriore, 2017). It is important though that all the authentic forms and functions of English as a *lingua franca* (Alptekin, 2002; Galloway, 2018; Gilmore, 2007; Tan, 2005), mainly produced by NNSs, should not be disregarded. In this study, our attempt is to include, and *not to* disregard, the forms and functions of English as a global lingua franca. Therefore, we present modifications, in the already existing coursebooks, in which forms of authentic and genuine speech produced by NS and NNSs alike are integrated.

Relevance to Learners

Another aspect to be considered in materials adaptation is the inclusion of topics which are *contextually relevant* to the learners. According to literature in ELT (McDonough et al., 2013; Rost, 2016), the topics included in ELT materials must be engaging, appealing, and relevant to the learners' age, interests, and reflect various global, local issues, like environment, travel, music, sports, traditions, immigration etc. so that the learners' curiosity and attention is aroused, and critical reflection is encouraged (McGrath, 2013). In case of a NNS context, "coursebooks [or class materials] should also provide opportunities to encourage learners to critically engage with the content" (Galloway, 2018, p. 476), [and] to consider the role of English in their own context" (Galloway, 2018, p. 478) as well as the role of English as a global lingua franca.

Considering thus the notions of authenticity and of contextually relevant topics, we initiated a research study to investigate how listening inputs and task modifications could be implemented in two diverse but similar EFL countries: Greece and Italy. The two countries were selected because, despite their differences, they present some similarities as outlined in the section below.

From Theory to Practice: A Two-Country Research Study

In what follows, we first present the two contexts where the lessons were conducted. Then, we describe the actual lessons that were developed by 4 teachers in collaboration with us. We continue with the learner and teacher responses and evaluation of the lessons, and we conclude with implications for ELT stakeholders and teacher education programmes.

The Two Contexts

In both countries, English is taught for 13 *years*, from kindergarten (5 years old) to last grade of senior high school (18 years old) by teachers who are NNESTs and are appointed after national exams which they take upon their graduation. English is taught from 2-4 hours per week depending on the school level (kindergarten, primary, junior or senior high school), type (private or state) and grade. The teaching of English follows the *CEFR levels* and descriptors and in Greece the indicated exit levels are A2 for primary school, B1+ in lower high school, and C1/C2 in high school (Ministry of Education and Religious Affairs, 2016b). In Italy the exit levels are A1+ at primary, A2+ at lower high school, B1+/B2+ at high school (Ministero dell'istruzione, dell'università e della ricerca – MIUR, 2005) (see overall table 1 below).

Coursebooks

In Greece, English coursebooks used at state schools follow the *Common European Framework of Reference* (Council of Europe, 2001) and the *Cross-curricular Unified Framework* (Ministry of Education and Religious Affairs, 2016a). They are provided for free, are designed and published by the Institute of Educational Policy in Greece (IEP) and Ministry of Education, Research and Religious Affairs (MofERA), written by local authors (i.e., *Think Teen* is written by Karagianni et al, 2008a/b), and accompanied by workbooks, CDs and supplementary material.

In Italy, coursebooks are provided for free at primary level, they are chosen by teachers at diverse levels, while several English coursebooks have been written in the years by English, American and Italian authors and often published by Italian publishers (e.g., Loescher, Zanichelli).

It is worth noting that in both countries, expert local teachers have often been the authors of very successful coursebooks providing a diverse perspective as NN authors.

English Language Initial Teacher Education

In both countries English language teachers are qualified as teachers after the completion of their university degree usually through an exam or a public competition.

The Foreign Language Curriculum

The foreign language curriculum is established, supervised and revisited by educational authorities: MofERA and IEP in Greece, and Ministero dell'Istruzione (MIUR) in Italy. In Italy, especially appointed committees, often formed by local experts and teacher

educators, oversee the planning of the foreign language curriculum and of innovations (e.g., early language learning or CLIL). In Italy, the acknowledged role of English as a global language is being addressed in some university pre-and in-service teacher education courses where notions of WEs and ELF are part of the course components (Lopriore, 2021). No such courses, however, are introduced in Greece.

Plurilingual School Population

In the last decade, in both countries, classes have become multilingual because of recent migration flows. Special programs for teaching national languages of schooling as second languages, respectively Italian and Greek, have been developed and provided either in local schools or in specialised educational centres for migrants. Within these multilingual contexts English is often used and taught to migrants and refugees.

International Certifications

Learners pursue international high-stakes certificates, particularly during their high school. In Italy, this is pursued by high-school students because certified language level (e.g., B2/C1/C2) is acknowledged in terms of credits when students enrol at university. In Greece, though, this pursuit, closely connected with good professional prospects, is extremely prevalent from an early age. Therefore, in Greece, learners, besides their regular morning classes, attend private afternoon classes aimed at preparing them specifically for international certificates (Anastasiadou, 2015; Dendrinos et al., 2013).

Research Design

Considering our two contexts, Greece and Italy, and drawing on ELF-awareness, we conducted a study in which inputs and tasks in the existing coursebook were adapted. In this study, carried out according to Kemmis and McTaggart (1988) action research model, a plan was initially developed to establish effective collaboration with local EFL teachers throughout the research process. The actual study took place in EFL classrooms in provincial, rural, and urban centres in both countries.

For the purpose of the study, lesson modifications, through listening inputs and follow-up tasks, were introduced in EFL classrooms. The specific modifications, made within the ELF-awareness perspective, aimed at eliciting both teachers' and students' *critical reflection* on: a) language-related issues (i.e., form-focused language vs effective communication), b) participants' attitudes towards NE and NNE, and c) instructional and learning practices.

The lesson modifications and participants' critical reflections focused on *authenticity* and *contextual relevance of topics* as mentioned earlier.

These criteria (McKay 2012; Mezirow, 1997; Tomlison & Masuhara, 2013) were considered to address the three components of ELF-awareness (i.e., awareness of

language and language use, awareness of instructional practices and awareness of learning) and therefore, they were considered as the most relevant for the specific study. Hence:

- a) Authenticity was attempted through different listening text types which:
 - i) displayed features of genuine, authentic, N and NN, discourse, and
 - ii) reflected real life situations and interactions.
- b) Contextual relevance of the modifications was attempted through topics that:
 - i) reflected global and intercultural issues,
 - ii) were challenging and relevant to the learners' needs, interests, and local contexts.

Table 1 *The Two Contexts*

	Italy	Greece		
English at school	Compulsory for 13 years. Introduced	Compulsory for 13 years. Introduced		
	through experimental L2 'awakening to	through the English for Young Learners		
	other languages' in over 50%	(EYL) programme according to the		
	kindergarten schools.	Integrated Foreign Languages Curriculum		
		(IFLC) (Ministry of Education, Research		
		and Religious Affairs, 2016b).		
Teachers'	NNESs, graduated in English; qualified	NNES of Greek origin; qualified as		
qualifications	as teachers as a result of a national	teachers through University degree and		
	competition.	appointed upon taking national exams.		
Weekly hours of	Primary: 1 to 3 hours	Kindergarten & primary school: 2 hours		
English	Middle school: 3 hours	Middle school: 3 hours		
instruction	High school: 3 to 4 hours	High school: 2 hours		
CEED E 1	D: 14			
CEFR: Exit	Primary: A1+	Primary school: A2		
levels of English	Middle school: A2+	Middle school: B1+		
	High school: B1+/B2	High school: C1/C2		
Coursebooks	Designed by major English or Italian	Designed by IEP and MofERA according to		
	publishers in line with the Italian	the existing curriculum and published by		
	Ministry of Education (MIUR)	the state.		
	curriculum guidelines			
The foreign	Established, supervised, and revisited by	Established, supervised, and revisited by		
language	the MIUR.	MofERA and IEP.		
curriculum				
Plurilingual	Plurilingual and multicultural classes	Some plurilingual classes due to migration;		
school	due to migration;	Greek taught as a second language to		
population	Italian taught as a second language to migrants	migrants		
International	High percentage of Intl. certifications	High percentage of Intl certificates from a		
(Intl)	especially – mostly in high schools -and	very early (8-9) age, as there is connection		
certifications	with a view to university enrolment.	with professional prospects.		

Research Procedure

The study was carried out within the teachers' own local contexts, taking into consideration the class syllabus, students' level, teaching schedule and each class peculiarities, in terms of school location, (urban or rural), school facilities, and time restrictions.

All participating teachers had initially been contacted and agreed to collaborate in the research. They subsequently (February-March 2018) were introduced by the authors of this paper to the main principles of ELF through:

- i) a handout on the main principles of ELF paradigm and its connections with ELT, and
- ii) 3 subsequent on-line meetings in which the nature, global or non-global character of the existing materials was discussed, examples of modified activities and recommendation within ELF-awareness were offered.

In the next stage, lesson plans were designed by the teachers in collaboration with the authors of this paper and implemented in each different context by the individual teacher. The rationale of all activities was fully discussed with the teachers. In order not to disrupt the syllabus and the class routine, the theme of the planned unit was kept as specified in the coursebook, but either the input(s) were replaced with other authentic material and/or the follow-up tasks were modified. All lesson plans followed the pre-while- and post listening framework in order to:

- i) trigger students' interest in the topic and give teachers an opportunity to introduce the topic and relevant lexis,
- ii) expose students to new, NE or NNE, listening materials (depending on the class),
- iii) engage students in group/class discussions relevant to the topics of the listening as well as the linguistic variety (NE or NNE) they were exposed to, triggering student reflections on issues of intelligibility, use of realistic and authentic language and ultimately of reconsideration of attitudes towards N and NN dichotomy, and
- iv) expand classroom experience with experience outside class.

All lessons were conducted in the Spring of 2018.

The impact of the lessons was noted through student lesson-evaluation tools and teacher feedback, elicited through a teacher self-report grid and subsequent interviews in the contexts in which they occurred.

Participants

Student Profile

Overall, 86 (44 in Greece and 42 in Italy) 13-18-year-old students, of A2-B2 level, participated in the study.

In Greece, the sample consisted of three groups aged 13-15:

- one group of 16 students (English level A2/B1) attended the false beginners' class of grade 1 of lower high school in a mainstream school in Lesvos, island in the Aegean Sea close to the Turkish borders,
- two groups of 12 students each (English level B1/B2) attended the advanced class of grade 1 in a Music school in Athens.

Students were mainly Greeks, and an insignificant number (6 in total) were second-generation migrants.

In Italy, the sample also consisted of three groups:

- one group 15 students, aged 13-14 (English level A2.2/B1.1) attended the second year of a high-school in a small town the North-east of Italy, and
- two groups aged 16-18 (English level B1.2/B2.1) composed by one class of 14 and one class of 13, for a total of 27) attended the fourth year in two different high schools in the outskirts of Rome; one of the schools is a Lycée, and the other one is a Technical school.

Similar to their Greek peers, students were mainly Italians whereas in the group attending the technical school there were 3 non-Italian speakers (from Albania, Romania and Egypt).

Teacher Profile

All participating teachers worked in secondary education with teaching experience ranging from 10-25 years. In Greece the two teachers had a postgraduate qualification, (M.A and PhD/Teacher #2), had attended several conferences on ELT and teachermethodology seminars. The two Italian teachers, qualified as permanent teachers, had attended conference presentations also on WEs & ELF.

Lesson Evaluation Tools

Student-Lesson Evaluations

At the end of each lesson, all lessons were evaluated by the students through an 11-item post-lesson evaluation questionnaire (9 Likert scale statements and 2 open-ended questions); in the open-ended questions, students were asked to justify their choices. The evaluation was administered in students' native language in order to avoid misunderstandings. The data reported in this paper comes only from the two open-ended questions of the student questionnaire as they highlight students' attitudes towards the novel interventions of the lessons.

Teacher-Lesson Evaluations and Response

Teachers were also asked to complete a *self-report grid* in which they estimated the time devoted to each activity (i.e., listening, pair-work, etc) and evaluated their group's reaction to the modifications. They indicated whether the lessons were positively, negatively or neutrally received. On subsequent days, *semi-structured interviews* with the teachers were conducted in which teachers further elaborated on the lessons conducted.

Teacher responses to the interviews were also recorded, transcribed, approved by the interviewees and then responses were thematically organised.

Description of the ELF-Aware Lessons

Six different lessons (three in each country) were conducted based on:

- Think Teen series in Greece: All lessons were conducted in the first class of junior high school. Greek teacher 1 (GT1) used Think Teen for Beginners' (Karagianni et al., 2008a), Unit 4/ "Ecofriendly" (p.44) (henceforth B1/4), and Greek teacher 2 (GT2) used Think Teen for Advanced (Karagianni et al, 2008b) Unit 7/ "Tomorrow and beyond" (henceforth B2/7) (p.104), (same lesson was conducted in two groups).
- Star Prize Books 1 (A2/B1 transition) & 2 (B1/B1+ transition), in Italy; published in 2011 by LOESCHER, Turin, Italy, written by Daniela Calzoni & Angioletta Viviani, both English language teachers & teacher trainers in the Italian school system. The books -used in the upper secondary school are all accompanied by a series of videos to be used in each lesson. The activities within the "Varieties of English" book unit were used by both teachers involved.

All lessons had two phases: in phase 1, the adapted lessons were conducted, in phase 2, students, through the post-lesson evaluation questionnaire, expressed their views on the

modifications and their responses towards NE/NNE. On all occasions, teachers were strongly recommended to act as facilitators only.

The lessons were modified as follows:

Greece

In GT1/B1/4, in accord with the definition of authenticity above, the existing listening input (*A day in the life of a zookeeper*, p.44), a scripted monologue describing the daily activities of a zookeeper, was replaced with a you-tube video (https://www.youtube.com/watch?v=mhLkuGf4sX8). In this video, Yumiko, an aquarist from Singapore, describes her daily job-routine. The decontextualized follow-up comprehension activity, (a 'listen and tick' activity), was also replaced by a more learner-relevant and real-life task, which was the building of Yumiko's *active* facebook page in which learners had to complete information related to her birthday, job description and so on.

In the post-listening stage, learners, acting as Yumiko's facebook-page followers, made comments on the content and/or technical parts of the video (see two examples below):

COMMENT 1: I love your TOUR of SEA Aquarium Singapore video It's fantastic. I want to come and visit it

COMMENT 3: I wanna b thr 🔾



Throughout the lesson, students were encouraged to cooperate for the completion of the information, even if Greek was used at times.

In GT2/B2/7 (p.104) the book listening input and the follow-up information-gap activity were kept untouched since it was a telephone conversation between Sophia, a Native Greek speaker exhibiting all phonetic features of Greek English, and Patrick, a British speaker living in Cambridge. In this conversation, Patrick gives Sophia directions regarding their meeting place in Cambridge. The follow-up listening information-gap activity, asking students to complete missing information, was left untouched as it reflected real life, authentic situations, such as listening to airport/station announcements. Therefore, it can reinforce listeners' ability to identify specific/factual information. During the listening, students collaborated in completing the information missing and engaged thus in authentic classroom interactions.

In the post-listening stage, students listened to an Austrian speaker (NNES) describing the *House of Music* (https://www.youtube.com/watch?v=Ue5QZJyny4A) and had to complete a grid with information missing.

In phase 2 of all lessons, major importance was placed on reflective and metalinguistic questions, integrated in a handout distributed to the students, upon completion of the actual listening and follow-up activity.

In GT1/B1/4 questions like (i.e., "did you like the video you saw and why? would you include similar videos in your you-tube searches? was there something that bothered you? do you think that NE is important in communication"?) were included.

In GT2/B2/7, there were questions like ("What is Sophia's nationality? What helped you understand her nationality? if you have done so. Does Sophia's speech have several pauses, hesitations, fillers, etc? How does Sophia make sure that she understands the exact meeting place that Patrick tells her"?).

Further questions had to do with their attitudes towards the two speakers ("which of the two speakers do you like the best and why"?) or their attitudes towards NS and NNS ("Do you think that it is important to speak like Patrick or like Sophia? Why? Do you think that when you speak English you should try to sound like a(n) American/British/your own nationality/Greek and why"?)

Italy

Lessons 1 & 2: Italian Teachers 1 & 2/Star Prize 1 & 2 – The unit "Varieties of English", unit B.8, is one of the last units of the first book. It was chosen because of the specificity of the theme, unusual to find in English coursebooks, and because it provided a way to widen learners' exposure to authentic uses of English. The interventions and modifications were put into practice using the activities related to the unit, offered in the second section of the book (pp.333-334). Parallel to the tasks already provided by the coursebook, learners were also asked to devise their own post-listening questions. Specifically, they were asked to engage into the spoken input and reflect upon what aural comprehension implied and how they coped with difficulties encountered. The first activity of the section, "Before watching the video", a 'pre-viewing' task, was left untouched in both schools, as it aimed at eliciting students' personal experiences, with questions regarding the accents they were familiar with, if they found speakers easy or difficult to understand, and if they were familiar with varieties of English.

The second activity was the modification of the third and fourth book activities (pp.333-334), originally meant to ask comprehension questions about a short video presenting people with diverse English accents, followed by questions related to students' degree of understanding of those people. In the modified activity, students were instead asked what had facilitated their understanding and how they had coped with misunderstandings. They were then asked to listen to an audio-recording from a YouTube video with a few short exchanges in L1 and in L2 – English – used by speakers from different countries. In the listening tasks, students were asked to listen and:

- a) identify speakers' different ways of saying the same things, and, in the post-listening phase,
- b) notice and discuss differences in the speakers' L1 and L2 use.

After that, they were asked whether they were able to identify and understand Italian, Greek, French, Spanish, Turkish speakers among those using English in the exchanges. This was followed by a plenary discussion where students shared their views and comments on the lesson, and they described the strategies they had been using in order to facilitate their comprehension. At the end, students of both classes watched a TV interview with Mario Draghi led by a German TV journalist in English and were asked what had surprised them because it was unexpected, and what, on the contrary, they expected to find.

In the second class, the TV interview section was followed by an activity where students were asked to watch a video and listen to a series of brief exchanges in English by speakers from different parts of the world; they were then asked a series of questions such as: ("What characterizes those speakers' speech? What helped you better understand what they say, e.g., paralinguistic gestures? Was there any special slang that you had heard before? Are there any differences in what/how they say things? What strategies did you use to support your understanding?")

The modifications regarded the different types of tasks students in both schools were asked to carry out and the type of reflective metacognitive and metalinguistic questions posed to them, as the ones upon diverse ways speakers use to say the same things, upon strategies used to understand and those on noticing differences between L1 and L2 in spoken language.

Findings and Discussion

Overall, the authenticity-focused and contextually relevant modifications and enrichment of the listening material in the coursebooks were favoured by students and teachers as the responses, received through the post-lesson student evaluations and interviews, indicated. It was generally observed that the adapted materials can be successfully integrated in ELT classes. Teachers and learners seemed to appreciate the shift introduced in traditional ELT routines when learners' attention was addressed to spoken language features as well as drawn to the different instantiations of real language use in a diversity of authentic informal exchanges. The acceptance of this shift especially on the part of the teachers involved, may represent the first step into a change within their teaching routines and towards a successful introduction of activities leading to ELF-awareness and of its three components which were fully satisfied. More specifically:

Awareness of language and language use was satisfied through the inclusion of authentic listening inputs in both contexts as we can read in the findings emerging in each country.

In *Greece*, all learners' awareness towards language diversity and usage was aroused through their exposure to genuine, authentic NNE (Singaporean and Austrian), but intelligible accent, contrary to their book listening. Moreover, the GT2/B2/7 group had their attention drawn to genuine speech in which the use of accommodation strategies, essential in ELF interactions (Cogo & Dewey, 2012), through Sophia's asking for repetition of information and asking for clarifications, was observed.

Overall, language awareness was also promoted through the metalinguistic questions which instigated reflection and class discussion upon issues such as focus on language accuracy vs communication, N/NN accents and how these accents relate to 'speaker identity'. Students though, in Greece, admitted that the "NS norm" is what is required for their "exams".

In *Italy*, the shift introduced by the modification of the activities affected learners who were offered an opportunity to provide their personal responses to authentic inputs while being engaged in noticing tasks upon L1 use. In their process of learning a foreign language, learners are rarely invited to reflect upon L1 and L2 similarities and differences in speaking and interacting. Inclusion of reflection as such, though, may represent an essential step in enhancing awareness of language, language use and intercultural communication. The YouTube conversational exchanges and the interview in English to Mario Draghi constituted both authentic input rarely offered in coursebooks, but also a challenge for enhancing learners' awareness of language as used in real life. The use of reflective and metalinguistic questions also elicited learners' individual and collective responses.

The awareness of learning [and of instructional practices] was met through the selection of topics and the questions that focused on language-related issues, N vs NN dichotomy and world knowledge. In particular,

In *Greece*, awareness of learning was satisfied through the selection of topics *relevant* to each group and questions prompting learners' reflection upon N and NN accents and dichotomy. Both topics, "aquaria" and the post-listening video on "the House of Music", were very relevant to students' realities as it was confirmed by student responses to the lesson student-evaluations. Moreover, as their teachers explained, the topics were "meaningful" to their students who connected them with "job availability (GT1/B1/4), "culture/music" (GT2/B2/7), "sea-life, environment" (GT1/B1/4), and "travelling" (GT2/B2/7). The inclusion also of metalinguistic questions allowed students to think of speaker diversity and express their positive attitudes towards this diversity.

In *Italy*, students' awareness of what and how they were learning was prompted through questions eliciting both the degree of difficulty they experienced in understanding the diverse accents and varieties of English in both the videos and in the interviews, and in the reflective questions about the strategies learners used. The elicitation of learners' responses demanding them to position themselves within a real-

life input approach represented a further step for developing their awareness of their language learning process.

Awareness of instructional practices was satisfied in both contexts through the modified activities. All teachers willingly engaged in the modification of activities and reflected upon their practices in relation to their contexts. This allowed them to get out of their 'comfort zone', be engaged in original 'ELF-aware' lessons and eventually gain a very good understanding of how ELF-awareness activities can be integrated in their teaching contexts. Besides, the fact that teachers were strongly recommended to act as facilitators only and avoid interventions of corrective nature allowed most learners to "open-up" and actively engage in group discussions. Therefore, shifting the focus of their lessons from the linguistic accuracy to the effective communication, they realised that student engagement is enhanced, and more authentic interactions and effective language use is promoted.

Leaners' Evaluations

Further evidence on students' appreciation of the coursebook modifications derives from their responses to open-ended questions (see table 2 below).

In Greece, students welcomed the topics selected as each group's extensive comments indicated: (I liked the job of the aquarist. or I mostly enjoyed, "music" and the "magnificent HOUSE OF MUSIC and VIENNA"). They noticed and positively commented on accent-related issues as indicated in some comments (i.e., "I liked Yumiko's pronunciation and accent", "I liked Yumiko speaking in English in a 'distinct /different' accent") and noticed and discussed the accommodation strategies. One student for example, referring to the Sophia-Patrick dialogue, wrote: "I liked the way that Sophia could ask questions in order to make us understand". Interestingly, they reflected upon and discussed the N vs NN dichotomy and connected it with speaker identity ("it is ok to speak with our Greek way"). Overall, they claimed that the modified lessons conducted were a novel and interesting way of learning beyond the coursebook material. Comments such as, "a totally different lesson from whatever we have done so far", or "the follow-up activities were very clever", and "I liked the fact that I learned something new" were frequent among all groups.

In **Italy**, students also unveil their positive appreciation of a diversity of topics. They also noticed and 'surprisingly' commented on accent-related issues ("I did not expect Draghi to be able to use English so well") and were honestly surprised to discover the implications of the activities they had been involved in for the first time as their answers indicated ("Together with my friends we didn't particularly like the idea of devising our questions, I realized later that this way we were more engaged in listening"). Similarly, to their Greek peers, they also appreciated the novel way of exploiting existing tasks to enhance their awareness and facilitate their learning "When I first watched the video on the varieties of English, I realized that the previous activity where we discussed differences in dialects and varieties had a purpose: I thought I

understood better". Importantly, they felt appreciated because they were asked their opinion and the rationale of using meaningful classroom activities. They perceived the fact that they were asked to retrace their comprehension process – both during the video tasks and the audio recording – by identifying the strategies adopted, as a learning suggestion that they could use also in other activities within and outside the school.

Table 2

Learners' Evaluations

Main thematic areas of findings: Learners commented on:	Greece	Italy
The topics: Topics selection and diversity were appreciated and well-embraced	v	v
Accent-related issues: NN accents were noticed and positively commented upon	v	v
The modified lessons: Lessons were a novel and interesting way of learning and the exploitation of existing tasks enhanced learners' awareness and facilitated their learning.	v	v
Own engagement in the learning process because their opinion counted, and classroom activities were meaningfully used		v
N vs NN dichotomy and made connections with speaker-identity	v	

Overall, in both countries, students' comments indicate that learners are open to new realities and seem to enjoy their exposure to novel ways of learning and to linguistic plurality and diversity.

Teacher Evaluations and Responses

All teachers further supported students' responses. They reported that students' collaboration in the follow-up activities, even if their native language was used in their interactions, engaged them in authentic classroom interactions.

Teachers also engaged in critical reflection regarding their hitherto instructional choices and practices as well as the norm-bound attitudes that shaped their instructional decisions. Specifically:

Teachers in Greece:

• reported that the "novel" lesson interventions greatly contributed to a lively and energetic class environment. As they said, the integration of targeted texts which are "relevant" to student interests, include "intercultural issues" and reflect the "global nature" of English through the inclusion of "authentic NN discourse" is significant as it can trigger student motivation, active engagement in student own learning and class discussions away from "bookish' NE". The above observations indicate a shift of perspective regarding teachers' norm-bound attitudes, reported in previous research (Sougari & Faltzi, 2015);

- acknowledged the value of metalinguistic questions in raising their own and their students' reflection and class discussion upon issues related to language accuracy versus communication, the importance of N/NN accents and how these accents relate to speaker identity.
- acknowledged that their "non-corrective stance" facilitated most students' lesson
 participation as students, not feeling threatened by the fact that they will be
 assessed on making mistakes and were left free to cooperate and complete the tasks.

Teachers' responses and evaluation in **Italy** indicated that the two Italian teachers involved:

- greatly appreciated their role as co-participants and willingly engaged in the modifications suggested, daring to try out and face the challenges of a diverse approach,
- revealed the stance of their positioning within a research study they had never been involved in before. At the beginning they admitted the reasons why they had not engaged in introducing WE & ELF in their courses claiming that: "even if interested in introducing WE & ELF in our lessons, we feel we won't have enough time and materials. Coursebooks do not provide enough materials & tasks",
- appreciated the video materials and the easiness of their availability on a website, something they did not even plan to do on their own,
- acknowledged their lack of awareness of how to handle listening input and promote meaningful tasks,
- admitted that the inclusion of English NS and NNS was a significant aspect of what they regarded as a feature of ELT that they were very willing to further explore: "I had never thought this could be an issue, apart from introducing varieties of English in an intercultural approach" (T.1) and "I still think that, even if important for learners to be aware of ELF, we teachers should stick to a NS model. I need time to think about it" (T.2).
- admitted -as for language awareness- it was the first time there was an elicited "reflection upon L1 and L2 spoken language features and use", something never offered in coursebooks.
- said, when interviewed about their overall response to the research study and their role, that they:
 - particularly enjoyed challenging the SS with an L1-L2 perspective on spoken language, we never do that" (T.1) and "I thought it was important to engage SS in managing the process. I also discovered how traditional I was when dealing with listening. (T.2)

Conclusions and Implications

This study showed that ELF-aware adaptations of existing materials can draw learners' attention to authentic interactions and active class participation especially when they don't feel threatened by being constantly corrected. All that engagement can have a positive impact on students' learning, raising their self-confidence as language users.

Overall, students' responses indicate that their exposure to novel and innovative teaching practices was appreciated. Students' exposure to topics that were relevant to each group's specific contexts and interests triggered their engagement with their learning process. Their exposure to NNE accents and dialogues between NNSs allowed them to think of speaker diversity, express their positive attitudes towards this diversity, refer to the importance of accommodation strategies for effective communication, value the authenticity, "real" use of the language each time. Besides, these responses also indicate that if appropriately guided, students can reflect upon and get aware of the "real language usage" reconsidering, thus, their norm-bound attitudes and beliefs (Seidlhofer, 2011, p. 199).

Teachers, on the other hand, collaborated in the preparation of lessons within ELF-awareness and, acknowledging the positive outcomes of the lessons for their learners and themselves, seemed eager to further experiment in more ELF-aware lessons and activities. They emphasised that the inclusion of metalinguistic questions triggered both, learners and themselves, to think of the dichotomy of N/NN, and issues of speaker identity, their norm-bound language beliefs, the source(s) of these beliefs, and the importance of effective communication in contrast to language accuracy.

Considering the above, implications can be seen in teacher education programmes, materials developers and publishers. First of all, teachers can be involved in training courses with an ELF-aware component and should be sustained by 'reflection-on-action' (Schön, 1983), starting from the teachers' lessons and making them use on-line authentic materials. Secondly, teachers can raise learners' awareness of the global nature of English and can further develop aural comprehension and spoken interaction awareness.

On the other hand, publishers and materials developers should widen the borders of ELT materials by exploring findings from ELF research, resorting to authentic audiovisual materials and appropriate tasks, gradually catering for learners' needs and redefining teaching and evaluation constructs.

Overall, this study shows that student and teacher feedback and reflection that were received on the lessons conducted can serve as the basis for further planning and signpost a more effective use of the already existing tasks and hopefully, a more effective teaching, "not [necessarily] by [providing] definitive answers to pedagogical questions, but rather by providing new insights into the teaching and learning process" (McKay, 2006, p. 1).

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İngiliz Dili Öğretimi Ders Kitaplarındaki Dinleme Materyallerini ODİ-Farkındalıklı Bakış Açısıyla Uyarlamak: Yunanca Ve İtalyanca Sınıflarından Yansımalar

Öz

Ortak dil olarak İngilizce (ODİ) farkındalığı perspektifinden (Sifakis, 2019) elde edilen bu katkı, güncel ODİ ve dünya İngilizceleri (Dİ) alanyazını ve araştırması bağlamında İngilizce öğretimi materyallerinin uyarlanması gerektiğine işaret etmektedir. Bu çalışma, dinlemeye odaklanarak, İtalya ve Yunanistan'da kullanılan İngilizce ders kitaplarındaki mevcut materyallerin uyarlamalarını göstermekte ve öğrenci ders değerlendirmeleri ve öğretmen görüşmeleri yoluyla toplanan verileri sunmaktadır. Uyarlamalar şunları içermektedir: a) önceden hazırlanmış dinleme girdilerinin sınıf ortamı dışında karşılaşılan gerçek sözlü söylemle değiştirilmesi, b) öğrencilerin gerçek etkileşimlere katılımını teşvik eden takip etkinliklerinin tasarımı ve c) öğretmenlerin ve öğrencilerin dil kullanımı, öğrenme ve öğretin uygulamaları ile ilgili farkındalığınıtetikleyebilecek düşündürücü soruların dahil edilmesi. Yapılan değişikliklerin başarılı olduğunu gösteren bulgular, İngilizce öğretiminde ODİ-farkındalık entegrasyonu anlayışını desteklemektedir.

Anahtar Kelimeler: uyarlamalar, dinleme, Ortak Dil Olarak İngilizce (ODİ) Farkındalığı, yansıtıcı uygulamalar

BOĞAZİÇİ UNIVERSITY JOURNAL OF EDUCATION

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Özel Sayı: Eğitimde Ölçme ve Değerlendirme Uygulamaları Ulusal Kongresi Özel Sayısı

> Cilt. 39-1 2022

Eğitimde Ölçme ve Değerlendirme Uygulamaları Ulusal Kongresi Özel Sayısı

Bu özel sayı 29-30 Mayıs 2021 tarihleri arasında gerçekleşen Eğitimde Ölçme ve Değerlendirme Uygulamaları Ulusal Kongresinde sunulan bildirilerden hakem değerlendirmeleri sonucu Boğaziçi Üniversitesi Eğitim Fakültesi Dergisinde yayımlanmasına karar verilen akademik çalışmalardan oluşmaktadır. Bu kapsamda, bu özel sayıya 8 adet çalışma gönderilmiş ve hakem değerlendirmeleri neticesinde bu çalışmaların 4 tanesi yayımlanmaya uygun bulunmuştur. Bu özel sayıda ayrıca eğitimde ölçme ve değerlendirme alanında, öğretmenlere yönelik bilimsel araştırma temelli bir mesleki gelişim programının tasarım sürecine ilişkin bir çalışmaya da yer verilmiştir. Bu özel sayının hazırlanma sürecine önemli katkılar sunan Beyza İnceçam'a, Güneş Ertaş'a ve hakemlik görevini yerine getiren öğretim üyelerine çok teşekkür ederiz.

Bu sayıdaki yayınların ilkinde **Mahmut Sami Yiğiter** ve **Selahattin Gelbal** öğretmenlerin uzaktan eğitimde yaşadığı sorunların belirlenmesine yönelik bir ölçek geliştirmiş ve öğrencilerin derse katılma isteksizliği ve internet erişimi sorununun en önemli sorunlar olduğu ortaya koymuştur. İkinci yayında **Safiye Bilican Demir** ve **Özen Yıldırım** TIMSS 2019 Türkiye örneklemini kullanarak kırsaldaki ve kentteki okullarda öğrenci performansını açıklayan öğrenci ve okul özelliklerini farklı kontrol değişkenlerini dikkate alarak incelemişlerdir. Üçüncü yayında ise **Eren Can Aybek, Seval Kula Kartal** ve **Özen Yıldırım** Millî Eğitim Bakanlığı Ölçme, Değerlendirme ve Sınav Hizmetleri Müdürlüğü tarafından yedinci sınıf düzeyi için sunulan maddelerin ölçme ve değerlendirme ilkelerine uygunluğunu incelemiştir. Alan yazında madde yazımında kaçınılması tavsiye edilen, maddelerde doğru yanıta yönlendirecek ipuçlarının bulunması, maddeyi yanıtlamak için gerekli olmayan metin ve görsellere yer verilmesi ve seçeneklerde bileşik yanıt kullanılması (I, II, III, IV gibi) gibi sorunların incelenen maddelerde sıkça tercih edildiği tespit edilerek soru yazarlarına tavsiyelerde bulunulmuştur.

Bu sayıda yer alan dördüncü çalışmada ise Ahmet Bolat, Sevilay Karamustafaoğlu ve Özgen Korkmaz fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliklerini, geliştirdikleri ölçek ile değerlendirmiştir. Beşinci çalışma ise Bengü Börkan, Engin Ader, Beyza İnceçam, Arif Böyüksolak, Emine Erktin, Güneş Ertaş ve Serkan Arıkan tarafından hazırlanmıştır. Bu yayının hakemlik süreçlerinin sağlıklı bir şekilde işlemesi için derginin ana editörü tüm süreçleri yürütmüştür. Bu yayında matematik ve fen bilimleri alan öğretmenlerinin ölçme ve değerlendirme bilgi ve becerilerini artırmak için tasarlanan bir mesleki gelişim programının ortaya çıkardığı fırsatlar, programın uygulanmasında karşılaşılan engeller ve zorluklar öğretmenlerin ve araştırmacıların gözüyle açıklanmıştır. Bu çalışma öğretmenlerin pedagojik bilgilerini destekleyen hizmet içi programlara somut bir örnek ortaya koymaktadır.

Özel Sayı Misafir Editörleri Serkan Arıkan Bengü Börkan

Öğretmenlerin Uzaktan Eğitimde Yaşadığı Sorunların Sıralama Yargıları Kanunuyla Ölçeklenmesi

Mahmut Sami Yiğitera ve Selahattin Gelbalb

Öz

Bu çalışmanın amacı, öğretmenlerin uzaktan eğitimde yaşadığı sorunların önem sıralamasını belirlemektir. Bu kapsamda nicel araştırma türlerinden tarama araştırması yönteminden faydalanılmıştır. Uzaktan eğitimde öğretmenlerin yaşadığı sorunlar belirlenmiştir. Ardından sorunlar ile oluşturulan ölçek, çalışma grubunda yer alan ve aktif olarak uzaktan eğitim veren 906 öğretmene uygulanmıştır. Çalışma grubundan elde edilen veri, ölçekleme yaklaşımlarından sıralama yargıları ile ölçekleme yöntemi kullanılarak analiz edilmiştir. Araştırmanın sonuçlarına göre öğretmenerin yaşadığı en önemli iki sorun "öğrencilerin derse katılma isteksizliği" ve "internet erişimi sorunu" iken, daha az önemli görülen iki sorun ise "online ders yazılımı sorunları" ve "uzaktan eğitimde ders dokümanı yetersizliği" dir. Ayrıca "öğrencilerin derse katılma isteksizliği" sorunu ilkokul düzeyinde önemli bir sorun olarak görülmezken, ortaokul ve lise düzeyinde önemli bir sorun olduğu sonucuna ulaşılmıştır.

Anahtar Kelimeler: Uzaktan eğitim, pandemi, öğretmen, sorun, ölçekleme

Makale Hakkında

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Giris

Eğitim, bireyin toplum yaşamında yerini alması için gereken bilgi, beceri, tutumu edinme ve kişilik gelişimini tamamlama sürecidir. Özellikle sanayinin hızla gelişmesiyle birlikte toplumun eğitime olan talebi artmıştır. Yetişkin, çalışan, maddi imkânı olmayan bireylerin eğitim ihtiyaçlarını karşılamada yüz yüze eğitimin yetersiz kalması sebebiyle alternatif öğrenme yöntemleri arayışları yoğunlaşmıştır (Başaran vd., 2020). Bu bağlamda uzaktan eğitim, yüz yüze eğitime alternatif bir eğitim sistemidir (Kaya, 1996). Uzaktan eğitim, farklı ortamlarda bulunan öğretmen ve öğrencilerin, yazılı veya dijital iletişim araçlarından faydalanarak planlanan, tasarlanan disiplinler arası biçimsel bir öğrenme faaliyetidir (Altıparmak vd., 2011). Posta ve gazete gibi yazılı kaynaklar ile 18.

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yüzyılda başlayan uzaktan eğitim faaliyetleri, zamanla teknolojinin gelişmesiyle radyo ve televizyon üzerinden devam etmiştir. Günümüzde ise özellikle internetin ve teknolojik cihazların günlük yaşamın bir parçası haline gelmesi ile bilgisayar, tablet, cep telefonu gibi araçlar ile uzaktan eğitimin etkililiği ve verimliliği artarak devam etmektedir (Özbay, 2015).

Uzaktan eğitim, farklı zaman veya mekânlarda hayatına devam eden öğrenciyi iletişim araçları sayesinde öğretmen ve ders materyalleriyle bir araya getiren eğitim sistemidir (Al & Madran, 2004). Uzaktan eğitimin pek çok yararı vardır. Uzaktan eğitim ile aynı anda daha fazla öğrenciye eğitim verilebilir, öğrenciler istedikleri zaman dersleri kayıttan tekrar izleme imkânına sahiptir, zaman ve mekân kısıtlaması olmadığından her ortamda eğitimi destekler, aynı anda fazla sayıda öğrenciye hizmet verildiğinden eğitim maliyeti düşüktür, fiziksel engeli veya rahatsızlığı olup da evde eğitim görmesi gereken bireylerinin eğitim sürecini destekler. Bunun yanında uzaktan eğitimin pek çok sınırlılığı da bulunmaktadır. Uzaktan eğitimde öğretmen ve öğrenci yüz yüze iletişim kuramamaktadır, kullanılan teknolojik cihazlar maliyetlidir, öğrenci bireysel çalışma sürecini planlayamadığı için motivasyon problemleri yaşayabilir, öğrencinin zihninde oluşan sorular anında açıklığa kavuşamayabilir (Dinçer, 2006). Görüldüğü üzere uzaktan eğitim, avantajlı yönlerinin yanında bazı dezavantajlara da sahiptir.

Çin'in Wuhan kentinde ortaya çıkan koronavirüsün neden olduğu pandemi, uzaktan eğitime zorunlu bir şekilde ivme kazandırmıştır. Pandemi, dünyada başta sağlık sistemleri açısından olmak üzere toplumsal, sosyal ve ekonomik açılardan pek çok değişime ve dönüşüme neden olmuştur (Aktürk, 2020; Oğurlu, 2020) . Dolayısıyla pandemi sürecinin en çok etkilediği alanlardan biri de eğitim sistemidir. Dünya'da pek çok ülke virüsün bulaşıcılığı sebebiyle okulları kapatmış ve eğitim, yüz yüze eğitim yerine uzaktan eğitim ile devam etmek durumunda kalmıştır (Miks & McIlwaine, 2020). Çin, 2020 yılı ocak ayının sonu itibariyle okulları kapatmış ve uzaktan eğitim sistemine gecmistir. Benzer sekilde İtalya, 4 Mart 2020 tarihinde koronavirüsün yayılımını engellemek için tüm kademelerdeki okulları kapatmıstır. İngiltere'de ise 20 Mart 2020 tarihinde tüm okullar kapatılmış ve uzaktan eğitim sistemine geçilmiştir (Telli & Altun, 2020). Türkiye, aldığı tedbirler sayesinde diğer ülkelere göre koronavirüs ile daha geç karşılaşmıştır. İlk vakanın görüldüğü hafta olan 16 Mart 2020 tarihi itibariyle öncelikle ara tatil erkene çekilerek okullar kapatılmış, ardından uzaktan eğitime geçilerek eğitim öğretim yılı sonuna kadar uzaktan eğitim ile devam etmiştir. Millî Eğitim Bakanlığı, uzaktan eğitimde daha aktif kullanılması için Eğitimde Bilişim Ağı (EBA) sistemine canlı ders için yeni modüller eklemiştir. Öğrencilerin EBA'ya bağlanmada sorun yaşamamaları için EBA altyapısı genişletilmiştir. Öğretmenler ve öğrenciler EBA üzerinden canlı dersler ile uzaktan eğitim sürecini yürütmüştür. Ayrıca ilkokul, ortaokul ve lise olmak üzere üç farklı EBA TV kanalı oluşturulmuş, EBA TV üzerinden 20 dakikalık dersler ile bu eğitim kademelerinde gün boyunca üc tekrar olacak şekilde TV yayını ile uzaktan eğitim verilmiştir (İnci Kuzu, 2020).

Türkiye'de 2020-2021 eğitim öğretim yılında bazı sınıf seviyeleri için okullar haftada iki gün olacak şekilde yüz yüze eğitime başlamıştır. Fakat koronavirüs vaka

sayılarının aşırı artması üzerine 23 Kasım 2020 tarihinde tüm sınıf seviyelerinde tekrar uzaktan eğitime geçiş yapılmıştır. Bu eğitim öğretim yılında uzaktan ve yüz yüze eğitim beraber uygulanmaya çalışılsa da ağırlıklı olarak uzaktan eğitim ile eğitim yılı tamamlanmıştır. Etkili bir eğitim hizmeti sunulabilmesi için diğer ülkeler gibi Türkiye de dijital teknoloji ve platformlardan faydalanarak uzaktan eğitim ile süreci yürütmektedir.

Uzaktan eğitim basladığından beri hem öğretmenler hem de öğrenciler, dijital cihazlar ve platformlar ile daha fazla zaman geçirmek durumunda kalmışlardır. Uzaktan eğitime dair daha önceden pek bir deneyimi olmayan binlerce öğretmen, artık derste sunum yapabilmek için dijital içerikleri etkili olarak kullanabilmeli, uzaktan ders platformunda (zoom, teams, eba) ders yönetimine hâkim olacak şekilde canlı ders platformun özelliklerini iyi bilmeli, ders esnasında kullandığı elektronik cihazların (webcam, mikrofon, grafik tablet) bağlantı ve ayarlarını iyi yapabilmelidir (Bakioğlu & Cevik, 2020). Öğretmenler, uzaktan eğitimde öğretmen-öğrenci etkilesimi azaldığından, ders süresince en cok ön plana cıkan, en cok caba sarf eden konuma gelmistir. Dahası bu süreçte bilgisayar ekranı önünde ve aynı pozisyonda oturarak çok fazla zaman geçiren öğretmenlerin göz ve vücut sağlığının da bu durumdan olumsuz etkilendiği düşünülmektedir. Ayrıca pandemi ile getirilen kısıtlamalardan dolayı evde çok fazla zaman geçiren öğretmenlerin psikolojik açıdan etkilendiği belirtilmektedir (Aktürk, 2020; Kavuk & Demirtaşlı, 2021). Uzaktan eğitim için gereken teknolojik cihaz ve internet altyapısına dair öğretmenlere bakanlık veya kurumları tarafından herhangi bir ekstra maddi destek verilmediği, öğretmenlerin cihazlarını kendi bütçelerinden karşıladığı bilinmektedir. Ayrıca yapılan bir araştırmada uzaktan eğitim sürecinde öğretmenlik mesleğine yönelik olumsuz ön yargıların arttığı ve uzaktan eğitimin toplumda öğretmenin oturarak gerçekleştirdiği bir eylem olarak görüldüğü ifade edilmektedir (Kavuk & Demirtaslı, 2021). Bu bağlamda uzaktan eğitimin içerisinde pek cok zorluk ve sorunu da barındıran eğitim süreci olduğu görülmektedir. Dolayısıyla öğretmenlerin uzaktan eğitimde teknoloji kullanımı yeterliği, teknolojik cihazlara ve internete erişebilme durumları, uzaktan eğitime dair tutumları ve pandemi sürecinde kısıtlamaların neden olduğu korku ve kaygı duyguları birlikte düşünüldüğünde öğretmenlerin uzaktan eğitimde yaşadığı sorunların araştırılması gereken bir konu olduğu görülmektedir.

Yapılan çalışmalar incelendiğinde; Tuncer ve Taşpınar (2008), uzaktan eğitimde yaşanan problem alanlarını öğrenciden kaynaklanan sorunlar, kurumsal problemler, mali sorunlar ve öğretmen nitelikleri olmak üzere dört ana başlık altında incelemiştir. Bu araştırmada, uzaktan eğitimde öğretmenlerin kaliteli içeriklerin hazırlanması, uygun öğrenme ortamının oluşturulması, iletişim ve motivasyon gibi sorumluluklarının olduğu belirtilmiştir. Yeşilfidan (2019), öğretim elemanlarının uzaktan eğitimde yaşadığı sorunları; değişime direnç sebebiyle adaptasyon sorunları, materyal geliştirmeye yönelik isteksizlik, sistem kullanmada yaşanan zorluklar, yazılım ve donanım eksikliklerinin giderilmemesi olarak sıralanmıştır. Kaya (2020), öğretim elemanlarının uzaktan eğitimde yaşadığı sorunları ölçme ve değerlendirmede yaşanan zorluklar, bilişim teknolojilerini kullanmada yetersizlikler, öğretim elemanlarının hazırlıksız yakalanmaları, uygun ders içerikleri hazırlamada zorluklar, online eğitimdeki

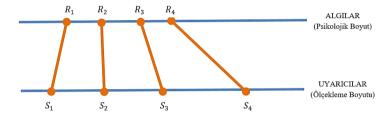
tecrübesizlikler olarak sıralanmıştır. Ülger (2020), uzaktan eğitimde sorunları öğrenci, öğretmen, ebeveyn ve teknoloji açıları ile ele aldığı nitel çalışmasında, öğretmenlerin yaşadığı sorunlar olarak internet erişimi, teknolojik cihazlara erişim, uygulamaya dayalı eğitimlerin gerçekleşememe durumu, öğretmenlerin dijital eğitime hâkim olamaması, öğretmenlerin materyal ve içerik geliştirememe durumu, kalabalık sınıflarda dijital yönetim, uzaktan derslere katılımın düşük olması, öğretme eyleminin dijital olarak güçleşmesi olmak üzere dokuz sorunun yer aldığını ifade etmektedir. Sezgin (2021), acil uzaktan eğitim sürecinde yaşanan sorunlar ve sınırlılıkları on bir başlık altında ele almıştır. Bu başlıklardan öğretmenlerin yaşadığı sorunlarla ilgili olan başlıklar; dijital ucurum, tekno-pedagojik deneyimsizlik, içerik tasarım kalitesi, ekonomik sorunlar, destek, pandemi psikolojisi ve sağlık, uygulama eksikliği ve genel sorunlar olarak görülmektedir. Kavuk ve Demirtas (2021), öğretmenlerin pandemi sürecinde yasadığı sorunlar üzerine yaptığı nitel calısmada; öğretim süreci ile ilgili sorunlar, teknoloji kullanımı ve erişimi sorunları, sağlık endişesi sorunları, sosyal yaşam ve gelecek kaygısı kaynaklı sorunlar, maddi sorunlar olmak üzere beş farklı ana başlıkta incelemiştir. Bu araştırmada öğretmenlerin mesleğini icra ederken yaşadığı özellikle teknolojik araç eksikliği ve internet erişimi sorunu, öğrenci-öğretmen arasındaki iletişim kopukluğu, öğretim yöntemlerinde çeşitliliğin olmaması, düz anlatım yöntemi kullanılması, ölçme ve değerlendirmenin yapılamaması, sağlık problemlerine neden olması, mesleki doyumun azalması sorunları öne çıkmaktadır. Sarı ve Nayır (2021), UNESCO, OECD ve Dünya Bankası'nın uzaktan eğitim üzerine yazdığı raporların analizini yaptıkları çalışmasında, uzaktan eğitimde öğretmenlerin yaşadığı sorunlar olarak, öğretmenler için karışıklık ve stres, uzaktan eğitime hazırlıksız yakalanan öğretmenler, uzaktan öğrenmeyi oluşturma, sürdürme ve geliştirmede zorluklar, yüksek ekonomik maliyetler, sosyal izolasyon, öğrenmeyi ölçmede zorluklar, velilerle iletişim kuramama, öğretmenlerin teknolojik yetersizlikleri sorunları öne çıkmaktadır.

Uzaktan eğitimde öğretmenlerin yaşadığı sorunların önem sıralamasının belirlenmesi için uzaktan eğitimde rol alan öğretmenlerin görüşlerine önem verilmelidir. Öğretmen değerlendirmelerinin önem sırasının belirlenmesi için yapılan ölçme işleminde, ölçülen değişkenlerin fiziksel nitelikleri tam olarak bilinmemekte ve fiziksel boyutları net olarak görülememektedir. Dolayısıyla, bireylerin görüş, düşünce ve değerlendirmelerinin alındığı davranış bilimlerinde ölçme yaparken fiziksel bilimlerdeki ölçmelere göre çok daha titiz çalışmak gerekmektedir. Zeka, kişilik, kaygı, tutum, başarı, öz-yeterlik, benlik saygısı, motivasyon gibi hem psikolojinin hem de eğitim bilimlerinin alanına giren bu değişkenler, doğrudan gözlenemediği için fiziksel büyüklükleri de doğrudan ölçülememektedir. Aynı zamanda insan davranışları arasındaki ilişkileri daha iyi betimlemek açısından bu değişkenlerin ölçülmesi önem arz etmektedir. Doğrudan ölçülemeyen bu değişkenlerin ölçülebilir kılınması için standart ölçme araçlarının ve ölçme yöntemlerinin geliştirilmesi psikometri bilim dalının konusudur. Psikometri bilim dalı, doğrudan ölçülemeyen bu değişkenlerin ölçülmesi için ölçme aracı geliştirilmesi ile ilgilenir (Kan, 2008).

Ölçekleme, psikolojik değişkenleri gözlemci yargılarından veya denek tepkilerinden elde edilen veriler ile farklı istatistiksel yöntemler kullanarak daha hassas ve daha iyi niteliklere sahip standart ölçekler geliştirilmesini amaçlamaktadır (Yalçın &

Şengül Avşar, 2014). Ölçekleme tekniklerini ortaya çıkaran ilk çalışmalar psikolojinin bir alt dalı olan psikofizik alanında yapılan çalışmalardır. Psikofizik, fiziksel uyarıcıların ölçülen nitelikleri ile bireyin algıladığı etki arasında bağıntı kurmaya çalışan bir bilim dalıdır. Doğrudan ölçülemeyen değişkenlerin ölçülebilme çabaları, psikofizikin algısal büyüklükler ile fiziksel büyüklükler arasındaki farka dayanan ölçme çalışmaları ile başlamıştır (Anıl & İnal, 2018). Psikofizikte yapılan deneysel araştırmalarda gözlemcilere fiziksel değerleri önceden ölçülmüş olan $S_1, S_2, ..., S_k$ gibi uyarıcılar verilir. Ardından her gözlemciden bu uyarıcıları nasıl algıladığını belirtmeleri istenir. S ölçümleri bir boyut, R ölçümleri diğer bir boyut olarak düşünülür ve boyutlar arasında ilişki kurmaya çalışılır. Boyutlar arasındaki bu ilişki Şekil 1'de sunulmuştur (Turgut & Baykul, 1992):

Şekil 1 Psikolojik Boyut ve Fiziksel Boyut Arasındaki İlişki (Turgut & Baykul, 1992:10)



Şekil 1'de görüldüğü üzere ölçeklemede iki boyutun varlığından söz edilebilir. Birincisi gözlemcinin zihninde ölçülecek niteliklerin bulunduğu "psikolojik boyut", ikincisi gözlemcinin verdiği tepkilere göre elde edilen değerlerin oluşturduğu "ölçekleme boyutu"dur (Turgut & Baykul, 1992, s.10).

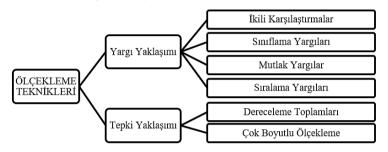
Ölçeklemede, gözlemciye uyarıcılar sunulur. Gözlemci, uyarıcıları inceler ve uyarıcılar arasında bir ayırt etme süreci yaşar. Süreç sonunda gözlemci uyarıcılara tepkide bulunur. Gözlemcinin tepkisine göre, gözlemcinin uyarıcıyı algıladığı noktaya karşılık bir ifade ya da bir değer (niceliksel) atfedilir. Bu atfedilen değerler "ölçekleme boyut"unu oluşturur. Ölçekleme ile elde edilen değerler, kullanılan ölçekleme yaklaşımına göre istatistiksel işlemlere tabi tutulur ve standart ölçme aracı bulunmayan bu uyarıcılar ile daha hassas standart ölçek geliştirilmiş olur (Kara & Gelbal, 2013).

Ölçeklemede iki tür yaklaşım kullanılmaktadır. Bunlar yargı yaklaşımı (yargıcı kararlarına dayalı yaklaşım) ve tepki (denek tepkilerine dayalı yaklaşım) yaklaşımıdır (Turgut & Baykul, 1992). Ölçekleme teknikleri Şekil 2'de yer alan şemada gösterilmiştir.

Yargı yaklaşımı, uyarıcıların uzman veya alana hâkim kişilere yöneltilmesi ile belirli bir boyuta ölçekleme işlemini içerir. Yargı yaklaşımı yönteminde gözlemcilere uyarıcılar sunulur, gözlemci, her bir uyarıcıyı diğer uyarıcılar ile karşılaştırır ve ölçekleme boyutundaki yerini belirler. Diğer gözlemcilerden de elde edilen ölçek yerlerinin ölçekleme işlemleri ile ortalama değeri alınarak uyarıcının ölçek değeri

belirlenir. Yargı yaklaşımı ölçekleme yöntemleri, uyarıcı merkezlidir. Yani, uyarıcının psikolojik ölçek üzerindeki yerinin belirlenmesi gözlemci yargıları gerçekleştirilmektedir (Kartal & Gülleroğlu, 2015).

Şekil 2 Ölçekleme Teknikleri (Turgut & Baykul, 1992)



Tepki yaklaşımı ise cevaplayıcı merkezlidir. Yargı yaklaşımında ölçek üzerinde uyarıcıların yeri ölçülmek istenmekte iken, tepki yaklaşımında cevapların ölçeklenmesi amaçlanmaktadır. Yani her cevaplayıcının maddelere verdiği tepkilere göre bireylerin ölçek üzerinde farklı yerlere yerleştirilmesi hedeflenir. Başka bir deyişle, maddelere verilen cevaplar arasındaki farklılıkların bireyler arasındaki farklılıktan kaynaklandığı düşünülerek, bireylerin ölçek üzerine yerleştirilmesi istenmektedir. Bu yaklaşımda K tane uyarıcı (madde), N kişilik bir birey grubuna uygulanır ve bireylerin uyarıcılara tepkileri toplanır. Likert tipi ölçek geliştirme ile oluşturulan ölçekler, tepki yaklaşımının en bilinen örneğidir. Özellikle davranış bilimlerinde bireylerin özellik veya tutumlarının ölçülmesinde en sık kullanılan ölçek türüdür (Crocker & Algina, 1986; Judd vd., 1991; Turgut & Baykul, 1992).

Ölçekleme, uyarıcılar veya bireyler arasındaki nitel gözlemleri kullanarak nicel farklılıkları ortaya çıkarmaya yarayan çok önemli bir çalışma alanıdır (Albayrak & Gelbal, 2015; Anıl & Güler, 2006). Diğer bir deyişle, ölçekleme, sınıflama ya da sıralama ölceği düzeyindeki veriyi üst ölcek düzeyi olan esit aralık ölceği düzeyine cıkarmayı sağlayan faydalı bir yöntemdir. Sıralama yargıları ile ölçekleme üzerine literatürde yapılmış pek çok çalışma bulunmaktadır. Bal (2011), lise birinci sınıf öğrencilerinin SBS başarılarında etkili olduğu düşünülen faktörleri belirlemek için sıralama yargıları ölçekleme yöntemini kullanmıştır. Güvendir ve Özkan (2013), ikili karşılaştırma ve sıralama yargıları ile ölçekleme yöntemini karşılaştırdıkları araştırmasında her iki yöntemin benzer sonuçlar ürettiği sonucuna ulaşmışlardır. Özbaşı (2019), öğrencilerin değerlendirme (evaluation) tercihlerini araştırdığı çalışmasında sıralama yargılarıyla ölçekleme yönteminden faydalanmıştır. Ayvallı ve Şimşek (2020), öğretmen adaylarının günlük eğitim akışında planladıkları etkinlik türlerini sıralama yargıları ile ölçekleme çalışması kapsamında yürütmüştür. İnceçam ve Demir (2020), ilköğretimden ortaöğretime geçiste yaşanan sorunların önem düzeyini belirlemek için sıralama yargıları ile ölçekleme yönteminden faydalanmıştır. Koçak ve Çokluk

Bökeoğlu (2021), üniversite tercih nedenlerini incelediği çalışmasında ikili karşılaştırma ve sıralama yargıları ile ölçekleme yöntemleri ile ölçekleme yapmışlardır. Her iki yöntemden elde edilen ölçek sıralamaları arasında pozitif yüksek düzeyde ilişki bulunmuştur. Bu çalışmada ise sıralama yargılarına göre ölçekleme yöntemi kullanılarak öğretmenlerin uzaktan eğitim sürecinde yaşadıkları sorunların önem sırasını belirlemek amaçlanmıştır. Konu ile ilgili literatür incelenmiş ve öğretmenlerin uzaktan eğitimde yaşadığı sorunlara dair doğrudan ölçekleme tekniklerinin kullanıldığı bir araştırmaya rastlanmamıştır.

Araştırmada cevap aranan araştırma soruları şu şekildedir:

- 1. Öğretmenlerin uzaktan eğitimde yaşadığı sorunların ölçek değerlerine göre sıralaması nasıldır?
- 2. Öğretmenlerin cinsiyete, çalıştığı okul türüne, kıdeme, uzaktan eğitim ile ilgili hizmet içi eğitim almasına, uzaktan eğitim araçlarını kullanma yetkinlik düzeyine ve covid-19 pandemisinin psikolojilerine etkisine göre uzaktan eğitimde yaşadığı sorunların ölçek değerleri sıralaması nasıldır?

Yöntem

Araştırma Deseni

Bu araştırmada öğretmenlerin uzaktan eğitimde yaşadığı sorunlara ilişkin yargıları sıralama yargılarına dayalı ölçekleme yöntemi ile ölçeklenmiştir. Araştırma, nicel araştırma türlerinden tarama araştırması üzerine temellendirilmiştir. Tarama araştırması, genellikle anket ya da görüşme tekniğinden faydalanılarak istatistiksel ölçümlerle bir gruba ait belirli özelliklerin ortaya çıkarılmasını sağlayan araştırma türüdür (Büyüköztürk vd., 2014).

Yayın Etiği

Bu çalışma, Hacettepe Üniversitesi Senatosu Etik Komisyonu'nun 15.03.2021 tarih ve 1499104 sayılı kararı ile etik açısından uygun bulunmuştur.

Çalışma Grubu

Araştırmanın çalışma grubunu Milli Eğitim Bakanlığı'nda çalışan 906 öğretmen oluşturmaktadır. Çalışma grubunda yer alan öğretmenlerin tamamı uzaktan eğitim sürecinde aktif olarak eğitim vermektedir. Araştırmada kartopu örnekleme yöntemi ile çalışma grubu oluşturulmuştur. Büyüköztürk vd. (2014), uygun örneklem seçiminin para, zaman ve işgücü açılarından kolayca ulaşılabilir ve uygulama gerçekleştirilebilir gruplardan seçilmesi gerektiğini ifade etmektedir. Çalışma grubunda yer alan katılımcı öğretmenlerin değişkenlere göre dağılımı Tablo 1'de sunulmuştur.

 Tablo 1

 Çalışma Grubunda Yer Alan Öğretmenlerin Değişkenlere Göre Dağılımı

Değişken	Kategori	n	%
Circlinat	Kadın	633	69,87
Cinsiyet	Erkek	273	30,13
	İlkokul	266	29,36
Okul Türü	Ortaokul	428	47,24
	Lise	212	23,4
	0-5 yıl	119	13,13
Kıdem	6-10 yıl	193	21,3
	11-15 yıl	212	23,4
	16-20 yıl	149	16,45
	20 yıl ve üzeri	233	25,72
Uzaktan Eğitimle İlgili Hizmet İçi	Evet	314	34,66
Eğitim Alma Durumu	Hayır	592	65,34
	Alt Düzey	28	3,09
Uzaktan Eğitim Araçlarını Kullanma Yetkinliği	Orta Düzey	634	69,98
Remainia Tekningi	Üst Düzey	244	26,93
	Etkilemedi	85	9,38
Covid-19'un Öğretmenlerin Psikolojilerine Etkisi	Biraz Etkiledi	514	56,73
1 Sikolojiletilie Likisi	Kötü Etkiledi	307	33,89
Toplam		906	100

Tablo 1 incelendiğinde cinsiyet, okul türü, kıdem, hizmet içi eğitim alma durumu değişkenlerinde alt kategorilerin dağılımının benzer olduğu görülmektedir. Uzaktan eğitim araçlarını kullanma yetkinliği değişkeninde "alt düzey" kategorisinin, Covid-19'un öğretmenlerin psikolojilerine etkisi değişkeninde "etkilemedi" kategorisinin örneklem sayısının düşük (n < 100) olduğu söylenebilir. Bu kategorilerin örneklem sayısının düşük olması, çalışmanın evrene genellenebilmesi için bu açısından araştırmanın bir sınırlılığıdır. Ayrıca çalışma grubunun belirlenmesinde kartopu örnekleme yöntemi kullanılmıştır. Bu yöntem, çalışmanın evrene genellenebilirliğini sınırlandırmaktadır. Çalışma grubunda yer alan katılımcı sayısının fazla olması ile bu sınırlılığın etkisi azaltılmaya çalışılmıştır.

Veri Toplama Aracı

Çalışma kapsamında kullanılan ölçme aracında yer alacak uyarıcıların belirlenmesi için öncelikle uzaktan eğitimde öğretmenlerin yaşadığı sorunlara dair literatür taraması yapılmıştır. Uzaktan eğitimde yaşanan sorunların literatürde öğrenme-öğretme süreci ile ilgili sorunlar (Avcı & Akdeniz, 2021; Devran & Elitaş, 2017; Dinçer & Yeşilpınar-

Uyar, 2016; Kavuk & Demirtaş, 2021; Ülger, 2020; Sari, 2020; Sari & Nayir, 2021; Saygı, 2021; Sezgin, 2021; Tuncer & Taspınar, 2008), teknoloji ve altyapı sorunları (Durak, 2017), yükseköğretimde yaşanan sorunlar (Çelen vd., 2018; Dünya vd., 2021; Erzen & Ceylan, 2020; Kaya, 2020; Kırmacı & Acar, 2018; Yeşilfidan, 2019; Yilmaz, 2017) konuları üzerine ele alındığı görülmüştür. Literatür taramasından elde edilen sorunlar listelenmiştir. Uzaktan eğitimin teknolojinin ilerlemesine paralel gelişim göstermesinden dolayı hem güncel sorunların tespit edilmesi hem de pandemi sürecinde yaşanan sorunların iyi belirlenmesi amacıyla uzaktan eğitimde aktif rol alan 15 öğretmen ile görüşme gerçekleştirilmiştir. Yapılan görüşmelerde öğretmenlerden eğitim-öğretim süreci, psikolojik, sosyal, teknoloji ve altyapı ve diğer acılardan uzaktan eğitimde vasadıkları sorunların neler olduklarını belirtmeleri istenmistir. Öğretmenlerin verdiği cevaplar doğrultusunda uyarıcılar olusturulmustur. Hem literatür calısmasından hem de görüsmelerden elde edilen sorunlar; benzerlik ve farklılıklarına göre tekrar değerlendirilmiş, benzer sorunlar birleştirilmiştir. Sonuç olarak, elde edilen 10 sorun, dil ve anlam bakımından özenli bir şekilde uyarıcılara dönüştürülmüştür. Uyarıcılara son halini vermek için eğitimde ölçme ve değerlendirme alanında uzman akademisyenlerden uzman görüşü alınmış ve görüşlerin doğrultusunda ölçme aracına son hali verilmiştir. Veriler online ortamda toplanmıştır.

Verilerin Analizi

Verilerin analizinde, yargı yaklaşımı ile ölçekleme yöntemlerinden olan sıralama yargıları ile ölçeklemeden faydalanılmıştır. Uzaktan eğitimde aktif rol alan öğretmenlere 10 uyarıcı sunulmuştur. Katılımcı öğretmenlerden on uyarıcı öncelikle okumaları, ardından on uyarıcıyı birlikte düşünerek birden ona kadar önem sırasına göre sıralamaları istenmiştir. Sıralama sonuçları, Microsoft Excel kullanılarak hem tüm örnekleme göre hem de bağımsız değişkenlerin tüm kategorilerine göre tek tek analiz edilmiştir.

Analiz işleminde, öncelikle hangi sıraya kaç defa getirildiğini belirten sıra frekansları matrisi oluşturulmuştur. Ardından sıra frekansları matrisi ile aşağıdaki formül kullanılarak frekanslar matrisi oluşturulmuştur (Turgut & Baykul, 1992):

$$n(S_{ji} > S_{ki}) = f_{ji}.(f_{k < i} + (\frac{1}{2}).f_{ki})$$

Burada, n frekanslar matrisinin hücrelerinde yer alacak değeri, f_{ji} , U_i uyarıcısına r_i sırasının verilme sayısını, f_{ki} , U_k uyarıcısına r_i sırasının verilme sayısını ifade etmektedir. Formül ile oluşturulan frekanslar matrisinin her bir hücresi katılımcı sayısının karesine bölünerek oranlar matrisi elde edilir. Ardından oranlar matrisinden Z birim normal sapmalar matrisi oluşturulur. Birim normal sapmalar matrisinin sütun elemanları toplanarak ölçek değerlerine (S_j) erişilir. Uyarıcıların ölçek değerlerinin (S_j) en küçüğünü sıfıra eşitlenecek şekilde tüm ölçek değerlerine aynı değer eklenir ve ölçek değerlerine son hali verilmiş olur (Turgut & Baykul, 1992).

Bu araştırmada çalışma grubuna dâhil edilen öğretmenlerin yargılarının ne kadar güvenilir olduğunu belirlemek için iç tutarlılık hesaplanmıştır. İç tutarlılığın değerlendirilmesi için öncelikle Ortalama Hata değeri hesaplanmıştır. Model ile verinin uyumlu olabilmesi için Ortalama Hata değerinin olabildiğince küçük olması beklenmektedir (Turgut & Baykul, 1992). Ayrıca elde edilen Ortalama Hata değerinin anlamlılığı ki-kare istatistiği ile incelenmiştir. Ortalama Hata değeri hesaplanırken, öncelikle ölçek değerleri sütun ve satırda yer alacak şekilde her hücrenin satır ve sütununa gelen ölçek değerlerinin farkları alınarak KxK boyutunda Teorik Birim Normal Sapmalar Matrisi elde edilir. Bu matristen z'nin elemanlarına karşılık gelen Teorik Oranlar Matrisi elde edilir. Ölçeklemede kullanılan Oranlar Matrisi ile Teorik Oranlar Matrisinin mutlak farkı ile Hatalar Matrisi elde edilir. Hatalar Matrisinin ortalaması Ortalama Hata değerini verir (Turgut & Baykul, 1992). Ortalama Hata değerinin anlamlılığını incelemek için elde edilen Ki-Kare istatistiği aşağıdaki formül ile hesaplanmıştır.

$$X^{2} = \frac{\sum_{j>k} (q_{jk} - q'_{jk})^{2}}{\frac{821}{N}} \qquad sd = \frac{(K-1)(K-2)}{2}$$

X²: Ki Kare İstatistiği

q_{ik}: Dönüştürülmüş Oranlar Matrisi

 q'_{ik} : Dönüştürülmüş Teorik Oranlar Matrisi

sd: Serbestlik Derecesi

N: Yargıcı Sayısı

K: Uyarıcı Sayısı

Elde edilen uyarıcı sıralarının değişkenlere (cinsiyet, kıdem vb.) göre değişimini değerlendirmek için tüm katılımcılardan elde edilen ölçek değerleri ile değişkenlerin kategorilerinden ayrı ayrı elde edilen ölçek değerleri arasındaki Spearman sıra farkları korelasyon katsayısı hesaplanmıştır. Formülü şu şekildedir:

$$r = 1 - \frac{\sum d^2}{n^3 - n}$$

Formülde yer alan d, arasındaki ilişkiye bakılan ölçeklerin sıra değerleri arasındaki farkı, n ise uyarıcı sayısını ifade etmektedir. Ayrıca elde edilen spearman korelasyon katsayısının p anlamlılık değeri de sunulmuştur.

Bulgular

Bu bölümde öğretmenlerin uzaktan eğitimde yaşadığı sorunların önem sırasını belirlemek amacıyla yapılan ölçekleme analizlerinden elde edilen bulgulara yer

verilmiştir. Öncelikle iç tutarlılığa ilişkin bulgular sunulmuş, ardından araştırma sorularına dair bulgulara sırasıyla yer verilmiştir.

İç Tutarlığa İlişkin Bulgular

Çalışma grubunda yer alan öğretmenlerin kendilerine sunulan on uyarıcıyı uygun şekilde sıralayıp sıralamadıklarını kontrol etmek için ölçek değerlerinin iç tutarlılığı hesaplanmıştır. Bu manada öncelikle ortalama hata değeri hesaplanmış, ardından hesaplanan ki-kare istatistiği ile karşılaştırılarak anlamlılığına karar verilmiştir. Hata matrisi, Toplam Hata ve Ortalama hata değerleri Tablo 2'de sunulmuştur.

Tablo 2
Hata Matrisi

Uyarıcılar									
Uzaktan Eğitimde Ders Dokümanı Yetersizliği									
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar Teknolojik Araç Eksikliği	0,009								
(Bilgisayar, Mikrofon, Webcam, Tablet vb.) Uzaktan Eğitim ile ilgili	0,039	0,003							
Hizmet İçi Eğitimlerin Yetersizliği	0,005	0,003	0,021						
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,014	0,000	0,018	0,007					
İnternet Erişimi Sorunu	0,036	0,001	0,005	0,020	0,013				
Öğrencilerin Derse Katılma İsteksizliği	0,027	0,002	0,028	0,017	0,003	0,021			
Online Ders Yazılımı Sorunları (Zoom, Eba vb. Kaynaklı)	0,002	0,013	0,037	0,007	0,018	0,035	0,028		
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,006	0,000	0,009	0,002	0,002	0,010	0,009	0,010	
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,022	0,003	0,001	0,010	0,009	0,003	0,015	0,024	0,003
Toplam Hata	0,569								
Ortalama Hata	0,013								

Ortalama hata değeri 0,013 olarak görülmektedir. Ortalama hata değerinin düşük olduğu görülmektedir. Ortalama hata, gözlenen değerlerle teorik değerler arasındaki uyumun ortalama değerini verir. Ancak bu değeri tek başına yorumlamak oldukça güçtür. Dolayısıyla ortalama hatanın manidar olup olmadığı Ki-kare değeri ile test edilmelidir

(Yılmaz & Doğan, 2015). Ki-Kare değerinin hesaplandığı Oran Farklarının Karesi Matrisi Tablo 3'de sunulmuştur.

Tablo 3Oran Farklarının Karesi Matrisi

Uyarıcılar									
Uzaktan Eğitimde Ders Dokümanı Yetersizliği									
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,295								
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam, Tablet vb.)	6,416	0,035							
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,106	0,038	1,505						
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,847	0,000	1,058	0,163					
İnternet Erişimi Sorunu	5,628	0,002	0,093	1,434	0,555				
Öğrencilerin Derse Katılma İsteksizliği	4,060	0,018	2,587	1,198	0,035	1,441			
Online Ders Yazılımı Sorunları (Zoom, Eba vb. Kaynaklı)	0,011	0,710	6,167	0,195	1,554	5,671	4,759		
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,147	0,001	0,268	0,010	0,009	0,311	0,286	0,388	
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	2,003	0,027	0,003	0,348	0,296	0,030	0,751	2,462	0,024
X ²	59,52	_	_		_	_		_	
$X^2 (p = 0.05; sd = 36)$	50,99								

Modelden elde edilen ki-kare istatistiğinin tablo değerinden büyük olduğu görülmektedir. Bu durumda iç tutarlılığın sağlanamadığı yorumu yapılmalıdır. Mosteller, ki kare istatistiğinin yüksek ve manidar çıkmasının üç nedeni olabileceğini belirtmektedir. Bu nedenler, ölçülen özelliğin tek boyutlu olmaması, normal dağılmaması veya uyarıcıların dağılımlarının standart sapmalarının eşit olmamasıdır (Mostellar, 1951, akt. İnceçam, 2019). Diğer taraftan, örneklem sayısı arttıkça ki-kare istatistiğinin artış gösterdiği bilinmektedir. Bu araştırmada yer alan değişkenlere göre yapılan ölçekleme çalışmalarının ölçek değerlerinin ortalama hata, ki-kare istatistiği ve yargıcı sayıları (n) Tablo 4'teki gibidir.

Tablo 4Okul Türü Değişkenine Göre Ortalama Hata Değeri ve Ki-Kare İstatistiği

Değişken	Grup	N	Ortalama Hata	Ki-Kare	Ki-Kare (Tablo Değeri)
Cinsiyet	Kadın	633	0,014	47,04	
Chisiyet	Erkek	273	0,013	16,28	
	İlkokul	266	0,010	15,99	
Okul Türü	Ortaokul	428	0,014	37,24	
	Lise	212	0,016	17,78	
	0-5 yıl	119	0,016	11,34	•
	6-10 yıl	193	0,016	19,14	
Kıdem	11-15 yıl	212	0,013	17,11	
	16-20 yıl	149	0,015	13,27	
	20 yıl ve üzeri	233	0,011	12,12	50,99
Hizmet İçi Eğitim Alma	Evet	314	0,014	26,08	
Durumu	Hayır	592	0,013	35,63	_
Uzaktan Eğitim	Alt Düzey	28	0,020	5,21	
Araçlarını Kullanma	Orta Düzey	634	0,013	42,09	
Yetkinliği	Üst Düzey	244	0,014	17,64	_
Covid-19'un	Etkilemedi	85	0,015	5,95	
Öğretmenlerin Psikolojilerine Etkisi	Biraz Etkiledi	514	0,013	37,24	
2 smolojnerine Eddisi	Kötü Etkiledi	307	0,012	19,05	_
Tümü		906	0,013	59,52	

Tablo 4'te görüldüğü üzere Ki-Kare istatistiği farklı değişkenlerin alt gruplarına göre anlamlı değilken, tüm çalışma grubunda örneklem sayısının büyük olması nedeniyle anlamlı hale gelmektedir. Örneğin okul türü değişkenine göre ki-kare istatistiği hem ilkokul hem ortaokul hem de lise için anlamlı değilken, tüm çalışma grubu için anlamlı farklılığın olduğu görülmektedir. Ortalama Hata değerleri üç alt grupta benzer olmasına rağmen Ki-Kare istatistiği örneklem büyüklüğüne göre artış göstermektedir. Sonuç olarak hem Ortalama Hata değerinin düşük olması hem de Ki-Kare istatistiğinin örneklem büyüklüğünden etkileniyor olması göz önüne alınarak alınarak veri ile ölçekleme yönteminin birbirine uygun olduğu kabul edilmiş ve analizler gerçekleştirilmiştir.

Birinci Araştırma Sorusuna İlişkin Bulgular

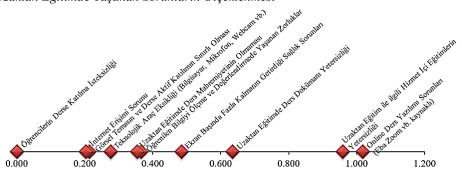
Katılımcı öğretmenlerden uzaktan eğitimde yaşanan sorunları öneme göre sıralaması istenmiştir. Sıralama sonucu on uyarıcıdan elde edilen ölçek değerleri ve önem sırası Tablo 5'te sunulmuştur.

Tablo 5Öğretmenlerin Uzaktan Eğitimde Yaşadığı Sorunların Ölçek Değerleri ve Önem Sıraları

Öğretmenlerin Uzaktan Eğitimde Yaşadığı Sorunlar	Ölçek Değerleri	Uyarıcı Sıraları
Öğrencilerin Derse Katılma İsteksizliği	0,000	1
İnternet Erişimi Sorunu	0,211	2
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,214	3
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,277	4
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,354	5
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,367	6
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,486	7
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,635	8
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	0,959	9
Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)	1,018	10

Tablo 5'e göre katılımcı öğretmenler uzaktan eğitimde yaşadığı sorunları önem sırasına göre sıraladığında, "Öğrencilerin Derse Katılma İsteksizliği" sorununun ilk sırada yer aldığı görülmektedir. Ardından uzaktan eğitimde yaşanan önemli sorun olarak sırasıyla "İnternet Erişimi Sorunu", "Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması" ve "Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)" sorunları izlemektedir. Öğretmenlerin en az önemli olarak gördükleri sorunlar ise "Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)" ve "Uzaktan Eğitimde Ders Dokümanı Yetersizliği" sorunlarıdır. Tablo 2'de yer alan uyarıcıların ölçek değerleri ölçek üzerinde Şekil 3'te gösterilmiştir.

Şekil 3 Uzaktan Eğitimde Yaşanan Sorunların Ölçeklenmesi



İkinci Araştırma Sorusuna İlişkin Bulgular

İkinci araştırma sorusuna yanıt aramak için katılımcıların uzaktan eğitimde yaşadığı sorunların ölçek değerleri ve sıraları ele alınan değişkenlerin her kategorisi için ayrı ayrı hesaplanarak verilmiştir. Ölçek değerlerine göre hesaplanan sıralamalar arasındaki ilişkiyi değerlendirmek için Spearman sıra farkları korelasyon katsayısı hesaplanmıştır.

Cinsiyet değişkenine göre öğretmenlerin uzaktan eğitimde yaşadığı sorunların ölçek değerleri ve önem sıraları Tablo 6'da sunulmuştur.

Tablo 6Cinsiyete Göre Ölçek Değerleri ve Önem Sıraları

	Ka	ıdın	Er	kek	Tümü		
Cinsiyet	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	
Öğrencilerin Derse Katılma İsteksizliği	0,000	1	0,000	1	0,000	1	
İnternet Erişimi Sorunu	0,169	2	0,230	3	0,211	2	
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,284	4	0,183	2	0,214	3	
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,192	3	0,315	5	0,277	4	
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,366	5	0,351	6	0,354	5	
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,496	6	0,311	4	0,367	6	
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,514	7	0,475	7	0,486	7	
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,794	9	0,569	8	0,635	8	
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	0,738	8	1,065	10	0,959	9	
Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)	0,975	10	1,04	9	1,018	10	

Cinsiyet değişkenine göre erkek ve kadın katılımcıların uyarıcı sıraları arasındaki Spearman korelasyon katsayısı 0,879 olarak hesaplanmıştır ($r_{1-2}=.879,\ p_{1-2}=.001$). Elde edilen bu korelasyon katsayısı kadın ve erkek öğretmenlerin uzaktan eğitimde benzer sorunlar yaşadığını göstermektedir. Her iki grup da "Öğrencilerin Derse Katılma İsteksizliği" sorununu en önemli sorun olarak görmektedir. Gruplar arası önem sıralamalarında bazı uyarıcılarda az miktarda değişim olduğu söylenebilir. Kadın öğretmenler, "Uzaktan Eğitimde Ders Dokümanı Yetersizliği" uyarıcısını, erkek öğretmenler ise "Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)" uyarıcısını daha az önemli sorun olarak görmektedir.

Okul türü değişkenine göre öğretmenlerin uzaktan eğitimde yaşadığı sorunların ölçek değerleri ve önem sıraları Tablo 7'de sunulmuştur.

Tablo 7Okul Türüne Ölçek Değerleri ve Önem Sıraları

	İlkokul		Ortaokul		Lise		Tüm	ü
Okul Türü	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları
Öğrencilerin Derse Katılma İsteksizliği	0,464	8	0,000	1	0,000	1	0,000	1
İnternet Erişimi Sorunu	0,131	2	0,364	3	0,672	5	0,211	2
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,311	3	0,356	2	0,47	2	0,214	3
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,000	1	0,549	5	0,741	6	0,277	4
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,322	4	0,571	6	0,631	4	0,354	5
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,45	6	0,526	4	0,612	3	0,367	6
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,363	5	0,697	7	0,895	7	0,486	7
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,458	7	0,823	8	1,173	9	0,635	8
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	0,92	9	1,223	10	1,169	8	0,959	9
Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)	0,988	10	1,214	9	1,353	10	1,018	10

Okul türü değişkenine göre ilkokul ve ortaokulda görev yapan katılımcıların uyarıcı sıraları arasındaki Spearman korelasyon katsayısı 0,503 olarak hesaplanmıştır ($r_{1-2}=.503,\ p_{1-2}=.138$). İlkokul ve lisede görev yapan katılımcıların uyarıcı sıraları arasındaki spearman korelasyon katsayısı ise 0,382 olarak hesaplanmıştır ($r_{1-3}=.382,\ p_{1-3}=.276$). Elde edilen bu korelasyon katsayılarının istatistiksel olarak anlamlı olmadığı görülmektedir. Dolayısıyla bu korelasyon katsayıları, ilkokul ile ortaokul-lise öğretmenlerinin yaşadığı sorunların sıralaması farklılık göstermektedir.

Özellikle ortaokul ve lise öğretmenlerinin en çok yaşadığı sorun olan "Öğrencilerin Derse Katılma İsteksizliği", ilkokul öğretmenleri için 8. sırada yer almaktadır. Bunun nedeni olarak ilkokul düzeyinde öğrencilerin derse katılımında sorun yaşanmadığı, fakat ortaokul ve lise düzeyinde öğrencilerin uzaktan eğitimde derse katılmakta isteksiz davrandığı belirtilebilir. İlkokul öğretmenlerinin en çok yaşadığı sorun olan "Teknolojik araç eksikliği" ise ortaokul ve lise öğretmenleri için sırasıyla 5 ve 6. sırada yer almaktadır. Ortaokul ve lisede görev yapan katılımcıların uyarıcı sıraları arasındaki Spearman korelasyon katsayısı ise 0,903 olarak hesaplanmıştır ($r_{2-3}=.879$, $p_{2-3}=.000$). Elde edilen korelasyon katsayısı anlamlı olup bu açıdan ortaokul ve lise öğretmenlerinin uzaktan eğitimde yaşadığı sorunların benzerlik gösterdiği söylenebilir.

Kıdem değişkenine göre öğretmenlerin uzaktan eğitimde yaşadığı sorunların ölçek değerleri ve önem sıraları Tablo 8'de sunulmuştur.

Tablo 8Kıdeme Göre Ölçek Değerleri ve Önem Sıraları

	0-5 Yıl		6-10 Yıl		11-15 Yıl		16-20	Yıl	21Yıl	üzeri
Öğretmenlerin Uzaktan Eğitimde Yaşadığı Sorunlar	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları
Öğrencilerin Derse Katılma İsteksizliği	0,047	2	0,000	1	0,000	1	0,000	1	0,000	1
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,241	3	0,457	5	0,132	3	0,440	3	0,209	2
İnternet Erişimi Sorunu	0,000	1	0,328	3	0,120	2	0,362	2	0,238	3
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,287	4	0,268	2	0,140	4	0,164	4	0,258	4
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,409	5	0,449	4	0,354	6	0,373	6	0,270	5
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,471	7	0,538	6	0,338	5	0,264	5	0,296	6
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,469	6	0,676	7	0,379	7	0,481	7	0,471	7
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,616	8	0,805	8	0,579	8	0,698	8	0,554	8
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	1,025	10	1,153	10	1,031	10	1,049	10	0,698	9
Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)	0,890	9	1,048	9	0,953	9	1,249	9	1,020	10

Kıdeme göre gruplar arası uyarıcı sıraları arasındaki Spearman korelasyon katsayılarının 0,745 ile 1,000 arasında değiştiği görülmüştür. Hesaplanan tüm korelasyon katsayıları

istatistiksel olarak anlamlı olup kıdeme göre uzaktan eğitimde yaşanan sorunların önem sıralarının büyük ölçüde benzer olduğunu göstermektedir.

Katılımcı öğretmenlerin uzaktan eğitimde hizmet içi eğitim alma durumuna göre uzaktan eğitimde yaşanan sorunların ölçek değerleri ve önem sıraları Tablo 9'da sunulmuştur.

Tablo 9Hizmet İçi Eğitimi Alma Durumuna Göre Önem Sıraları ve Ölçek Değerleri

		et	Нау	Hayır		nü
Uzaktan Eğitim Hizmet İçi Eğitim Aldınız mı?	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları
Öğrencilerin Derse Katılma İsteksizliği	0,000	1	0,000	1	0,000	1
İnternet Erişimi Sorunu	0,062	2	0,289	3	0,211	2
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,183	4	0,231	2	0,214	3
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,171	3	0,334	4	0,277	4
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,377	5	0,344	5	0,354	5
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,391	6	0,355	6	0,367	6
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,409	7	0,527	7	0,486	7
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,638	8	0,635	8	0,635	8
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	1,075	10	0,903	9	0,959	9
Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)	0,944	9	1,059	10	1,018	10

Uzaktan Eğitime Dair Hizmet İçi Eğitim alma durumuna göre hizmet içi eğitim alan ve almayan öğretmenlerin uyarıcı sıraları arasındaki Spearman korelasyon katsayısı 0,952 olarak hesaplanmıştır ($r_{1-2}=.952,\;p_{1-2}=.000$). Hesaplanan korelasyon katsayısı istatistiksel olarak anlamlı olup uzaktan eğitim hizmet içi eğitimi alma durumuna göre hizmet içi eğitim alan ve almayan öğretmenlerin uyarıcı sıraları arasında büyük ölçüde benzerlik olduğunu göstermektedir.

Katılımcı öğretmenlerin uzaktan eğitim araçlarını kullanma yetkinliğine göre uzaktan eğitimde yaşanan sorunların ölçek değerleri ve önem sıraları Tablo 10'da sunulmuştur.

Tablo 10Uzaktan Eğitim Araçlarını Kullanma Yetkinliğine Ölçek Değerleri ve Önem Sıraları

	Alt Di	üzey	Orta D	üzey	Üst D	Üst Düzey		nü
Öğretmenlerin Uzaktan Eğitimde Yaşadığı Sorunlar		Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları	Ölçek Değerleri	Uyarıcı Sıraları
Öğrencilerin Derse Katılma İsteksizliği	0,111	2	0,000	1	0,000	1	0,000	1
İnternet Erişimi Sorunu	0,499	5	0,208	2	0,200	3	0,211	2
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,464	4	0,247	3	0,115	2	0,214	3
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,323	3	0,262	4	0,325	5	0,277	4
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,000	1	0,359	5	0,393	7	0,354	5
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yasanan Zorluklar	0,570	6	0,392	6	0,294	4	0,367	6
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,848	7	0,534	7	0,336	6	0,486	7
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	1,035	9	0,650	8	0,570	8	0,635	8
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	0,934	8	0,960	9	0,978	10	0,959	9
Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)	1,531	10	1,064	10	0,864	9	1,018	10

Uzaktan eğitim araçlarını kullanma yetkinliğine göre alt ve orta düzey grupları arasındaki uyarıcı sıraları arasındaki Spearman korelasyon katsayısı 0,818, alt ve üst düzey grupları arasındaki uyarıcı sıraları arasındaki Spearman korelasyon katsayısı 0,636, orta ve üst düzey grupları arasındaki uyarıcı sıraları arasındaki Spearman katsayısı 0,915 olarak hesaplanmıştır $(r_{1-2} = .818,$ $p_{1-2} = .004$; $r_{1-3} = .636$, $p_{2-3} = .048$; $r_{2-3} = .915$, $p_{1-2} = .000$). düzey yetkinliğe sahip olan öğretmenler en önemli sorun olarak "Uzaktan Eğitimde Ders Mahremiyetinin Olmaması" uyarıcısını, orta ve üst düzey yetkinliğe sahip olan öğretmenler ise en önemli sorun olarak "Öğrencilerin Derse Katılma İsteksizliği" uyarıcısını belirtmektedir. Alt düzey yetkinliğe sahip öğretmenlerin yaşadığı sorunların orta ve üst düzey yetkinliğe sahip öğretmenlerin yaşadığı sorunlar ile daha az benzerlik göstermekte iken, orta ve üst düzey yetkinliğe sahip öğretmenlerin yaşadığı sorunların önem sıralarının büyük ölçüde benzerlik gösterdiği görülmektedir. Bu bulgu yorumlanırken alt düzey yetkinliğe sahip öğretmenler grubunun örneklem sayısının düşük (n = 28) olduğu göz önüne alınmalıdır.

Katılımcı öğretmenlerin Covid-19 pandemi sürecinin psikolojilerine etkilerine göre uzaktan eğitimde yaşanan sorunların ölçek değerleri ve önem sıraları Tablo 11'de sunulmuştur.

Tablo 11Covid-19'un Öğretmenlerin Psikolojilerine Etkisine Göre Ölçek Değerleri ve Önem Sıraları

	Etkile	Etkilemedi		Biraz Etkiledi		Kötü Etkiledi		nü
Covid-19 Pandemi Süreci Psikolojinizi Nasıl Etkiledi?		Uyancı Sıraları	Ölçek Değerleri	Uyancı Sıraları	Ölçek Değerleri	Uyancı Sıraları	Ölçek Değerleri	Uyancı Sıraları
Öğrencilerin Derse Katılma İsteksizliği	0,000	1	0,000	1	0,000	1	0,000	1
İnternet Erişimi Sorunu	0,288	5	0,198	3	0,212	2	0,211	2
Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması	0,010	2	0,190	2	0,310	3	0,214	3
Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)	0,399	7	0,209	4	0,358	4	0,277	4
Uzaktan Eğitimde Ders Mahremiyetinin Olmaması	0,365	6	0,329	5	0,396	5	0,354	5
Öğrenilen Bilgiyi Ölçme ve Değerlendirmede Yaşanan Zorluklar	0,216	3	0,355	6	0,429	6	0,367	6
Ekran Başında Fazla Kalmanın Getirdiği Sağlık Sorunları	0,275	4	0,510	7	0,505	7	0,486	7
Uzaktan Eğitim ile ilgili Hizmet İçi Eğitimlerin Yetersizliği	0,497	8	0,630	8	0,685	8	0,635	8
Uzaktan Eğitimde Ders Dokümanı Yetersizliği	0,908	9	0,968	9	0,961	10	0,959	9
Online Ders Yazılımı Sorunları (Eba, Zoom vb. kaynaklı)	0,932	10	1,071	10	0,960	9	1,018	10

Covid-19 pandemisinin psikolojilerine etkilerine göre "Etkilemedi" ve "Biraz Etkiledi" gruplarının uyarıcı sıraları arasındaki spearman korelasyon katsayısı 0,806, "Etkilemedi" ve "Kötü etkiledi" gruplarının uyarıcı sıraları arasındaki spearman korelasyon katsayısı 0,758, "Biraz etkiledi" ve "Kötü etkiledi" gruplarının uyarıcı sıraları arasındaki spearman korelasyon katsayısı 0,976 olarak hesaplanmıştır ($r_{1-2}=.806,\ p_{1-2}=.005;\ r_{1-3}=.636,\ p_{2-3}=.011;\ r_{2-3}=.976,\ p_{1-2}=.000$). Elde edilen tüm korelasyon değerleri anlamlı olup önem sıraları birlikte değerlendirildiğinde gruplar arasında benzer sıralamaların olduğu görülmektedir. Dolayısıyla Covid-19'un öğretmenler üzerindeki psikolojik etkilerine göre uzaktan eğitimde yaşadığı sorunların benzer olduğu söylenebilir. "Etkilemedi" grubunun örneklem sayısının düşük (n = 85) olması göz önüne alınmalıdır.

Tartışma ve Sonuç

Uzaktan eğitim ile yüz yüze eğitimin karşılaştırıldığı, faydalarının ve zararlarının tartışıldığı bir ortamda sorulara henüz net bir yanıt bulamamışken Covid-19 pandemisinin başlamasıyla birlikte eğitim süreci uzaktan eğitim ile sürdürülmek zorunda kalınmıştır. Uzaktan eğitim, pandemi sürecinde hastalığın yayılmasını engelleme imkânı sunmasından dolayı bir kurtarıcı olarak görülmüş ve uzaktan eğitim ile eğitim süreci yürütülmeye başlanmıştır. Uzaktan eğitimin pek çok yararı olduğu gibi sorunları da içerdiği bir gerçektir. Bu açıdan, uzaktan eğitimde yaşanan sorunların tespit edilmesi ve çözüme kavuşturulması öğrenci ve öğretmenin motivasyonunun yükselmesi ve kaliteli bir eğitim sunulması için gereklidir. Bu çalışma uzaktan eğitimde öğretmenlerin yaşadığı sorunların önem sıralarının belirlenmesi için gerçekleştirilmiştir.

Araştırmanın bulgularına göre uzaktan eğitimde öğretmenlerin yaşadığı en önemli sorunun "Öğrencilerin Derse Katılma İsteksizliği" olduğu görülmektedir. Bu sorunu sırasıyla "İnternet Erişimi Sorunu" ve "Görsel Temasın ve Derse Aktif Katılımın Sınırlı Olması" sorunları takip etmektedir. Ülger (2020), uzaktan eğitimde karşılaşılan sorunlar üzerine yaptığı çalışmada katılımcı öğretmenler sırasıyla "internet erişimi" ve "sanal sınıf uygulamalarına katılım düşüklüğü" sorunlarının önemli olduğunu vurgulamışlardır. Araştırma sonuçları, Ülger'in (2020) sonuçları ile benzerlik göstermektedir. Yesilfidan (2019) ise uzaktan eğitimde sorunlara odaklandığı arastırmasında, bu arastırma sonuclarına benzer sekilde, öğretim elemanlarının "öğrencinin isteksiz oluşu ve canlı derslere devamsızlık olması" sorununu belirttiklerini vurgulamaktadır. Kavuk ve Demirtaş (2021), uzaktan eğitimin sorunları üzerine odaklandığı çalışmasında katılımcı öğretmenler; "evlerde internet olmaması", "canlı derslere zamanında girilmemesi, ses ve kamera sıkıntıları", "öğrencilerin derse odaklanamadığı" ve "iletişim kopukluğu" sorunlarını yaşadığını önemli sorunlar olarak belirtmektedir. Belirtilen sorunların bu araştırma sonuçları ile benzerlik gösterdiği görülmektedir. Bu sonuçlara göre, öğretmenlerin en çok yaşadığı sorun öğrencilerin canlı derslere katılma isteksizliği göstermeleridir. Öğrencilerin canlı derslere katılmama sebebi olarak pek cok neden olabilir. Teknolojik araca (bilgisayar, tablet, telefon) ya da internete sahip olmama, motivasyon düşüklüğü, canlı derslerin verimsiz olarak düsünülmesi veya tasarlanması, devam zorunluluğunun olmaması bu sebeplere örneklerdir. Bu nedenlerin ele alınarak öğrencilerin canlı derslere katılımının arttırılması gerekmektedir.

Uzaktan eğitimde öğretmenlerin daha az önemli olarak gördüğü sorun ise dokuzuncu sıradaki "Uzaktan Eğitimde Ders Dokümanı Yetersizliği" ve onuncu sıradaki "Online Ders Yazılımı Sorunları (Eba Zoom vb. kaynaklı)" sorunlarıdır. Karadağ ve Yücel (2020), yaptıkları araştırmada katılımcı öğrenciler öğretim elemanlarının kullandığı ders dokümanları ve içeriklerin kalitesinden memnuniyetsizlik duydukları görülmüştür. Erzen ve Ceylan (2020), uzaktan eğitimde uygulamadaki sorunlar üzerine yaptığı araştırmada başarılı öğretim elemanlarının daha kaliteli ders içerikleri kullandığını belirtmektedir. Bu araştırmada ise katılımcı öğretmenler uzaktan eğitimde ders dokümanı yetersizliğini daha az önemli bir sorun olarak görmektedir. Bu araştırmalar arasındaki farklılığın sebebi olarak araştırmamızın çalışma grubu olan

ortaokul öğretmenlerinin FATİH projesi ile 2010 yılından bu yana sınıflarda yer alan akıllı tahtalarda kullanılan e-kitap ve akıllı defter içeriklerinin uzaktan eğitime hızlıca adapte ettiği ifade edilebilir. Ayrıca Yamamoto ve Altun (2020), MEB'in ilkokul ve ortaokul düzeyinde üstlendiği uzaktan eğitim derslerini uzman içerik geliştiriciler ve profesyonel stüdyo ve yapım ekipleri ile tüm ülkeye sunduğunu belirmektedir. Bu manada, MEB'e bağlı okullarda görev yapan öğretmenlerin uzaktan eğitimde ders dokümanı yetersizliği sorununu daha az yaşadıkları belirtilebilir. Katılımcı öğretmenler, uyarıcılar arasında daha az önemli sorun olarak online ders yazılımı sorunlarını görmektedir. Bu sonuç, teknolojinin gelişmesi ile birlikte canlı derslerde kullanılan uzaktan eğitim yazılımlarının kullanışlı ve sorunsuz olduğunu göstermektedir.

Öğretmenlerin uzaktan eğitimde yaşadığı sorunların cinsiyete göre benzer sıralamaya sahip olduğu sonucuna ulaşılmıştır. Bu sonuç, uzaktan eğitimde erkek ve kadın öğretmenlerin benzer sorunlar yaşadığını göstermektedir.

Okul türüne göre öğretmenlerin yaşadığı sorunların farklılaştığı sonucuna ulaşılmıştır. Ortaokul ve lise öğretmenleri, en önemli sorun olarak gördükleri "Öğrencilerin Derse Katılma İsteksizliği" sorununu birinci sıraya yerleştirirken, aynı sorunu ilkokul öğretmenleri sekizinci sıraya yerleştirmektedir. Bu sonuç, ilkokul öğrencilerinin canlı derslere istekli bir şekilde katılım sağladığını, fakat ortaokul ve lise öğrencilerinin canlı derse katılma isteksizliği davranışı sergilediğini göstermektedir. Bir diğer farklılaşma ise "Teknolojik Araç Eksikliği (Bilgisayar, Mikrofon, Webcam vb.)" sorununda görülmektedir. İlkokul öğretmenleri bu sorunu birinci sıraya yerleştirirken, ortaokul ve lise öğretmenleri beş ve altıncı sıraya yerleştirmiştir. Uzaktan eğitim sürecinde öğretmenlere teknolojik cihaz temini yapılmadığı bilinmektedir. Dolayısıyla bu sorunun giderilmesi için öğretmenlere uzaktan eğitimde kullanmaları için bilgisayar, tablet, webcam, mikrofon gibi teknolojik cihazların temin edilmesi gerekir.

Uzaktan eğitimde öğretmenlerin kıdem değişkenine göre benzerlik gösterdiği sonucuna ulaşılmıştır. Genellikle yaş olarak büyük olan kıdemli öğretmenlerin teknoloji ile daha ileri yaşlarda tanışmasından dolayı uzaktan eğitim yazılımlarını kullanmalarında sorun yaşanabileceği düşünülür. Fakat kıdem gruplarına göre öğretmenlerin yaşadığı sorunların değişiklik göstermemesi tüm yaş ve kıdem seviyesindeki öğretmenlerin uzaktan eğitim araçlarını kullanma konusunda belli bir düzeye sahip olduklarının ve bu uzaktan eğitim alanında kendilerini geliştirdiklerinin göstergesi olarak görülebilir.

Uzaktan eğitimle ilgili hizmet içi eğitim alma durumuna göre öğretmenlerin yaşadığı sorunların benzer olduğu sonucuna ulaşılmıştır. Bu sonuç, uzaktan eğitimle ilgili hizmet içi eğitim almanın yaşanan sorunlar üzerinde bir etkisinin olmadığını göstermektedir.

Uzaktan eğitim araçlarını kullanma yetkinliği düzeylerine göre alt düzey grubunun orta ve üst düzeyden kısmi olarak farklılaştığı sonucuna ulaşılmıştır. Alt düzey yetkinliğe sahip öğretmenler, "Uzaktan Eğitimde Ders Mahremiyetinin Olmaması" sorununu en önemli sorun olarak görürken, orta ve üst düzey yetkinliğe

sahip öğretmenler bu sorunu sırasıyla beş ve yedinci sıraya yerleştirmişlerdir. Bu durumun sebebi, alt düzey yetkinliğe sahip öğretmenlerin teknolojik araçlara güven duymamaları ve kullanırken kendilerini rahat hissetmemeleri olabilir. Diğer uyarıcılar açısından grupların sıralamaları benzerlik göstermektedir.

Covid-19'un öğretmenlerin psikolojilerine etkisine göre öğretmenlerin uzaktan eğitimde yaşadığı sorunların benzer olduğu görülmektedir. Dolayısıyla Covid-19 pandemisinin sebep olduğu psikolojik etkilerin uzaktan eğitimde yaşanan sorunların sıralamasını neredeyse etkilemediği sonucuna ulaşılmıştır.

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Scaling the Problems Faced by Teachers in Distance Education with Rank-Order Judgements

Abstract

The aim of this study is to determine the order of importance of the problems experienced by teachers in distance education. In this context, survey research method, one of the quantitative research types, was used. The problems experienced by teachers in distance education have been identified. Then, the scale created with the problems was applied to 906 teachers who were in the study group and actively gave distance education. The data obtained from the study group were analyzed using the scaling method with rank-order judgments from the scaling approaches. According to the results of the research, the two most important problems experienced by the teachers are "unwillingness of students to attend classes" and "internet access problem", while two less important problems are "online course software problems" and "lack of course documents in distance education". In addition, while the problem of "unwillingness of students to attend classes" is not seen as an important problem at primary school level, it has been concluded that it is an important problem at secondary and high school levels.

Keywords: Distance education, pandemic, teacher, problem, scaling

Kırsal-Kent Başarı Farkını Açıklayan Öğrenci ve Okul Özellikleri: TIMSS 2019 Analizi

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Öz

Bu araştırmanın amacı kırsaldaki ve kentteki okullarda öğrenci performansını açıklayan öğrenci ve okul özelliklerinin belirlenmesidir. Bu amaçla TIMSS 2019 Türkiye örnekleminde yer alan 4028 öğrenci ve 180 okula ait veriler analiz edilmiştir. Verilerin analizi için örnekleme yapısına uygun olarak aşamalı doğrusal modeller kurulmuş; veriler HLM 7 programı kullanılarak analiz edilmiştir. Elde edilen bulgular, kırsal bölgedeki okulların başarısının kentlere göre düşük olduğunu; sosyoekonomik düzeyin etkisi kontrol edildiğinde bölgeler arası başarı farklarının devam ettiğini göstermiştir. Benzer şekilde okul düzeyi değişkenler modele eklendiğinde okulun bulunduğu bölgenin öğrenci performansı üzerindeki etkisi bir miktar azalmış; öğrencinin fen ve matematikte kendine güven duyması bölgesel başarı farklarını ortadan kaldırma konusunda etkili olmamıştır. Araştırmanın bulguları ilgili literatür bağlamında tartışılmış ve öneriler sunulmuştur.

Anahtar Kelimeler: fırsat eşitliği, kırsal-kent okul, başarı farkı, TIMSS 2019

Makale Hakkında

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Giris

Okul çağındaki bireylerin nitelikli eğitim alması ve bunu sağlayacak politikaların üretilmesi eğitimcilerin tartıştıkları konulardan biridir. Bununla ilgili olarak özellikle eğitimde firsat eşitliği kavramı daha sık gündeme gelmektedir. Bu kavram okulların tüm öğrencilerine eşit öğrenme olanakları sunmasıyla ilgilidir. Yani öğrenme çıktılarının öğrenci cinsiyetinden, aile geçmişinden, sosyoekonomik düzeyinden bağımsız olarak gelişmesidir. Aslında bu kavramla ifade edilmek istenen her bireyin "aynı" olduğunu kabul edip "aynı" eğitimin sağlanmasından ziyade, bireylere istediği yaşam koşullarını elde etmesini sağlayacak potansiyeli ortaya çıkaracak nitelikte eğitim hizmetlerinin sunulmasıdır (Mercik, 2015). Eğitimde eşitlik, sosyoekonomik düzey, cinsiyet veya dil gibi bireylerin iradesi dışındaki özelliklerden bağımsız olarak her bireye başarılı olma ve potansiyelini ortaya çıkarma olanağı sunmaktır. Her bireyin gittiği okuldan, yaşadığı yerden ya da anne-babasının özelliklerinden bağımsız olarak nitelikli eğitim alma hakkı vardır (Sahlberg, 2012). Okul başarısızlığının bireylerin sadece akademik değil, okul sonrası iş ve sosyal yaşantılarını da olumsuz etkileyebileceği bilinen bir gerçektir. Bu durumda eğitimde fırsat eşitliği özellikle sosyal

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adaletin sağlanması bağlamında da üzerinde düşünülmesi gereken bir kavramdır. Ancak dünya gündemindeki sosyal, politik ve ekonomik değişimlere bağlı olarak artan nüfus hareketliliği ülkelerin özellikle demografik yapılarında değişimlere neden olmuştur. Bu tür hareketliliklerden yakından etkilenen ülkeler için eğitim ortamlarında dengesizliklerin ortaya çıkması da kaçınılmazdır. Özellikle demografik hareketliliğe maruz kalan ülkelerin çeşitli alt gruplardan gelen öğrencilerin başarıları arasındaki farkları azaltma ve bu bireylere eşit eğitim olanakları sunma konusunda çok çaba harcamaları gerektiği açıktır. Ancak bireylere eşit eğitim olanağı sunmak üzere ülkelerin yapması gereken pek çok şeyin olduğu da belirgindir (van Damme ve Bellens, 2017).

Eğitimde firsat eşitliğiyle ilgili karşımıza çıkan konulardan biri bölgesel kaynaklı öğrenci başarısındaki farklılıklardır. Bölgelerin kırsal ya da kent olarak sınıflandırılmasında ekonomik faaliyetler, nüfus yoğunluğu ve nüfus miktarı gibi farklı ölcütler dikkate alınmaktadır (Echazarra ve Radinger, 2019). OECD'nin nüfus voğunluğuna göre yaptığı sınıflamada, nüfusu 3.000 altındaki bölgeler kırsal, 3.000 ile 100.000 arası kasaba ve 100.000 üstü ise kentsel bölgedir (daha detaylı tanım ve ölçütler için Echazarra ve Radinger (2019) 'a bakınız). Pek çok ülke için, kırsal bölgelerdeki okullarda öğrenim gören öğrencilerin kentlerdeki akranlarına göre akademik başarı bakımından dezavantajlı olduğunu gösteren çalışma bulguları vardır (Berberoğlu ve Kalender, 2005; Curtis vd., 2017; Mercik, 2015; Mohammadpour ve Abdul Ghafar, 2014; OECD, 2013; Sullivian vd., 2018; Young, 2006). Bölgesel öğrenci başarı farkları sadece az gelişmiş ya da gelişmekte olan ülkeler için bir sorun olarak ele alınmamalıdır. Benzer sorunlar gelişmiş ülkeler için de çözülmesi gereken konular olarak karşımıza çıkmaktadır. Örneğin PISA 2015 verilerine göre Finlandiya ve İzlanda için metropolitan bölgelerdeki ortalama öğrenci başarısı tutarlı bir şekilde daha yüksektir (Nissinen vd., 2018).

Kırsal-kent başarı farklılığına ilişkin açıklamaların özellikle sosyoekonomik özelliklerle iliskilendirildiği dikkat cekmektedir (Mussa, 2013; Nissinen vd., 2018). Cünkü sosyoekonomik düzey öğrencinin yasadığı bölgeyi belirleyen faktörlerden biridir ve bu durum ilgili calısmalarla da desteklenmektedir. Örneğin, Echazarra ve Radinger (2019), özellikle gelismekte olan ülkelerde, kentlerde yasayan ailelerin kırsal bölgelerde yaşayan ailelere göre sosyoekonomik düzeylerinin yüksek olduğunu belirtmektedir. PISA 2009 verilerine göre, Danimarka hariç, Kuzey Avrupa ülkelerinde ve birçok OECD üyesi olmayan ülkede, kentteki okulların sosyoekonomik özelliklerinin kırsal kesime göre daha iyi durumdadır; kentteki okullarda, kırsala göre daha olumlu bir disiplin ortamı vardır ve bu durum öğrenci başarısını da desteklemektedir (OECD, 2013). OECD'nin sosyal kültürel düzey indeksine göre Türkiye'de kentsel bölgelerde okuyan öğrenciler kırsal bölgelerde okuyan akranlarına göre sosyoekonomik olarak avantajlı konumdadır (Echazarra ve Radinger, 2019). Benzer sosyoekonomik özelliklere sahip öğrencilerin aynı okullara gitme olasılığının yüksek olduğu dikkate alındığında, sosyoekonomik düzey sadece öğrenciler arası değil okullar arası başarı farklılıklarına da neden olabilmektedir (Owens, 2018). Pek çok meta- analiz çalışmasında sosyoekonomik düzeyin öğrenci başarısını açıklamada güçlü bir değişken olduğu ortaya konmuştur (Harwell vd., 2017; Liu vd., 2020; Sirin, 2005).

Kırsal – kent ayırımında öne çıkan diğer bir faktör ise öğretmen nitelikleriyle ilgilidir (Mohammadpour ve Abdul Ghafar, 2014; Young, 2006). Pek çok meta-analiz çalışmasında öğretmen niteliği ile öğrenci başarısı arasındaki anlamlı ilişkiler ortaya konmuştur (Bolyard ve Moyer-Packenham, 2008; Burroughs vd., 2019). Öğretmen niteliklerinin kırsal-kent bağlamında ele alındığı ilgili çalışmalarda ise başarı farklılıklarını azaltmak üzere kırsal bölgelerde çalışan öğretmen ve yönetici niteliğinin artırılması önerilmiştir (Luschei ve Chudgar, 2015; Mohammadpour ve Abdul Ghafar, 2014; Yetkiner Özel ve Özel, 2013). Ancak, bilindiği gibi Finlandiya'da öğretmenlerin %95'i yüksek lisans derecesine sahiptir (Paronen ve Lappi, 2018) ve daha önce belirtildiği gibi bu ülke için de kırsal-kent başarı farkları söz konusudur. Bu durumda kırsal-kent başarı farklarını sadece öğretmen-yönetici niteliğiyle açıklamak yetersiz kalmaktadır.

Öğrenciler arası başarı farklarını inceleyen diğer çalışmalarda öne çıkan bulgu ise kırsal ve kentte öğrenim gören öğrencilerin duyuşsal özelliklerindeki farklılıklardır. İlgili çalışmalar kırsal bölgede öğrenim gören öğrencilerin duyuşsal özelliklerinin kentte öğrenim gören akranlarına göre daha zayıf olduğunu göstermiştir (Abrams ve Middelton, 2017; Young, 2006). Örneğin Young (2006) tarafından yapılan çalışma bulguları, kırsal kesimdeki öğrencilerin akademik becerilerine ilişkin algılarının ve eğitim olanaklarını sürdürme konusunda kentteki akranlarına göre "zayıf" olduğunu ortaya koymuştur. Pek çok çalışmada akademik başarı için bilişsel beceriler yanında duyuşsal özelliklerin de önemli olduğu ortaya konmuştur (Duckworth ve Yeager, 2015; He vd., 2021). Bu durum öğrenciler arası başarı farklarını açıklamada duyuşsal özelliklerin önemini ortaya koymaktadır ve bu çalışmada kırsal kent ayrımında öğrencinin duyuşsal özellikleriyle ilgili algıları da ele alınmıştır.

Kırsal kent başarı farklıklarıyla ilgili yukarıda belirtilen örüntüler Türkiye için de geçerlidir. Türkiye, sosyal, politik ve ekonomik değişimlere bağlı olarak artan nüfus hareketliliğine maruz kalan ülkelerden biridir. Bu durumu desteklemek üzere örneğin, TUİK (Türkiye İstatistik Kurumu) (2020) verilerine göre Türkiye'de yaşayan yabancı uyruklu çocuk sayısı 289.167'dir ve bu sayı bir önceki yıla göre artış göstermiştir. Bu durumda, sınıf içinde farklı dil ve kültürden veya sosyoekonomik göstergelere sahip öğrencilerin bir arada bulunması kaçınılmaz olacaktır (Richardson ve Sauers, 2014). Öğrencilerin geçmişleri, ihtiyaçları ve yetenekleri çeşitlendikçe eğitimde fırsat eşitliği sağlanması için öğretim programlarının yeniden yapılandırılması ve fırsat eşitliğini sağlamak üzere yeni politikaların üretilmesini gerektirmektedir. Bu farklıkların bilimsel verilere dayalı olarak, Türkiye evrenini temsil eden bir veri setiyle ve doğru veri analizi yöntemleriyle ortaya konması özellikle bu eşitsizlikleri azaltmaya yardımcı olacak politikaların geliştirilmesine olanak sağlayacaktır.

Kırsal bölgelerdeki öğrencilerin düşük akademik performanslarını açıklamak üzere pek çok çalışma ve kuramsal açıklama bulunmasına karşın, bu açıklamaları daha detaylı ele almak ve daha etkili sonuçlar elde etmek üzere özellikle bağlamsal durumları dikkate alan çalışmalara ihtiyaç vardır. Bu yaklaşımla, kırsal-kent öğrenci performansındaki farklılıkları açıklamak üzere öğrenci özelliklerini ve öğrencinin sosyal bir üyesi olduğu okul özelliklerini birlikte ele almak daha doğru sonuçlar elde etmemize

katkı sağlayacaktır. Ek olarak, bu çalışma bulguları, eğitim reformlarının etkilerini öğrenci ve okul özellikleri bakımından da değerlendirmemizi kolaylaştıracak; farklı düzeylerindeki faktörleri belirleyerek daha işe yarar reformların yapılandırılmasına yardımcı olacaktır. Bilindiği gibi, uluslararası geniş ölçekli test uygulamaları eğitim çıktılarını ve uygulamaları geniş bir çerçevede değerlendirmek üzere araştırmacılara olanaklar sağlamaktadır. Böylece hem uygulama hem de politikalarla ilgili daha derin düsünmek üzere bilimsel veri üretebiliriz. Genel bir eğilim olarak bu veri setlerinin genel ortalamayı dikkate alan bir yaklaşımla analiz edildiği görülmektedir. Bu tür yaklaşım öğrenci başarısını etkileyen faktörleri ortaya koymak acısından oldukça önemlidir; ancak değisen basarı düzeylerinde bu faktörlerin etkisini daha derin olarak analize etmemize olanak sağlamayabilir. Yani ortalama öğrenci basarısı için anlamlı olan bu faktörler örneğin düsük ya da yüksek basarılı öğrenciler icin anlamlı olmayabilir. Bu bağlamda calısmanın amacı TIMSS 2019 5. sınıf matematik ve fen performansındaki kırsal-kent farkını açıklayan öğrenci ve okul özelliklerini ortaya koymaktır. Bu amaçla aşağıdaki sorulara yanıt aranmıştır:

- Öğrencilerin matematik ve fen başarıları bakımından okullar arasında anlamlı bir fark var mıdır?
- 2) Okulun ortalama matematik ve fen başarısı okulun bulunduğu bölgeye göre farklılaşmakta mıdır?
- 3) Öğrencinin sosyoekonomik düzeyi kontrol edildiğinde okulun ortalama matematik ve fen başarısı okulun bulunduğu bölgeye göre farklılaşmakta mıdır?
- 4) Okul özellikleri dikkate alındığında okulun ortalama matematik ve fen başarısı okulun bulunduğu bölgeye göre farklılaşmakta mıdır?
- 5) Öğrencinin duyuşsal özellikleri dikkate alındığında okulun ortalama matematik ve fen başarısı okulun bulunduğu bölgeye göre farklılaşmakta mıdır?

Yöntem

Evren ve Örneklem

TIMSS uygulaması 4. sınıf ve 8. sınıf düzeyinde yapılmaktadır. Örneklemlerdeki sınıf düzeylerinin belirlenmesinde genellikle yaş ortalaması dikkat alınmaktadır ve 4. sınıf uygulaması için yaş ortalamasının en az 9,5 ve 8. sınıf için en az 13,5 olması önerilmektedir. Ülkelere göre yaş ortalaması değişebileceğinden bazı ülkelerde 4. sınıf yerine 5. ya da 6. ve 8. sınıf yerine 9. veya 10. sınıflar örnekleme dahil olmaktadır (La Roche vd., 2020). Bu araştırmanın örneklemini TIMSS 2019 uygulamasına katılan Türkiye'deki 5. sınıf öğrencileri oluşturmaktadır. Araştırmada erken yaş gruplarının seçilme nedeni, kırsal ve kentsel bölgede öğrenci başarısında etkili faktörlerin erken dönemde fark edip, gerekli önlemlerin zaman geçmeden alınması için yol göstermektir.

TIMSS örnekleminin belirlenmesi süreci seçkisiz iki aşamalı tabakalı örnekleme dayanmaktadır. İlk aşamayı okullar, diğer aşamayı bu okullardan seçkisiz seçilen bir veya daha fazla sınıf oluşturmaktadır. Okulların seçilmesinde ülkelerin demografik özellikleri (bölge ve sosyo ekonomik düzey vb.) rol oynayabilir (La Roche

vd., 2020). TIMSS 2019 Türkiye örneklemini 180 okul ve 4028 öğrenci oluşturmaktadır. Öğrencilerin %52'si kız ve %48'i erkektir. TIMSS veri setinde okulun bulunduğu yerleşim yerine göre dört kategori oluşturulmuştur. Buna göre örneklemde yoğun nüfuslu kentten 75, kenar semtlerden 17, orta büyüklükteki illerden 55 ve küçük illerden ya da kasabadan 33 okul yer almaktadır.

TIMSS verilerinde örneklemler evreni temsil edecek şekilde belirli miktar örnekleme hatası dikkate alınarak tasarlanmakta ve veriler işlendikten sonra, öğrenci özelliklerini tanımlayan ortalamalar ve yüzdeler gibi örnek istatistikler, evren parametrelerinin ağırlıklı tahminleri olarak hesaplanmaktadır. Örneklem ağırlıklandırmaları okul, sınıf ve öğrenci düzeyinde yapılabilir (La Roche vd., 2020). Bu araştırmada iki düzeyli bir örneklem ele alındığından parametrelerin doğru kestirilmesi için okul ve öğrenci düzeyinde örneklem ağırlıklandırmalarından yararlanılmıştır.

Veriler ve Toplanması

Araştırmada TIMSS 2019 matematik ve fen alanlarına ait başarı puanları ve öğrenci ve okul anketlerinden elde edilen veriler kullanılmıştır. İlgili verilere araştırmacılara açık olarak sunulan https://timss2019.org/international-database/ sayfasından erişilmiştir. TIMSS uygulamasında kullanılan ölçme araçlarının geliştirilme aşamasında ulusal araştırma koordinatörleri ve TIMSS uzmanları birlikte rol almakta, ölçme araçlarının geçerliği ve güvenirliği uygulama öncesinde sağlanmaktadır (Ayrıntılı teknik bilgi için bkz: https://timssandpirls.bc.edu/timss2019/methods/pdf/TIMSS-2019-MP-Technical-Report.pdf). Araştırmada ele alınan değişkenlere ilişkin detaylı açıklamalar aşağıda verilmiştir:

Bilişsel Alan Verileri (Bağımlı Değişkenler)

Öğrencilerin matematik ve fen bilimleri alanlarında kazandıkları bilgi ve becerilerin değerlendirilmesini amaçlayan TIMSS tarama çalışması, ülkelerin eğitim programını temel almakta ve eğitim programında ölçülmek istenilen kazanımlar dikkate alınarak sorular hazırlanmaktadır. TIMSS uygulamasında sorular öğrenme alanı ve bilissel alan olmak üzere iki alan dikkate alınarak hazırlanır. Matematik dördüncü sınıflar için öğrenme alanları: sayılar (%50), ölçme ve geometri (%30) ve veriler (%20); öğrencinin ortaya koyması gereken bilişsel süreçler: bilme (%40), uygulama (%40) ve akıl yürütme (%20). Bilme; kavramları, bilgileri ve süreçleri, uygulama; bilgilerin uygulama becerisini ve akıl yürütme, alışılmadık durumlar, karmaşık bağlamlar ve çok adımlı problemlerin çözümünü kapsar (Cotter vd., 2020). Dördüncü sınıf fen bilimleri öğrenme alanı ise "canlı bilimleri (%45), fiziksel bilimler (%35) ve yer bilimlerinden (%20)" oluşmaktadır. Bilişsel alanlar matematik alanında olduğu gibi bilme (%40), uygulama (%40) ve akıl yürütme (%20) süreçlerinden oluşmaktadır (Cotter vd., 2020). Soru dağılımı bakımından matematik alanında öğrenme alanı olarak sayılara, fen alanında ise canlı bilimine ağırlık verilmiştir. Bilişsel alanda bilgi ve uygulamaya dayalı hazırlanan soru sayısı daha fazladır. Bu durum eğitim programına ve öğrencinin sınıf düzeyine göre düzenlenmektedir. Sorular seçme gerektiren ya da öğrencinin yapılandırması gereken madde türlerinde kurgulanmıştır. TIMSS 2019 uygulamasında matematik ve fen de ayrı ayrı 175 soru kullanılmıştır.

Öğrencilerin bilişsel alandaki performansları hakkında daha doğru kestirimler yapabilmek için TIMSS veri setinde her öğrenciye ait tek bir yeterlik değeri yerine olası beş değer (plausible value) raporlanmaktadır. Uygulamada öğrenci her soruyu görme ve yanıtlama olasılığı olmadığı için öğrencinin tüm sorulara verebilecekleri yanıtları da içeren bir kestirim yapılır. Bu nedenle öğrencinin bilişsel becerileri dikkate alınarak yapılan analizlerde ve grup verilerinin karşılaştırılmasına dayalı çalışmalarda bu beş değerin birlikte kullanılması önerilmektedir (Arıkan vd., 2020; Rutkowski, vd., 2010; Von Davier, 2020). Bu araştırmada matematik ve fen alanları için olası değerlerin tümünden yararlanılarak analizler yapılmıştır.

Öğrenci ve Okul Verileri (Bağımsız ve Kontrol Değişkenleri)

Öğrencilerden anket yoluyla toplanan yanıtlar birinci düzey veriler olarak analize dahil edilmiştir. Öğrencilere fen ve matematik öğrenmeleriyle ilişkili evdeki ve okuldaki eğitsel deneyimlerine dayalı sorular sorulmuştur. Bu araştırmada öğrencinin sosyoekonomik düzeyi, öğretimin anlaşılırlığı ve açıklığı, ilgili dersi öğrenmeyi sevme, ilgili derste kendine güvenme, okul aidiyeti ve öğrenci zorbalığı değişkenleri incelenmiştir. Bu değişkenlere ait kısa açıklamalar TIMSS teknik raporundan özetlenmiştir (Yin ve Fishbein, 2020):

Sosyoekonomik Düzey. TIMSS'de öğrencinin sosyoekonomik düzey göstergeleri evdeki öğrenme olanakları, en yüksek ebeveyn eğitim düzeyi, en yüksek ebeveyn meslek düzeyi olarak ele alınmaktadır. Araştırmada bu üç değişken incelenmiş ve üç değişkenin indeks değerleri kullanılmıştır.

Öğretimin Anlaşılırlığı ve Açıklığı (Matematik ve Fen). Ölçekler ilgili dersin işleyişi hakkında öğrenciden bilgi almak amacıyla geliştirilmiştir. Ölçeklerde; "öğretmenimi anlamak kolaydır, öğretmenim sorularımı açık olarak yanıtlar, öğretmenim öğrenmemize yardımcı olmak için farklı yollar dener" şeklinde altışar madde yer almaktadır. Ölçeklerden alınan yüksek puanlar dersin anlaşılma düzeyinin yüksek olduğunu ortaya koymaktadır. Cronbach Alfa güvenirliği matematik için 0,70 ve fen bilimleri dersi için 0,76'dır.

Matematik/Fen Dersini Öğrenmeyi Sevme. Ölçekler öğrencinin ilgili dersi sevme durumu hakkında bilgi vermektedir. Ölçekte ".... öğrenmekten zevk alırım, sıkıcıdır, problemleri çözmeyi severim" şeklinde maddeler yer almaktadır. Matematikte 11, fende dokuz madde bulunmaktadır. Ölçeklerden alınan yüksek puanlar öğrencinin ilgili dersi sevdiğini göstermektedir. Matematikte ölçeğin Cronbach Alfa güvenirliği 0,88 ve fen için 0,86 hesaplanmıştır.

Matematikte/Fende Kendine Güvenme. Ölçekler, öğrencilerin ilgili derste kendilerine ne kadar güvendiklerini ortaya koymak amacıyla geliştirilmiştir. Maddeler; "genellikle dersinde başarılıyım, dersinde hızlı öğrenirim, diğer derslere göre dersinde zorlanırım" biçimindedir. Ölçeğin matematik bölümünde dokuz, fen bölümünde yedi

madde yer almaktadır. Ölçekten alının yüksek puanlar öğrencinin ilgili derste kendine güveninin yüksek olduğunu göstermektedir. Cronbach Alfa güvenirliği matematik dersi için 0,85 ve fen için 0,81'dir.

Okula Aidiyet Duygusu. Öğrencinin okul hakkındaki düşüncelerini ortaya çıkarmak amacıyla hazırlanmıştır. "Okulda olmayı severim, okulda kendimi güvende hissederim, bu okula gittiğim için gurur duyuyorum" şeklinde beş madde bulunmaktadır. Ölçekten alınan yüksek puanlar öğrencinin okul aidiyet duygusunun yüksek olduğunu göstermektedir. Türkiye için ölçeğe ait Cronbach Alfa değeri 0,66'dır.

Öğrenci Zorbalığı. Öğrencinin okul içi zorbalığa maruz kalma durumu ölçülmektedir. "Arkadaşlarım oyunlarına ve etkinliklerine beni dahil etmez, arkadaşlarım bazen benden bir şeyler çalar, arkadaşlarım istemediğim şeyleri yapmak için beni zorlar" şeklinde 11 madde yer almaktadır. Ölçekten alının yüksek puanlar öğrencinin daha az zorbalığa maruz kaldığını göstermektedir. Türkiye için hesaplanan Cronbach Alfa değeri 0,83'tür.

Araştırmadaki okul özelliklerine ait veriler okul müdürleri ya da yöneticilerden toplanmış ve analize ikinci düzey veriler olarak dahil edilmiştir. İkinci düzey değişkenler, okulun bulunduğu bölge, kaynak yetersizliğine bağlı öğretimin etkilenme durumu, okulun akademik başarıya verdiği önem, okul disiplini ve okul öncesi aritmetik ve okuma yazma becerisine sahip olmadır. Bu değişkenlere ait indeks değerleri kullanılmıştır. Bu değişkenlere ait kısa açıklamalar TIMSS teknik raporundan özetlenmiştir (Yin ve Fishbein, 2020):

Okulun Bulunduğu Bölge. Okulun bulunduğu yerleşim yerine göre dört kategori bulunmaktadır. Bunlar yoğun nüfuslu kentte okul, kenar semtte okul, orta büyüklükteki ilde okul, küçük ilde okul kategorileridir.

Matematikte/Fende Kaynak Yetersizliğine Dayalı Öğretimin Etkilenmesi. Ölçek okuldaki kaynakların yetersizliğine bağlı olarak eğitimin aksama durumunu ortaya koymaktadır. Genel okul kaynakları ve ilgili derse dayalı kaynaklar olmak üzere iki kısım vardır. Matematik bölümü 13, fen bölümü 12 maddeden oluşmaktadır. Eğitim materyallerine, okul binasına, ısınma sistemlerine ya da ilgili derse yönelik kütüphane kaynaklarına, alanda uzman eğitmenin bulunmasına ilişkin maddeler yer almaktadır. Ölçekten alının yüksek puanlar kaynak yetersizliğinin az olduğu ve öğretimin bundan az etkilendiği şeklinde yorumlanmaktadır. Ölçeğin Cronbach Alfa güvenirliği matematik ve fen için 0,92'dir.

Okulun Akademik Başarıya Verdiği Önem. Bu ölçekle öğretmen, veli ve öğrencilerin akademik başarıya verdikleri değer belirlenmektedir. Ölçekte "öğretmenin öğrencilere ilham verme yeteneği, velinin okul etkinliklerine dahil olma durumu, öğrencinin okulun hedeflerine ulaşma becerisini" ele alan 11 madde yer almaktadır. Ölçekten alının yüksek puanlar okulun akademik başarıya önem verdiğini göstermektedir. Ölçeğin Cronbach Alfa güvenirliği 0,89'dur.

Okul Disiplini. Ölçekle, okul içerisinde belirli sorunlarla ne sık karşılaşıldığını ortaya koymak amaçlanıştır. Ölçekte okula geç gelme, kopya çekme, hırsızlık gibi olumsuz

durumlara ilişkin 10 madde vardır. Ölçekten alının yüksek puanlar okul disiplinin artığı şeklinde yorumlanır. Ölçeğin Cronbach Alfa güvenirliği 0,96 olarak hesaplanmıştır.

Okula Aritmetik ve Okuma Yazma Becerisine Sahip Başlama. Ölçek, öğrencinin aritmetik ve okuma ve yazma becerine sahip olarak okula başlama durumu belirlemek üzere bazı kelimeli okur, cümleleri okur, 1-10 kadar yazabilir, adını yazabilir şeklinde 12 madde içermektedir. Ölçekten alının yüksek puanlar öğrencinin ilgili beceriye sahip olduğunu göstermektedir. Ölçeğin Cronbach Alfa güvenirliği 0,98'dir.

Verilerin Analizi

TIMSS uygulamasında tabakalı örnekleme yaklaşımı kullanılmıştır ve veriler iç içe yuvalanmıştır; yani uygulamaya katılan öğrenciler bir sınıf içerisinde bulunmakta, okul ise bu sınıflardan oluşmaktadır. Her düzeyin elemanları üstteki düzeylerin belirli özelliklerinden ve deneyimlerden ortak olarak etkilenir. Bu nedenle gözlemler birbirinden bağımsız değildir. Veri setinin bu yapısı dikkate alınarak analizler için iki düzeyli Hiyerarşik Doğrusal Modeller kullanılmıştır. Modellerde birinci düzey öğrenci, ikinci düzey okuldur. Analizler HLM7 üzerinden REML (Restricted Maximum Likelihood) kestirim yöntemiyle yapılmıştır.

Modeller oluşturulurken açımlayıcı model yaklaşım kullanılmış değişkenlerin sabit ve tesadüfi etkisi test edilmiştir. Hox (2002), güçlü teorilere dayanmayan ilişkisel çalışmaların açımlayıcı modele dayalı oluşturulmasını önermiştir. Model matematik ve fen başarısı için ayrı ayrı oluşturulmuş; değişkenler modele birer birer eklenerek modelde anlamlı yordayıcılar tutulmuş ve anlamlı olmayanlar modelden çıkarılmıştır (Raudenbush ve Bryk, 2002). Analizlerden önce çok değişkenli regresyon ve hiyerarşik modellerin varsayımları test edilmiş matematik ve fene ait verilerde çoklu bağlantı problemi gözlenmiştir. Buna göre öğrencinin sosyoekonomik düzeyinin göstergeleri olan evdeki olanaklar, ebeveyn eğitim düzeyi ve ebeveynin meslek düzeyleri arasında yüksek korelasyonlar (r > 0.80) söz konusudur. Bu nedenle analizlere evdeki olanaklar dahil edilmiş; VIF, CI ve Tolerans değerleri incelendiğinde çoklu bağlantı probleminin çözüldüğü gözlenmiştir. Ayrıca standardize edilmiş artık değerler ve standardize edilmiş yordanan değerler için saçılma diyagramları incelenmiş, doğrusal ilişkilerin olduğu ve bağımlı değişkenlerin normal dağıldığı belirlenmiştir.

Modelin oluşturulması aşaması üç adımda gerçekleştirilmiştir. İlk adımda boş model olarak adlandırılan Tesadüfi etkiler Tek Yönlü ANOVA Modeli oluşturulmuş ve okullar arasında matematik ve fen başarıları bakımından fark olup olmadığı incelenmiştir. Bu aşamada hiyerarşik modele devam edebilmek için okullar arasındaki farklılaşmanın en az %10 oranında olması şartı aranmıştır (Ma, 2001). Daha sonra koşullu modeller oluşturulmuştur. İlk olarak, kırsal ve kentsel kesim ayrımda en göze çarpan değişken öğrencinin sosyoekonomik düzeyi değişkeni kontrol edildiğinde okulun bulunduğu bölgenin başarı üzerindeki etkisi test edilmiştir. Daha sonra diğer öğrenci ve okul düzeyi değişkenleri model eklenerek bu etkinin değişip değişmediği incelenmiştir. Test edilen modeller aşağıda verilmiştir.

Boş model:

$$Y_{ij}(PVMatematik/Fen) = \beta_{0j} + r_{ij}$$

$$\beta_{0j} = \gamma_{00} + u_{0j}$$

Koşullu Modeller:

$$Y_{ij}$$
 (PVMatematik/Fen) = $\beta_{0j} + r_{ij}$

$$\beta_{0j} = \gamma_{00} + \gamma_{01} \; (OklB\"{o}lge) + \ldots + u_{0j} \quad ve$$

$$Y_{ij}\left(PVMatematik/Fen\right) = \beta_{0j} + \beta_1\left(EvKaynak\right) + \dots + r_{ij}$$

$$\beta_{0i} = \gamma_{00} + \gamma_{01}$$
 (OklBölge)+....+ u_{0i}

$$\beta_{1j}=\gamma_{10}$$

$$\beta_{2i} = \gamma_{10}$$

Modeldeki sembollerin açıklamaları aşağıda verilmiştir:

Yij (PVMatematik/Fen): j okulundaki i öğrencisinin fen veya matematik başarısı

 $\beta_{0j:}j$. okulunun fen veya matematik ortalama başarısı

 γ_{00} : Her okulun fen veya matematik için başarı ortalamalarının ortalaması

γ₀₁: Okul düzeyinde değişken için eğim

u_{0i}: j. okulun sabit üzerindeki tesadüfi etkisi

r_{ij:} j. okuldaki i. öğrenciyle ilişkili tesadüfi hata

Etik Kurul İzin Bilgileri

Çalışma halka açık bir veri setinin analizi şeklinde gerçekleştirildiği için Etik Kurul İzni alınmasını gerektiren çalışmalar grubunda yer almamaktadır. Bu nedenle Etik Kurul İzni beyan edilmemiştir.

Bulgular

Betimleyici İstatistikler

Araştırmada ilk olarak örneklem ağırlıkları dikkate alınarak değişkenlere ait betimsel istatistikler elde edilmiş; ilgili değişkenlerin fen ve matematik performansıyla ilişkisi hesaplanmıştır. İlgili betimsel istatistikler Tablo 1 ve 2'de gösterilmiştir.

Tablo 1Araştırmanın Öğrenci ve Okul Düzeyi Değişkenlerine Ait Ağırlıklandırılmış Betimsel İstatistikler

*			Mate	ematik			Fen			
Öğrenci düzeyi değişkenler	N	X	S	Min.	Max	N	X	S	Min.	Max.
Evdeki olanaklar	1038343	8,72	2,00	3,81	14,87					
Okula aidiyet duygusu	1083992	10,69	1,96	3,14	12,75					
Öğrenci zorbalığı Desrte öğretimin	1087001	9,90	1,95	2,86	12,71					
açıklığı ve anlaşılırlığı	1103767	10,06	1,96	2,55	12,25	110353	10,16	1,93	2,65	12,14
Dersi öğrenmeyi sevme	1115436	10,93	1,89	3,85	13,14	111546	10,87	2,09	2,69	13,19
Derste kendine güven	1099542	10,11	1,09	2,79	14,40	106322	10,40	1,98	3,431	13,29
PV1-5	4028	522,86	99,50	114,792	844,850	4028	26,36	90,90	107,55	786,96
Okul düzeyi			Mate	ematik			Fen			
değişkenler	N	X	SS	Min	Max	N	X	SS	Min	Max
Derste Kaynak yetersizliğine dayalı öğretimin etkilenmesi	16301	8,07	2,00	2,267	15,77	16301	7,90	2,25	2,54	15,95
Okulun akademik başarıya verdiği önem	16301	8,88	1,77	5,655	16,40					
Okul disiplini	16301	9,01	2,01	3,70	12,79					
Okula aritmetik ve okuma yazma becerisine sahip başlama	16007	8,51	2,05	6,11	13,85					

Tablo 1'de tüm veri setini temsil eden verilere göre Türk öğrencilerin matematik başarı ortalaması 522 ve fen başarı ortalaması ise 536 olarak kestirilmiştir. Araştırma değişkenleri arasında 0,559 ve 0,112 arasında değişen anlamlı ilişkiler elde edilmiştir.

Tablo 2Öğrenci ve Okul Düzeyi Değişkenlerinin Matematik ve Fen Başarısıyla İlişkisi

Öğrenci düzeyi değişkenler	Matematik	Fen
Evdeki olanaklar	0.559**	0.552**
Öğretimin açıklığı ve anlaşılırlığı	0.286**	0.272**
Matematik/fen dersi öğrenmeyi sevme	0.239**	0.302**
Matematikte/fende kendine güvenme	0.412**	0.335**
Okula aidiyet duygusu	0.131**	0.112**
Öğrenci zorbalığı	0.216**	0.196**
Okul düzeyi değişkenler		
Okulun bulunduğu bölge	-0.408**	-0.443**
Matematikte/Fende kaynak yetersizliğine dayalı öğretimin etkilenmesi	0.139	0.148*
Okulun akademik başarıya verdiği önem	0.465**	0.421**
Okul disiplini	0.291**	0.287**
Aritmetik ve okuma yazma becerisiyle okula başlama	0.226**	0.232**

^{**}p < ,01, *p < .05

Öğrenci performansına ilişkin olası değerler ve örneklem ağırlıkları dikkate alınarak okulun bulunduğu bölgeye göre öğrencilerin matematik ve fen başarı ortalamaları hesaplanış ve Tablo 3'te verilmiştir.

Tablo 3Okulun Bulunduğu Bölgeye Göre Matematik ve Fen Başarına Ait Ortalama ve Standart Sapma Değerleri

Okulun bulunduğu bölge	Matematik ortalama (ss)	Fen ortalama (ss)
Yoğun nüfuslu kent	546,21(91,22)	550,01(78,95)
Kenar semt	535,26 (86,85)	539,22 (74,71)
Orta büyüklükteki il	526,87 (94,80)	530,13(84,24)
Küçük il	456,56 (101,10)	459,79 (100,40)

ss: standart sapma

Tablo 3'e göre, yoğun nüfuslu kentte yer alan okulların matematik başarı ortalaması 546.21 ve fen başarı ortalaması 550,01 olarak hesaplanmıştır. Küçük illerde yer alan okulların başarı ortalaması matematik için 456,56 ve fen için 459,79 olmuştur. Yoğun nüfuslu yerleşim birimlerinden küçük illere doğru matematik ve fen performansına düşüş gözlenmektedir. Yerleşim birimlerinde ortaya çıkan bu farklara ilişkin detaylı incelemelere aşağıda verilmiştir.

Bölgesel Farklara İlişkin Bulgular

Matematik ve fen başarı ortalamaları bakımından okullar arasında anlamlı bir farkın olma durumu tesadüfi etkiler Tek Yönlü ANOVA modeliyle incelenmiştir. Bu modelde ayrıca öğrenci performansına ait varyansın kaynaklarını belirlemek üzere sınıf içi korelasyon katsayısı (ICC) hesaplanmıştır. Hesaplanan değer okul düzeyine ait varyans oranını gösterir ve korelasyon kat sayısı ya da etki büyüklüğü indeksi olarak yorumlanır (Snijders ve Bosker, 2012). Boş modele ilişkin bulgular Tablo 4'te verilmiştir.

Tablo 4Boş Model İçin Varyans Bileşenleri

Düzey	Matematik	Fen
Öğrenciler arası σ ²	6000,92	4999,33
Okullar arası $ au_{00}$	4691,73	4631,85***
ICC	0,44	0,48

^{***}p < .001

Tablo 4'e göre, sınıf içi korelasyon katsayısı (ICC) = $\tau 00 / (\tau 00 + \sigma 2)$ hesaplandığında matematik başarısındaki değişimin %44'ü ve fen başarısındaki değişimin %48'i okular arası farklardan kaynaklanmaktadır. Ayrıca matematikteki varyansın %56'sı ve fendeki

varyansın %52'si öğrenci özellikleriyle açıklanmaktadır. Türkiye'de matematik ve fen başarılarının okullar arası ve öğrenciler arası farklılıktan kaynaklanma olasılıkları birbirine yakın olmakla birlikte öğrenciler arası farklılıkların bir miktar fazla olduğu gözlenmiştir.

Okulun bulunduğu bölgenin okulun ortalama fen ve matematik başarısı üzerindeki etkisini belirlemek için modele ilk olarak bu değişken eklenmiştir. Modele ilişkin bulgular Tablo 5'te verilmiştir.

Tablo 5 *Modele Okulun Bulunduğu Bölge Eklendiğinde Sabit ve Tesadüfi Etki Sonuçları*

	Mate	matik	Fen		
Sabit Etkiler	Beta	SH	Beta	SH	
Okul ortalamaları için, Sabit γ_{00}	587,87	12,31	592,79	12,17	
OklBölge γ_{01}	-29,81**	5,527	-29,30**	5,90	
Tesadüfi Etkiler	Varyans		Varyans		
Okullar arası	3522,10**		3484.86**		
Öğrenciler arası	6001,24		5010.23		

^{**}p < .01, SH: standart hata

Tablo 5'e göre, okulun bulunduğu bölge hem matematik hem de fen başarısının anlamlı bir yordayıcısıdır ($\gamma_{01\text{mat}} = -29,81$, $\gamma_{01\text{fen}} = -29,302$; p < ,01). Okulun bulunduğu kentin nüfus yoğunluğu artıkça okulun ortalama başarısı da artmaktadır. Diğer bir ifadeyle küçük ilde bulunan okulların ortalama matematik başarısı büyük illerdeki okulların ortalamasına göre matematikte 29,81, fende ise 29,30 puan düşüktür, Okullar arasındaki hem ortalama matematik ve hem de ortalama fen başarıları arasındaki farklılaşmasının %25'i öğrencinin yaşadığı bölgeden kaynaklanmaktadır.

Modelin geliştirilmesinin ikinci adımında bölge ayrımında etkili olan SED faktörü kontrol edilmiş ve okulun bulunduğu bölgenin öğrenci başarısını yordama gücü incelenmiştir. SED kontrol edildiğinde sabit ve tesadüfi etki sonuçları Tablo 6'da gösterilmiştir.

Tablo 6SED Kontrol Edildiğinde Sabit ve Tesadüfi Etki Sonuçları

	Matematik		Fen		
Sabit Etkiler	Beta	SH	Beta	SH	
Sabit γ ₀₀	393,88	19,938	424,15	18,12	
Okl Bölge γ_{01}	-14,34**	4,588	-15,70**	4,84	
Ev Kaynak γ ₁₀	18,19**	1,721	15,53**	1,51	
Tesadüfi Etkiler	Varyans	•	Varyans	•	
Okullar arası	1964,99**		2145,87**		
Öğrenciler arası	5631,11		4684,96		

^{**}p < .01, *p < .05, SH: standart hata

Tablo 6'ya göre SED değişkeni matematik ve fen başarı ortalamalarının anlamlı bir yordayıcısıdır ($\gamma_{10\text{mat}} = 18,19$, $\gamma_{10\text{fen}} = 15,53$; p < 0,01). Öğrencinin evdeki olanakları artıkça matematik ve fen başarısı artmaktadır. SED değişkeni kontrol edildiğinde okulun bulunduğu bölgenin matematik başarısı üzerindeki etkisi 29,81'den 14,34'e, fen başarısı üzerindeki etkisi 29,30'dan 15,71'e düşmüştür.

Modelin gelişimsel sürecine okul düzeyi değişkenleri eklenerek devam edilmiştir. Dört okul düzeyi değişkeninin eklenmesiyle elde edilen sabit ve tesadüfi etkilere dayalı sonuçlar Tablo 7'de verilmiştir.

Tablo 7Okul Özellikleri Modele Eklendiğinde Sabit ve Tesadüfi Etki Sonuçları

	Matematik		Fen	
Sabit Etkiler	Beta	SH	Beta	SH
Sabit γ ₀₀	228,31	34,00	287,61	38,18
OklBölge yo1	-11,02**	3,87	-12,76**	4,04
OklDisiplin γ ₀₂	10,04**	2,84	10,74**	3,05
Oku-Arit γ ₀₃	-	-	4,04*	1,81
OklÖnem γ ₀₄	7,90**	2,33	-	-
Evkaynak γ ₁₀	17,60**	1,65	15,21**	1,42
Tesadüfi Etkiler	Varyans		Varyans	
Okullararası	1412,70**		1666,29**	
Öğrenciler arası	5627,99		4682,49	

^{**}p < .01, *p < .05, SH: standart hata

Tablo 7'deki bulgular incelendiğinde okul disiplini değişkeninin hem matematik hem de fen başarısının anlamlı bir yordayıcısı olduğu görülmüştür ($\gamma_{02\text{mat}} = 10,04$, $\gamma_{02\text{fen}} = 10,74$, p < 0,01). Okul disiplini artıkça matematik ve fen başarısı artmıştır. Matematik performansı için okulun akademik başarıya verdiği önem ($\gamma_{04} = 7,90$, p < 0,1); fen performansı için okula aritmetik ve okuma becerisine sahip olarak başlama ($\gamma_{03} = 4,04$, p < 0,1) anlamlı birer yordayıcı olmuştur. Okuldaki kaynakların yetersizliği öğrencilerin matematik ve fen performasını yordamada anlamlı bir değişken olmamıştır.

Yukarıdaki modelde öğrencinin SED ve okul düzeyi değişkenleri kontrol edildiğinde okulun bulunduğu bölgenin etkisi matematik başarısında 14,34'ten 11,02'ye, fen başarısında 15,71'den 12,76'ya düşmüştür.

Son adımda modele öğrenci düzeyi değişkenler eklenmiş ve bunların öğrenci performansını yordama gücü test edilmiştir. İlgili modele ait sonuçlar Tablo 8'de gösterilmiştir.

Tablo 8Öğrenci Özellikleri Modele Eklendiğinde Sabit ve Tesadüfi Etki Sonuçları

	Matematik		Fen	
Sabit Etkiler	Beta	SH	Beta	SH
Sabit γ ₀₀	88,47	38,10	197,70	43,75
OBölge γ ₀₁	-14,10**	4,05	-14,93**	4,13
ODisiplin γ ₀₂	10,53**	2,97	11,04**	3,17
Oku-Arit γ ₀₃	-	-	3,64*	1,90
OÖnem γ_{04}	7,84**	2,38	-	-
EKaynak γ ₁₀	13,23**	1,48	12,32**	1,31
Güven Fen-Mat γ ₂₀	17,82**	0,99	11,86**	0,98
Tesadüfi Etkiler	Varyans		Varyans	
Okullararası	1498,44**		1758,40**	
Öğrenciler arası	4406,52		4137,46	

^{**}p < .01, *p < .05, SH: standart hata

Tablo 8'e göre, okul düzeyi değişkenlerinin matematik ve fen başarısı üzerinde etkileri öğrenci düzeyi değişkenleri modele eklenince devam etmiştir. Birinci düzey değişkenlerden öğrencinin matematik ve fen dersinde kendisine güveni artıkça matematik ve fen başarısının artığı belirlenmiştir ($\gamma_{20\text{mat}} = 17,82, \gamma_{20\text{fen}} = 11,86, p < ,01$). Öğrenci ve okul düzeyindeki tüm değişkenler dikkate alındığında altı değişken okulların matematik başarısındaki farklılaşmasının %45'ini ve fen başarısındaki farklılaşmanın %39'unu açıklamaktadır. Buna göre araştırmada ele alının değişkenler öğrencinin matematik ve fen başarılarının değişmesinde önemli bir role sahiptir.

Sonuç, Tartışma ve Öneriler

Bu araştırmanın amacı kırsaldaki ve kentteki okullarda öğrenci performansını açıklayan öğrenci ve okul özelliklerinin ortaya konmasıdır. Bu amaçla Türkiye evrenini temsil eden TIMSS 2019 verileri, örnekleme yapısına uygun olarak hiyerarşik doğrusal modeller kurularak analiz edilmiştir. Araştırmanın ilk bulgusunda. TIMSS 2019 matematik ve fen performansı bakımından okullar arası istatistiksel olarak anlamlı farkların olduğunu bulunmuştur. Bu farklılaşmada okuldan kaynaklı özelliklerin önemli bir yeri vardır. Etkili okul kavramına ilişkin tartışmalar, okullar arasındaki başarı farklarını okul özelliklerinden kaynaklandığını iddia etmektedir (Balcı, 2014; Şişman, 2018). Bu faktörler arasında araştırmada okul düzeyi değişkenler olarak ele alınan (1) güvenli ve düzenli okul ortamı, (2) okulun başarıya verdiği önem, (3) öğrenme ortamına dayalı fırsatlar sayılabilir (Lezotte, 1999). Araştırma bulgularına göre okul özellikleri bakımından öğrenci özellikleri de okullardaki başarılar arasındaki farklılaşmada önemlidir. Coleman ve diğerlerinin (1966) uzun süre kabul gören araştırmasında öğrenci başarısında okul özelliklerinden ziyade öğrenci özelliklerinin önemli olduğu savunulsa

da zaman içerisinde hem öğrenci özelliklerinin hem de okul özelliklerinin başarıda önemli rolü olduğu kanıtlanmıştır (Konstantopoulos ve Borman. 2011).

Kurulan açımlayıcı modele göre araştırmanın diğer bulgusu TIMSS 2019 matematik ve fen performansı bakımından kentte bulunan okulların ortalama başarısının kırsaldakilere göre daha yüksek olmasıdır. Pek çok araştırma bulgusu bunu destekler niteliktedir (Curtis vd., 2017; Mercik. 2015; Mohammadpour ve Abdul Ghafar, 2014; OECD, 2013; Sullivian vd., 2018). Bu okulların performans düşüklüğü özellikle kırsal bölgedeki sosyoekonomik göstergelerin yetersizliği, eğitim olanakları ya da öğretmen niteliği gibi değişkenlerle açıklanmıştır. Gelişmekte olan ülkeler için kırsal kesimde bireylerin sosyoekonomik özelliklerinin zayıf olduğu bilinmektedir (Echazarra ve Radinger, 2019). Bu durum, sosyoekonomik geçmişin öğrenci başarısı üzerinde önemli bir etkisi olduğunu ortaya koyan pek çok çalışma bulgusuyla da (Harwell vd., 2017; Sirin, 2005; Yıldırım, 2012) tutarlılık göstermektedir.

Modelde sosyoekonomik düzey kontrol edildiğinde, yerleşim yerinin öğrenci performansını yordama gücü azalmış ancak bölgeler arası başarı farkı devam etmiştir. Bu bulguya göre başarı farkını sadece sosyoekonomik göstergelerle açıklamak yetersiz kalmıştır. Bu bağlamda okul ve öğretmenlerle ilgili özellikler ön plana çıkabilir. Örneğin eğitim olanaklarına erişim de bu farkları açıklayabilir. Pek çok ülkede kırsal bölgedeki okulların eğitim olanaklarına erişimi kentlere göre daha kısıtlıdır. Ancak Türkiye için bu farklılık istatistiksel olarak anlamlı değildir; yani Türkiye'de kırsal bölgedeki okullar eğitim materyalleri bakımından dezavantajlı görünmemektedir (OECD, 2017). Özellikle eğitime yapılan yatırımlar yoluyla kırsal bölge okullarının da bilgisayar, deney malzemeleri ya da diğer eğitim materyallerine ulaşması sağlanmıştır. OECD'nin bu verisine göre Türkiye'deki kırsal okullar pek çok ülkeden farklı olarak fiziksel olarak donanımlı görünmektedir. Bunu destekler biçimde, bu araştırmanın bulguları da materyal eksikliğinin öğrencilerin performansını yordamada anlamlı olmadığını göstermiştir. Bu durum, eğitim materyallerinin nasıl kullanıldığını gündeme getirmekte ve öğretmen etkinlikleri ve nitelikleri üzerinde düsünmeyi isaret etmektedir. TALIS 2018 verilerine göre Türkiye için mesleki tecrübesi bes yıl ya da daha az olan öğretmenlerin %50.4'ü kırsal ve %22'si ise kentlerde görev yapmaktadır. (OECD, 2019). Türkiye'deki kırsal bölgedeki öğretmenlerin eğitim materyallerini kullanma ve öğrenci ihtiyacına uygun ortamlar oluşturma konusunda desteğe ihtiyacı olabilir. Araştırmalara göre, birçok ülke için öğretmen yetiştirme programlarında özellikle kırsal bölgedeki okul ve öğrencilerin ihtiyacına uygun eğitim verilememektedir ve buna yönelik bir mesleki gelişime ihtiyaç duyulmaktadır (Ares Abelde, 2014). PISA 2015 verileri Türkiye'de mesleki gelişim etkinliklerinin kentlere göre kırsal bölgelerde daha az sıklıkla düzenlendiği ortaya koymuştur (OECD, 2016). Bu durumların, özellikle kırsal bölgede görev yapan öğretmenlerin öğretim etkinliklerini yakından etkilemesi olasıdır. Pek çok araştırma öğretmene bağlı özelliklerin en az okul özellikleri kadar öğrenci başarısındaki varyansı açıklamada önemli olduğu göstermiştir (McBer, 2001; Scheerens, 1993).

Araştırma modeline okul düzeyi değişkenler eklendiğinde okulun bulunduğu bölgenin öğrenci performansını yordama gücü bir miktar azalmıştır. Özellikle okul

disiplini değişkeni matematik ve fen performansı ile pozitif anlamlı ilişki göstermiş, okulda disiplin arttıkça öğrenci performansının da artığı gözlenmiştir. Benzer bulguya diğer araştırmalarda da rastlanmaktadır (Ababneh ve Kodippili, 2020; Nicholas vd., 2016; Yıldırım, 2017). Okul disiplini etkili okul faktörlerinden güvenli ve düzenli okul özelliği içerisinde ele alınabilir. Ma ve Williams (2004) okul ikliminin öğrenci başarısı üzerine etkilerini araştırdıkları çalışmalarında okul disiplininin güvenilir öğrenme ortamları yarattığını ve böyle bir ortamda öğrencinin fiziksel ve duygusal olarak kendini özgür hissetmesinin öğrenmeyi desteklediğini belirtmişlerdir. Bu noktada öğretmenin okul ve sınıf içerisinde gerekli disiplini sağlayabilmesi gerekir. Daha önce belirtildiği gibi Türkiye'de kırsal kesimdeki öğretmenlerin mesleki tecrübesi kentteki öğretmenlere göre daha azdır (OECD, 2019). Eğitim yönetimi bakımından yeterli deneyime ve niteliğe sahip olamayan öğretmen okul disiplinini sağlamada zorlanabilir ve bu durum öğrenci performansını düşürür (Hammond, 2005).

Son kurulan modelde öğrenci özelliklerinden öğrencinin fen ve matematikte kendine güven duyması bölgenin başarı üzerindeki etkisinde bir değişime neden olmasa da öğrenci performansını artırdığı belirlenmiştir. Farklı araştırmalarda benzer bulgular gözlenmiştir (Ababneh ve Kodippili, 2020; Yalçın vd., 2017). İnsanların yetenekleri hakkında sahip oldukları inançlar, bireylerin başarıları üzerinde güçlü bir etkiye sahiptir (Schunk ve Pajares, 2002). Kendine güveni yüksek, kendi hakkında olumlu duygulara sahip, kendi hakkında güçlü inançları olan ve yetenekleri hakkında doğru bilgiye sahip öğrenciler, bilgi ve yeteneklerini geliştirebilirler (Suyra ve Putri, 2017). İlgili derste kendine güven duyan motivasyonu yüksek öğrencinin bir amaç doğrultusunda koyduğu hedefin değerine ve başarı olasılığına ilişkin tahminlerde bulunması ve hedefe ulaşmada ısrarlı ve istekli olması beklenir (Bandura, 1997). Öğretmenin öğrencinin davranışlarını geliştirmedeki rolü düşünüldüğünde, öğrencinin yeteneklerine inanma, iyimser olma, objektif olma ve rasyonel bakabilme özelliklerini desteklemesi gerekir.

Bu araştırmanın bulguları değerlendirilirken bazı sınırlılıklar göz önünde bulundurulmalıdır. Öncelikle TIMSS uygulaması bir tarama araştırmasıdır ve elde edilen bulgular nedensellik anlamında yorumlanmamalıdır. Nedensel açıklamalar için deneme modelinde kurgulanmış çalışmalara ihtiyaç vardır. Araştırmada yer alan değişkenler öğrenci ve okula ait özellikleri temsil etmektedir. Öğretmen ya da veli özelliklerinin kırsal-kent ayrımındaki etkisini belirlenmek üzere bu tür değişkenleri ele alan çalışmalar yapılabilir. Araştırmada değişkenlerle ilgili başka bir sınırlılık ise sosyoekonomik düzey göstergesidir. TIMSS veri setinde SED için üç değişkene ait ölçüm kullanılmaktadır. Ancak yapılan analizlerde çoklu bağlantı probleminden dolayı SED'i evdeki olanaklar değişkeninin temsil etmiştir. Farklı araştırmalarda SED için bu üç değişkenden yararlanıp bir indeks değer elde edilerek analizlere dahil edilmesi önerilir.

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Student and School Characteristics Explaining the Rural- Urban Achievement Gap: TIMSS 2019 Analysis

Abstract

The purpose of the study was to determine student and school characteristics that explain student performance in rural and urban schools. For this purpose, data of 4028 students and 180 schools in the TIMSS 2019 Turkey sample were analyzed. The hierarchical linear models were established in accordance with the sampling structure; The data were analyzed using the HLM 7 program. The findings showed that the success of schools in rural areas is lower than in urbans. When the effect of socio-economic level is controlled, it has been shown that the differences in achievement between regions continue. Similarly, when school level variables were added into the model, the effect of the school region on student performance decreased slightly. However, the student's self-confidence in science and mathematics was not effective in eliminating regional achievement differences. The findings were discussed based on the relevant literature.and recommendations were given.

Keywords: equal opportunity, rural-urban schools, achievement gap, TIMSS 2019

Milli Eğitim Bakanlığı Tarafından Yayınlanan Test Maddelerinin Madde Yazım İlkelerine Uygunluğunun İncelenmesi

Eren Can Aybeka, Seval Kula Kartalb ve Özen Yıldırımc

Öz

Araştırmada Millî Eğitim Bakanlığı (MEB) Ölçme, Değerlendirme ve Sınav Hizmetleri Müdürlüğü tarafından yedinci sınıf düzeyi için sunulan maddelerin ölçme ve değerlendirme ilkelerine uygunluğunun incelenmesi amaçlanmıştır. Bu doğrultuda fen bilgisi ve sosyal bilgiler derslerinden tesadüfi olarak seçilen üçer üniteden toplam 120 madde incelenmiştir. Maddelerin incelenmesinde alanyazın taraması sonucunda araştırmacılar tarafından geliştirilen madde inceleme formu kullanılmıştır. Verilerin analizinde betimsel istatistiklerden yararlanılmıştır. Araştırma sonucunda maddelerde doğru yanıta yönlendirecek ipuçlarının bulunduğu, maddeyi yanıtlamak için gerekli olmayan metin ve görsellere yer verildiği, bileşik yanıt vermeyi gerektiren (l, II, III, IV gibi) maddelerin sıkça tercih edildiği belirlenmiştir. Bununla birlikte, maddelerde dilbilgisi kurallarına uyulduğu, ana fikrin seçeneklerde değil madde kökünde verildiği, maddelerin belirli bir görüşe ya da kanıya dayalı olmadığı, yönergelerin açık ve anlaşılır olduğu gözlemlenmiştir.

Anahtar Kelimeler: Çoktan seçmeli madde yazım ilkeleri, ölçme ve değerlendirme, test geliştirme

Makale Hakkında

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Giris

Başarılı ve nitelikli insan gücü potansiyeli bir toplumun kalkınmasında önemli bir etkendir. Bu nedenle öğrencilerin başarılı olmaları kendileri, aileleri ve içinde yaşadıkları toplum açısından büyük önem taşımaktadır (Bangchang, 2015). Güncel yaklaşımda başarı kavramı, bireyin bilişsel, duyuşsal ve psikomotor alandaki becerilerini geliştirmeyi içerecek biçimde genişlemiştir. Başarının bu tanımı gereği, okulların bireylerin bilgili, sorumlu ve içinde yaşadığı toplumla ilgilenen yetişkinler olarak yetişmesine katkı sağlamayı amaçlaması gerekmektedir (Elias vd., 1997).

Bireylerin bilişsel gelişimlerine katkı sağlamak için okullar öğrencilerin hem alt düzey hem de üst düzey zihinsel becerilerini geliştirmek durumundadır (Haladyna,

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1997; Kutlu vd., 2014). Böyle bir gelişim, öğrencilere planlı ve sistematik bir öğretim sürecinin sunulmasını ve süreç içerisindeki gelişimlerinin izlenmesini gerekli kılmaktadır. Eğitimde, bir ders, ünite ya da dönem süresince öğrencilerin bilgi ve becerilerinde meydana gelen değişmeleri gözlemek amacıyla başarı testleri yaygın biçimde kullanılmaktadır (Cohen ve Swerdlik, 2010). Anastasi (1961) başarı testlerinin, öğretim programlarının değerlendirilmesi ve iyileştirilmesi, eğitim sürecinin ve bu sürece ait çıktıların değerlendirilmesi gibi çok çeşitli amaçlarla kullanıldığını ifade etmektedir.

Başarı testlerinin psikometrik özelliklerinin yüksek olabilmesi için bireyler hakkında doğru ve yeterli bilgiler sağlaması gerekmektedir (Adkins, 1947). Ölçme araçlarının ölçülen özellik hakkında doğru bilgiler vermesi ise nasıl bir geliştirilme süreci sonucunda oluştuğuna bağlıdır. İyi bir test, test geliştirme ilke ve kurallarının dikkatli ve özenli bir biçimde uygulanmasıyla ortaya çıkmaktadır (Cohen ve Swerdlik, 2010). Psikometrik açıdan nitelikli bir test geliştirmek için önemli olan aşamalardan biri de maddelerin alan yazında yer alan madde yazım ilkelerine göre yazılmasıdır. Test maddelerinin psikometrik nitelikleri, başarı testinin psikometrik niteliği açısından belirleyici olduğundan, uzmanlar tarafından madde yazım ilkeleri üzerinde önemle durulmaktadır.

Hem sınıf içi hem de geniş ölçekli test uygulamalarında en sık kullanılan madde türlerinden biri coktan secmeli madde türüdür (Cheung, 2003). Diğer madde türlerine göre daha yaygın olarak kullanıldığından, bu madde türünün incelenmesi üzerinde daha fazla sayıda çalışma yapılmıştır. Örneğin, Haladyna ve Downing (1989) çoktan seçmeli madde geliştirme sürecine ilişkin bilgi içeren 46 kitabı incelemiş ve sonucunda 43 adet çoktan seçmeli madde yazım ilkesi belirlenmiştir. Bu araştırmanın devamı niteliğindeki bir başka çalışmada, Haladyna vd. (2002) ilkeleri yeniden gözden geçirmiş ve 31 ilkeden oluşan yeni bir liste oluşturmuştur. Yapılan araştırmada madde yazım ilkeleri maddenin içeriği, türü, düzeni, maddenin kökü ve seçenekleri başlıkları altında düzenlenmistir. Maddenin içeriği baslığı altında, test maddesiyle önemli bir öğrenme kazanımını ölemeyi hedefleme, görüse dayalı maddelerden kacınma, özgün matervaller kullanma gibi ilkeler ver almaktadır. Madde türü başlığı altında kullanılması önerilen çoktan seçmeli madde tiplerine yer verilirken, düzen başlığı altında genel düzen, yazım ve dilbilgisi kurallarına değinilmektedir. Madde kökünün yazılması başlığı altında maddenin ne sorduğunun madde kökünde açık biçimde ifade edilmesi, madde kökünde olumsuz ifadelerden kaçınılması gibi ilkeler bulunmaktadır. Madde seçeneklerini yazma başlığı altında ise seçeneklerin içerik, dilbilgisi, uzunluk açısından benzer olması, anlamlı ve mantıklı çeldiricilerin yazılması gibi ilkelere yer verilmiştir.

Madde yazım süreçleri için oluşturulan ilke ve öneriler çeşitlilik gösterse de uzmanlar tarafından ortak biçimde vurgulanan bazı ilkeler bulunmaktadır. Bu ilkeler içerisinde, test maddesiyle önemli öğrenme kazanımlarını ölçmeyi hedefleme, anlamı belirsiz hale getiren ifadelerden kaçınma, grubun düzeyine uygun bir dil kullanma, maddenin doğru cevabı için ipucu oluşturacak nitelikteki ifadelerden kaçınma gibi öneriler yer almaktadır (Haladyna, 1997; Gronlund ve Waugh, 2009; Turgut ve Baykul, 2010; Popham, 2011; Nitko ve Brookhart, 2011).

Haladyna vd. (2002) de bu bağlamda çoktan seçmeli madde yazım ilkelerini ortaya koymuş ve bu ilkeler maddelerin madde yazım ilkelerine göre incelendiği gelecek araştırmalar için bir temel oluşturmuştur. Bu ilkeler geliştirilirken, görgül çalışmaların bulgularına ve çoktan seçmeli madde yazımına ilişkin alan yazındaki kaynaklarda yer alan görüşler kullanılmış ve birleştirilmiştir. Örneğin, Downing (2005) tarafından yapılan çalışmada, dört farklı testte yer alan maddelerin Haladyna vd. (2002) tarafından oluşturulan 31 ilkeye uygunluğu üç farklı uzman tarafından incelenmiştir. Araştırmada, 219 test maddesi içerisinde toplam 100 maddenin bu ilkelerden en az birini ihlal ettiği bulunmuştur. En çok ihlal edilen ilkelerin madde kökünde soru cümlesi kullanmama ve olumsuz ifade kullanma olduğu görülmüstür. Sireci vd. (1998) tarafından yapılan çalışmada, Haladyna ve Downing (1989) tarafından belirlenen ilkelere göre maddeler incelenmis ve en sık yapılan ihlallerin madde kökünde soru cümlesi yerine tamamlanmamış ve bileşik çoktan seçmeli madde tipinin kullanılması olduğunu belirtilmiştir. Tarrant vd. (2006)'nin çalışmasında incelenen 2770 çoktan seçmeli test maddesinde en sık gözlenen ihlaller arasında madde kökünde açık olmayan ya da gereksiz bilgi ve yönerge, olumsuz madde kökü, mantıksız çeldirici kullanımı yer almaktadır.

Bu araştırmanın amacıyla benzer bir amaca sahip bir araştırma Şengül-Avşar ve Barış-Pekmezci (2020) tarafından yapılmıştır. Bu araştırmada, Milli Eğitim Bakanlığı tarafından yayınlanan Türkçe dersi için geliştirilmiş beceri temelli madde örnekleri incelenmiştir. Bu inceleme sonucunda araştırmacılar, bileşik yapıdaki çoktan seçmeli madde tipinin ve olumsuz madde kökünün sıklıkla kullanıldığını bulmuştur. Ayrıca, araştırmacılar sorularda kullanılan görsel ve yazılı materyallerin soruları yanıtlamak için gerekli olduğunu, ancak bu materyallerin etkili biçimde kullanılamadığını belirtmiştir.

Bu konuyla ilgili bazı araştırmalarda, madde yazımında gözlenen ihlallerin madde istatistikleri üzerindeki etkilerine odaklanılmıştır. Örneğin, Martinez vd. (2009) maddede birbirine içerik olarak benzer olmayan çeldiricilerin kullanılmasının maddenin ayırt ediciliği üzerinde küçük ancak olumsuz bir etkisi olduğunu göstermiştir. Ayrıca, madde ayırt ediciliğinin "yukarıdakilerin hiçbiri" seçeneğinin doğru yanıt olması durumunda da olumsuz etkilendiği bulunmuştur. Diğer çalışmalardan farklı olarak, araştırmacılar seçeneklerinin uzunluklarının denk olmaması, seçeneklerde "her zaman, asla" gibi ifadelerin kullanılması ve "yukarıdakilerin hepsi" seçeneğinin kullanılmasının madde güçlüğü ve ayırt ediciliğini olumsuz etkilemediğini bulmuştur. Ancak, Rush vd. (2016) tarafından yapılan bir çalışmada, "yukarıdakilerin hepsi" seçeneğinin kullanılmasının maddeyi kolaylaştırdığı ve ayırt ediciliğini düşürdüğü belirtilmiştir. Ayrıca, bu çalışmada mantıksız çeldiricilerin kullanılmamasının da madde güçlüğü ve ayırt ediciliğini olumsuz etkilediği görülmüştür.

İlgili araştırmalar incelendiğinde, çoktan seçmeli madde türünün yazımına ilişkin belirli ilke ve önerilerin geliştirildiği görülmektedir (Haladyna ve Downing, 1989; Haladyna vd., 2002). Buna ek olarak, uygulamada hangi ilkelerin en sık ihlal edildiğini belirlemeyi amaçlayan araştırmalar yürütülmüştür (Downing, 2005; Sireci vd., 1998). Ayrıca, araştırmacılar tarafından ilkelerin geçerliğini belirlemek amacıyla bu

ihlallerin madde istatistikleri üzerindeki etkisini inceleyen görgül çalışmalar yapılmıştır (Martinez vd., 2009; Rush vd., 2016). Ancak, yurt içi alan yazın incelendiğinde hem sınıf içi hem de ulusal geniş ölçekli test uygulamalarında çoktan seçmeli madde geliştirmede hangi ilkelerin göz önünde bulundurulduğunu, hangi ilkelerin sıklıkla ihlal edildiğini inceleyen araştırmaların çok sınırlı olduğu görülmüştür (Şengül-Avşar ve Barıs-Pekmezci, 2020).

Madde vazımı üzerinde vürütülen arastırmalar (Anıl ve Acar, 2008; Gelbal ve Kelecioğlu, 2007), öğretmenlerin ölçme araçlarını yapılandırmadaki bilgi eksikleri nedeniyle desteklenmeye ihtiyaç duyduklarını ortaya koymaktadır. Bu nedenle, Millî Eğitim Bakanlığı (MEB) tarafından son yıllarda öğretmenlere ölçme araçlarının sahip olması gereken özellikler, test maddelerinin geliştirilmesi gibi konularda seminerler düzenlenmekte ve öğretmenlerin ölçme ve değerlendirme alanındaki gelişimi desteklenmektedir. Seminerlerin sonrasında bakanlık tarafından eğitimlere katılan öğretmenlerden kendi konu alanlarında madde yazmaları istenmektedir. Öğretmenler tarafından gelistirilen maddeler içerisinden uygun görülerek seçilen maddeler bakanlığın internet sitesinde (https://odsgm.meb.gov.tr/) ücretsiz bir bicimde öğrencilerin erisimine sunulmaktadır. Ancak, bu testlerde yer alan maddelerin geliştirilme sürecine ya da madde yazımında dikkat edilen noktalara iliskin ayrıntılı bilgilere yer verilmemektedir. Oysa, öğretmenler tarafından geliştirilen ve ulusal düzeyde uygulamaya açılmış olan bu maddelerin, çoktan seçmeli madde yazımında sıklıkla yapılan ihlalleri ortaya koymak ve hangi ilkelere daha çok dikkat edildiğini belirlemek için iyi bir kaynak olduğu düşünülmektedir. Bu nedenle, araştırmadan elde edilen bulguların, geniş bir öğrenci grubunun kullanımına açılan soruların geliştirilmesi gereken yönlerine ilişkin bilgi sağlaması ve daha nitelikli soruların geliştirilmesinde yol gösterici olması beklenmektedir.

Bu araştırmada MEB Ölçme, Değerlendirme ve Sınav Hizmetleri Müdürlüğü tarafından her sınıf düzeyi için öğrencilerin erişimine sunulan maddeler içerisinden 7. sınıf düzeyinde Fen Bilgisi ve Sosyal Bilgiler konu alanlarından üçer ünite için hazırlanmış maddeler seçilmiştir. Bu maddeler, madde yazım süreçlerinde dikkat edilmesi gereken ilkelere uygunluğu açısından incelenmiştir. Bu sayede, öğretmenler tarafından madde yazım süreçlerinde uyulması gereken ilkelerin ne düzeyde göz önünde bulundurulduğu, maddelerde en çok hangi ilkelere uygunluk açısından sorunlar yaşandığı ortaya koyulmuştur. Araştırma sonucunda elde edilen bulguların öğretmenlerin madde yazımında desteklenmesi süreci açısından yol gösterici olacağı düşünülmektedir.

Yöntem

Araştırma Modeli

MEB tarafından yayınlanan örnek test maddelerinin madde yazım ilkelerine uygunluğunu incelemeyi amaçlayan bu araştırma tarama türündedir. Tarama araştırmaları, bir grubun özelliklerini belirlemeyi amaçlamaktadır (Fraenkel, vd., 2012).

Mevcut çalışmada da bir grup maddenin madde yazım ilkelerine uygunluk özelliği belirlendiğinden dolayı tarama araştırmasına uygun bir desen seçilmiştir.

Evren ve Örneklem

Araştırmanın evrenini MEB tarafından yayınlanan Fen Bilgisi dersinden 140 ve Sosyal Bilgiler dersine ait toplam 144 adet 7. sınıf düzeyinde madde oluşturmaktadır. Bu maddeler MEB Ölçme, Değerlendirme ve Sınav Hizmetleri Genel Müdürlüğü'nün sayfasında yer alan beceri temelli testler içerisinden seçilmiştir. Araştırmacılardan ikisi lisans eğitimini ortaöğretim fen ve matematik alanları eğitiminde tamamlaması dolayısıyla, yayınlanan testlerden ortaöğretime en yakın olan sınıf düzeyi tercih edilmiştir. İlgili testler içerisinden üçer üniteye ait test tesadüfi olarak seçilmiştir. Tesadüfi seçimi sağlayabilmek adına random.org sitesinde yer alan bir araçtan yararlanılmıştır (Haahr ve Haahr, 2021). Buna göre toplam yedi ünite içerisinden fen bilgisi dersinden 2, 5 ve 6. üniteler; sosyal bilgiler dersinden ise 1, 6 ve 7. üniteler araştırmaya dahil edilmiştir. Bu ünitelerin her birinden ilk 20 madde olmak üzere seçilen 120 test maddesi araştırmacılar tarafından incelenmiştir.

Veri Toplama Aracı

Araştırma kapsamında belirlenen maddeler, araştırmacılar tarafından geliştirilen madde inceleme formu kullanılarak incelenmistir. Bu form arastırmacılar tarafından alanyazın taramasına dayalı olarak oluşturulmuştur (Gronlund ve Waugh, 2009; Haladyna ve Downing, 1989; Haladyna vd., 2002; Nitko ve Brookhart, 2011 Popham, 2011; Turgut ve Baykul, 2010). Formda çoğunlukla maddelerin teknik özelliklerini içeren ilkelere yer verilmiştir. Bunun en önemli nedeni, formun ölçme ve değerlendirme alan uzmanları tarafından kullanılacak temel ilkeleri içermesini sağlamaktır. Formun son halinde toplam 20 ilke bulunmaktadır (Ek-1). Bu ilkeler maddenin geneli, madde kökü ve seçenekler olmak üzere üç başlık altında düzenlenmiştir. Maddenin geneli başlığında maddenin bir bütün olarak dil bilgisi kurallarına uygun olup olmadığı, maddeyi yanıtlamada gerekli olmayan ifadelerin bulunup bulunmadığı gibi ilkeler incelenirken, madde kökü başlığında madde kökünün anlaşılırlığı, yanlı ifadeler içerip içermediği gibi ilkeler incelenmistir. Secenekler baslığında ise seceneklerin mantıksal bir sırada verilip verilmediği, tekrar eden ifade bulunup bulunmadığı gibi ilkeler yer almaktadır. İnceleme formundaki her bir madde ise evet, havır ya da uygun değil kategorileriyle yanıtlanmaktadır.

Madde inceleme formuyla yapılan belirlemelerin tutarlılığını ortaya koymak için, incelenen her ünitenin ilk beş maddesi olmak üzere toplam 30 madde üç araştırmacı tarafından ortak olarak incelenmiştir. Araştırmacılar arasındaki tutarlılık Fleiss' kappa ve uyum yüzdesine dayalı olarak belirlenmiştir. Araştırmacıların tutarlığı Fen Bilgisi dersine ait ünitelerde yer alan maddelerde 0,73, sosyal bilgiler dersi maddelerinde 0,85 olarak bulunmuştur. Üç araştırmacı arasındaki uyum yüzdesi fen bilgisi dersi için %86,67, sosyal bilgiler dersi için %91,33 olarak elde edilmiştir. Bu değerler farklı araştırmacılar tarafından madde inceleme formuna dayalı olarak tutarlı

ölçme yapılabildiğini göstermektedir. Daha sonra araştırmacılar bir araya gelerek uyuşmazlık bulunan durumlar için ortak bir karar vermiştir.

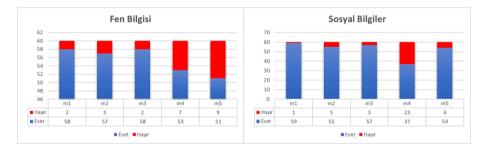
Verilerin Analizi

Toplanan veriler betimsel istatistiklerden frekans ve yüzde analizi ile çözümlenmiştir. Bu amaçla Jamovi 1.8.1 (The jamovi project, 2021) yazılımı kullanılmış ve çapraz tablolar aracılığıyla *Evet, Hayır* ve *NA* seçeneklerinin derslere göre dağılımı hesaplanmıştır. "Evet" seçeneği maddede ilgili ilkeye uyulduğunu, "hayır" seçeneği maddenin ilgili ilkeyi ihlal ettiğini göstermektedir. "NA" seçeneği ise ilgili ilkenin incelenen madde için uygulanabilir olmadığını ifade etmektedir. Bu seçeneklere dağılımları gösteren grafikler Microsoft Office Excel yazılımı kullanılarak oluşturulmuştur. Araştırmacılar arasındaki uyumu gösteren Fleiss' kappa ve uyum yüzdeleri R (R Core Team, 2021) yazılımında "irr" paketi kullanılarak hesaplanmıştır (Gamer vd., 2018).

Bulgular

Araştırma bulguları, ölçme aracında yer aldığı sıra ile *maddenin geneli*, *madde kökü* ve *seçenekler* olmak üzere üç kısımda sunulmuş ve ilke ihlallerine ilişkin madde örnekleri ve yorumlarına yer verilmiştir. Bu bağlamda, **maddenin genel** olarak incelendiği *maddenin geneli* başlığındaki beş ilkeye ait yüzde grafikleri Şekil 1'de sunulmuştur.

Şekil 1 İncelenen Maddelerin Maddenin Geneliyle İlgili İlkelere Uygunlukları



Şekil 1 incelendiğinde hem fen bilgisi hem de sosyal bilgiler derslerine ait örnek maddelerin maddenin geneli başlığındaki ilk üç ilkede %90'ın üzerinde bir uyuma sahip olduğu görülmektedir. Bu ilkeler sırasıyla şöyledir:

- Maddede belirsiz ve hedef grubun düzeyine uygun olmayan kelimelerden (teknik terim, yabancı kelime, aşina olunmayan kelimeler) kaçınılmıştır.
- Dilbilgisi kurallarına uyulmuştur.
- Ana fikir seçeneklerde değil madde kökünde verilmiştir.

Hem fen bilgisi hem de sosyal bilgiler dersleri için incelenen maddelerin bu ilkelere uygun olarak hazırlandığı anlaşılmaktadır. Öte yandan, maddeler 4 ve 5 numaralı ilkeler (maddede doğru cevaba yönlendirecek ip uçlarından kaçınılmıştır, maddeyi yanıtlamada gerekli olmayan ifadelerden kaçınılmıştır) açısından incelendiğinde, bu ilkelere uygun olan madde oranlarının düştüğü görülmüştür. Hatta, sosyal bilgiler dersi için 4 numaralı ilkenin karşılanma oranı %61,7 olarak bulunmuştur. Özellikle sosyal bilgiler dersine ait maddelerin, ölçülmek istenen özelliğe ek olarak okuduğunu anlama becerisini de ölçtüğü gözlenmiştir. İncelenen maddelerin yaklaşık olarak %38'inin, madde ile ölçülen özelliğe sahip olmayan ancak öncüldeki ipucunu kullanabilen öğrenciler tarafından doğru yanıtlanabilecek nitelikte olduğu görülmüştür. Araştırmacıların bu ilkelere ilişkin belirlemelerine bir örnek olması amacıyla sosyal bilgiler dersinden bir örnek madde Sekil 2'de verilmistir:

Şekil 2

Sosyal Bilgiler Dersi İçin Örnek Madde – 1



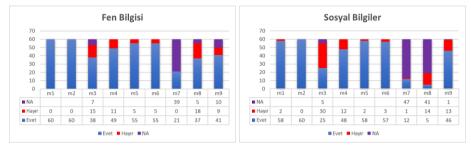
İletişimle ilgili bu görsel aşağıdaki özdeyişlerden hangisi ile ilişkilendirilebilir?

- A) İnsan, anlamadığı şeye sahip olamaz. (Goethe)
- B) Ne kadar bilirsen bil söylediklerin karşındakinin anladığı kadardır.(Mevlâna)
- C) Evinizin eşiğini temizlemeden, komşunuzun damındaki karlardan şikâyet etmeyiniz.(Konfüçyüs)
- D) Her doğrunun iki yüzü vardır; birini kabullenmeden önce iki taraftan da bakmış olmak her zaman daha iyidir. (Aisopos)

Şekil 2'de verilen maddede bir görselin bulunduğu ve öğrencilerden özdeyişleri bu görselle ilişkilendirmelerinin beklendiği görülmektedir. Ancak, D seçeneğindeki özdeyişte *iki yüz, iki taraftan bakmak* gibi ifadeler kullanılmıştır. Görselde ise bir sayıya iki farklı taraftan bakan iki insan görülmektedir. Dolayısıyla, bu maddenin, öğrencileri doğru yanıta ulaştıracak ipuçları içerdiği ifade edilebilir.

İnceleme formunun ikinci kısmında ise madde köküne ait ilkeler yer almaktadır. Maddelerin, madde köküyle ilgili ilkelere uygunluklarına ilişkin yüzdeler Şekil 3'te verilmiştir.

Şekil 3 İncelenen Maddelerin Madde Kökü ile İlgili İlkelere Uygunlukları



Şekil 3 incelendiğinde hem fen bilgisi hem de sosyal bilgiler maddelerinin, araştırmacılar tarafından **madde kökü** ana başlığına ait 1, 2, 5 ve 6 numaralı ilkeler açısından uygun bulunduğu görülmektedir. Bu ilkeler sırasıyla şöyledir:

- Aşırı detay ya da aşırı genel içerikten kaçınılmıştır.
- Madde bir görüşe ya da kanıya dayalı değildir.
- Madde kökündeki yönerge açık ve anlaşılırdır.
- Madde kökünde belli bir grup (cinsiyet, din, ırk, vb.) için yanlı olan bir ifade yoktur.

İncelenen maddelerin, aşırı detay ya da genel içerikten uzak, görüşe ve kanıya dayanmayan, açık ve anlaşılır bir yönergeye sahip ve belli bir gruba yanlı ifadelerin içermeyen maddelerden oluştuğu anlaşılmaktadır. Bu nedenle, maddeler, 6 numaralı ilkede yer alan "yanlı ifade içermemesi" açısından araştırmacı görüşlerine dayalı olarak incelenmiştir.

Maddelerin 3, 4, 8 ve 9 numaralı ilkelere uygunluk oranlarının (%15 üzerinde hayır) daha düşük olduğu bulunmuştur. Bu ilkeler sırasıyla şöyledir:

- Bileşik yanıt vermeyi gerektiren (I, II, III ve IV biçiminde öncül içeren) maddelerden kaçınılmıştır.
- Madde kökünün okuma yükü en aza indirilmistir.
- Kullanılan görsel maddeyi yanıtlamak için gereklidir.
- Kullanılan metin maddeyi yanıtlamak için gereklidir.

İlgili alanyazında bileşik yanıt vermeyi gerektiren maddelerin, özellikle ikili puanlama yapıldığı durumlarda kullanılması gerektiği ifade edilmektedir (Haladyna ve Downing, 1989; Haladyna vd., 2002). Ancak, bu araştırmada incelenen fen bilgisi maddelerinin yaklaşık olarak dörtte biri, sosyal bilgiler maddelerinin ise yaklaşık olarak yarısı bileşik yanıt vermeyi gerektiren maddelerden oluşmaktadır. Madde kökünün okuma yükünün en aza indirilmesi gerekliliği ise fen bilgisi maddelerinin dörtte birinde, sosyal bilgiler

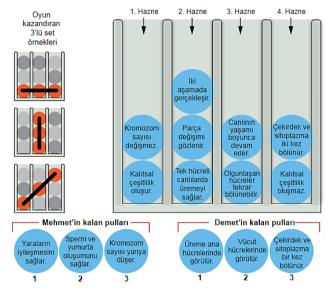
maddelerinin ise beşte birinde sağlanamamıştır. Bu ilkenin ihlal edildiği örnek bir fen bilgisi maddesi Şekil 4'te verilmiştir:

Şekil 4

Fen Bilgisi Dersi İçin Örnek Madde – 1

ÜÇLÜ SET OYUNU

Mehmet ve Demet üzerinde mayoz ve mitoz bölünmenin özelliklerinin yazılı olduğu pulları eşit olarak paylaşıp aşağıdaki oyunu oynamaktadırlar. Oyunun amacı şekilde gösterilen örneklerde olduğu gibi aynı bölünme çeşidine ait özelliklerin yazılı olduğu pulları yatay, dikey ya da çapraz olarak aynı doğrultu oluşturmasını sağlayıp oyunu kazanmaktır. Aşağıda oyunun belli bir anındaki durumu gösterilmiştir.



Buna göre hamle sırası gelen oyuncuyla ilgili aşağıdaki ifadelerden hangisi <u>kesinlikle</u> doğrudur?

- A) Mehmet kalan herhangi bir pulunu 1. hazneye bıraktığı zaman oyunu kazanır.
- B) Demet kalan herhangi bir pulunu 2. hazneye bıraktığında oyunu kazanır.
- C) Mehmet kalan herhangi bir pulunu 3. hazneye bıraktığı zaman oyunu kazanır.
- D) Demet kalan herhangi bir pulunu 4. hazneye bıraktığında oyunu kazanır.

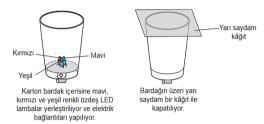
Şekil 4'te verilen maddeyle öğrencilerin mitoz ve mayoz bölünmenin özelliklerine ilişkin bilgilerinin ölçülmesi amaçlanmıştır. Maddede öğrencilerin bu bilgileri oyuna dayalı bir durum üzerinden ölçülmektedir. Öğrencinin bu maddeyi doğru yanıtlaması için hem mitoz ve mayoz bölünmenin özelliklerini bilmesi hem de oyunun kurallarını anlaması gerekmektedir. Dolayısıyla, bu durumun hem gereksiz bir okuma yükü oluşturduğu, hem de ölçülmek istenen özellikle ilgisiz bir beceri kullanmayı gerektirdiği için bir geçerlik sorunu yaratabileceği ifade edilebilir.

Kullanılan görselin maddeyi yanıtlamak için gerekli olmasına ilişkin ilkeyi ihlal eden örnek bir fen bilgisi maddesi Şekil 5'te verilmiştir:

Sekil 5

Fen Bilgisi Dersi İçin Örnek Madde – 2

2. Işıkla ilgili bir etkinlik için şekildeki düzenek hazırlanıyor.



Led lambalar tek tek veya birlikte yakıldığında karton bardağın üstten görünümleri aşağıdakiler gibi oluyor.



Buna göre yapılan etkinlikle ilgili,

- I. Renkli ışıklar birleştirilerek farklı renkte ışıklar elde edilir.
- II. Beyaz ışık kendi rengindeki ışığı ve kendine yakın renkteki ışıkları yansıtır.
- III. Sarı renkli ışık mavi renkli ışıkla birleştirilirse beyaz renkli ışık görünür.

çıkarımlarından hangileri doğrudur?

A) Yalnız I.

B) Yalnız III.

C) I ve II.

D) I ve III.

Şekil 5'te verilen madde incelendiğinde, maddenin bileşik yanıt vermeyi gerektiren bir madde olduğu görülmektedir. Ayrıca, bu maddeye ait görselin ilk bölümünde anlatılan bardaklı düzenek maddeyi yanıtlamak için gerekli olmayan bilgiler içermektedir. Üstelik, bu maddeden tüm görsel çıkarıldığında, madde ışığın ve renklerin özelliklerini bilen bir öğrenci tarafından yanıtlanabilir niteliktedir.

Madde kökünde kullanılan metnin maddeyi yanıtlamak için gerekli olmadığı sosyal bilgiler dersine ait bir madde örneği Şekil 6'da verilmiştir:

Sekil 6

Sosyal Bilgiler Dersi İçin Örnek Madde-2

Bir ürünü ilk kez deneyecek olan tüketiciler öncelikle ürünün "dışsal" özelliklerine bakarak ürünü tercih edip etmeme kararı vermektedir. Bu özellikler ürün değerlendirmesinde önemli rol oynar ve tüketiciler ürünleri değerlendirme sürecinde ürünün fiyat, ambalaj, marka ismi, üretildiği ülke gibi dışsal özellikleri de bir kalite göstergesi olarak düşünerek karar verirler. Bu durum kalıp yargılarla ilgilidir.

Buna göre aşağıdakilerden hangisi ürüne yönelik bir kalıp yargı değildir?

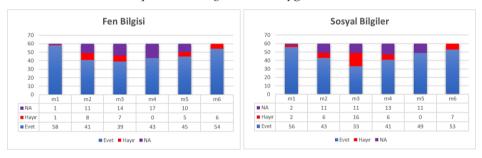
- A) Bir ürün ne kadar pahalıysa o kadar kalitelidir.
- B) Japonlar teknolojik ürün üretiminde en iyi ülkedir.
- C) Cep telefonu alırken garanti belgesinin olmasına dikkat edilmelidir.
- D) Elektronik eşya alırken bilinen markalar tercih edilmelidir.

Şekil 6'da verilen madde, öncül bir metin içermektedir. Bu metinde kalıp yargılara ilişkin bilgi ve örnekler verilmiştir. Seçeneklerde ise birtakım önermeler bulunmaktadır. Öğrencilerden bu önermelerin kalıp yargı olup olmadığını belirlemeleri beklenmektedir. Metinde fiyat, ambalaj, marka ismi, üretildiği ülke gibi örneklere yer verilmiştir. Seçeneklerde ise pahalı, Japonlar, bilinen marka ifadeleri bulunmaktadır. Maddede kullanılan metnin hem maddeyi yanıtlamak için gerekli olmadığı hem de maddenin doğru yanıtına ilişkin ipuçları içerdiği ifade edilebilir. Bu haliyle, madde öğrencilerin sosyal bilgiler dersine ilişkin bilgi ve becerilerinden ziyade onların okuduğunu anlama becerilerini ölçmektedir. Öğrencinin bu maddeyi doğru yanıtlaması için okuduğu metni anlaması yeterlidir.

Madde kökü başlığı altında yer alan 7 numaralı ilke *madde kökündeki olumsuz ifadelerin vurgulanmas*ıyla ilgilidir. Bu bağlamda hem fen bilgisi hem de sosyal bilgiler dersinden incelenen maddelerin büyük çoğunluğunun olumsuz madde köküne sahip olmadığı görülmüştür. Madde kökü olumsuz olan maddelerde ise olumsuz ifadelerin vurgulanması ilkesine uyulduğu belirlenmiştir.

İnceleme formunun üçüncü kısmında **maddenin seçeneklerine** ait ilkeler yer almıştır. Maddelerin, seçeneklerle ilgili ilkelere uygunluklarına ilişkin yüzdeler Şekil 7'de verilmiştir.

Şekil 7 İncelenen Maddelerin Seçenekler ile İlgili İlkelere Uygunlukları



Grafik incelendiğinde, maddelerin seçeneklerle ilgili ilkeleri ihlal oranlarını genel olarak %20'nin altında olduğu görülmektedir. Karşılanma oranı en yüksek olan 1, 4, 5 ve 6 numaralı sırasıyla şöyledir:

- Seçenekler mantıksal ya da anlamlı bir sırada düzenlenmiştir.
- Hepsi veya hiçbiri seçeneklerinden kaçınılmıştır.
- Seçeneklerde tekrar eden ifade yoktur.
- Anlamsız, maddeyle ilişkisiz (saçma) seçenekler yoktur.

Şekil 7'de her iki derse ait uygunluk oranları incelendiğinde, 2 ve 3 numaralı ilkelerin (seçeneklerin içerik ve dilbilgisi olarak benzer olması, seçeneklerin yaklaşık olarak benzer uzunluğa sahip olması) diğer ilkelere göre daha fazla ihlal edildiği görülmektedir. 2 numaralı ilke fen bilgisi dersi için % 13,3, sosyal bilgiler dersi için

% 10 oranında; 3 numaralı ilke fen bilgisi dersi için % 11,7, sosyal bilgiler dersi için % 26,7 oranında ihlal edildiği belirlenmiştir. Üç numaralı ilkenin ihlaline ilişkin örnek bir madde Şekil 8'de verilmiştir:

Şekil 8

Fen Bilgisi Dersi için Örnek Madde – 3

İsmail'in geçirmiş olduğu bir hastalık sonrası bir bakteri türü vücuduna girmiş, ancak iki hafta sonunda kendiliğinden iyileşmişti. Bu süre içinde aylardır hazırlandığı bin metre yıldız sporcular koşu yarışmasına hiç antrenman yapamadan katılmak zorunda kalmıştı. Yarışın ilk üç yüz metresini rahat bir şekilde koşmuş ancak bacaklarındaki ani kasılmaları, son beş yüz metrede de enerjisinin tükendiğini hissetmişti. Terden sırılsıklam olan İsmail nefes almakta güçlük çektiğini fark edince yarışı bıraktı.

Hayatından bir kesit verilen İsmail'in hücrelerindeki organellerle ilgili aşağıdaki yargılardan hangisine ulaşılamaz?

- A) Golgi cisimciği İsmail'in terlemesi esnasında daha fazla görev almıştır.
- B) Vücuduna giren bakterilerin yok edilmesine lizozom organelleri yardımcı olmuştur.
- C) Nefes almakta güçlük çektiği sırada ribozom organelleri hücrelere gerektiği kadar oksijen taşıyamamıştır.
- D) Bacaklarındaki ani kasılmalar ve enerjisinin tükendiği hissi hücrelerindeki mitokondrilerin yeterli miktarda enerji üretememesi sonucudur.

Şekilde 8'de yer alan madde incelendiğinde seçeneklerin uzunluklarının benzer olmadığı görülmektedir. Maddeyi tahminle doğru yanıtlama davranışı gösterecek bir öğrencinin en kısa ya da en uzun seçeneğe yönelme eğiliminde olacağı göz önüne alındığında, bu maddenin doğru yanıtının bu iki seçenekten biri olmaması olumlu bulunmuştur. Bu maddede ihlal edilen önemli bir durum ise maddenin bilimsel hata içermesidir. Maddede öncül bir durum olarak verilen metnin ilk cümlesinde "hastalık sonrası bakterinin vücuda girdiği" biçiminde bir bilgi verilmiştir. Hastalık yapıcı bir bakterinin vücuda girmesi sonrasında hastalığın oluşacağı göz önüne alındığında, maddede yer alan bu bilginin bilimsel acıdan hatalı olabileceği ifade edilebilir.

Sonuc ve Tartısma

Bu araştırmada, MEB Ölçme, Değerlendirme ve Sınav Hizmetleri Müdürlüğü'nün web sitesi aracılığıyla öğrencilerin erişimine sunulan 7. sınıf düzeyindeki Fen Bilgisi ve Sosyal Bilgiler konu alanlarına dayalı farklı üniteler için hazırlanmış maddelerin, genel madde yazımı, madde kökü ve madde seçenekleri bakımından madde yazım ilkelerine uygunluğu incelenmiştir.

Maddeler genel madde yazım ilkelerine uygunluk açısından incelendiğinde hem fen bilgisi hem de sosyal bilgiler alanında maddelerin büyük bir çoğunluğunda hedef gruba uygun bir anlatım kullanıldığı, maddelerde öğrenciler için belirsiz olabilecek ifadelerden ya da aşina olmayan kelimelerden kaçınıldığı, ana fikrin madde kökünde açık ve anlaşılır bir biçimde ifade edildiği gözlenmiştir. İyi bir maddenin, öğrenciden beklenen görevi açık ve sade bir biçimde içermesi, ayrıca, öğrenciler için anlamlı ve önemli olan bir bilgiyi ve bilişsel süreci ölçmesi gerekmektedir (Haladyna, 2004). Maddenin içeriği ve dili öğrenci düzeyine uygun olmadığında, öğrenci

kendisinden nasıl bir yanıt beklendiğini ve madde ile neyin ölçülmek istendiğini anlamakta güçlük çekebilir. Bu durum, öğrencinin madde ile ölçülen kazanıma ulaşmış olmasına rağmen maddeye yanlış yanıt vermesine neden olabilir. Kullanılan madde türü ne olursa olsun, bir test maddesinin temel görevi ölçülen bilgi ya da beceriye sahip olan öğrencileri, bu bilgi ve beceriler açısından eksikleri olan öğrencilerden ayırılabilmektir (Nitko ve Brookhart, 2011).

Maddeler genel madde yazım ilkelerine uygunluk açısından incelendiğinde, maddelerde (öncül, kök veya seçenek) öğrencileri doğru cevaba yönlendirebilecek ip uçlarının bulunduğu görülmüştür. Madde yanıtlarını etkileyebilecek nitelikte ipuçları içeren madde sayısının fen bilgisine göre sosyal bilgiler dersinde daha fazla olduğu belirlenmiştir. Bu ipuçları özellikle maddelerde verilen öncüller (metin, resim, tablo, görsel vb.) içerisinde bulunmaktadır. Öğrencinin maddenin doğru yanıtına ilgili bilgi ve becerileri kullanarak mı, yoksa ipucunu fark ederek mi ulaştığı bilinemez. Bu durum, madde ile ölçülen psikolojik özellikten kaynaklı olmayan bir varyansın (construct irrelevant variance) oluşmasına neden olduğundan (Messick, 1989) madde puanlarının geçerliğini düşürebilir.

Araştırmada elde edilen bir diğer bulgu, maddelerde yanıt vermek için gerekli olmayan ifadelerin kullanılmasına ilişkindir. Madde yazımında uzun ve karmaşık cümle yapılarının, öğrenciler için zor olabilecek sözcüklerin ve maddeyi yanıtlamak için gerekli olmayan ifadelerin kullanılması, öğrencilerin maddedeki performanslarını olumsuz etkileyebilir. Maddenin yanıtlanması açısından gereksiz olan ifadeler öğrenci için önemli hale gelip onun dikkatini çekebilir. Bu durum, gerçekte zor olmayan bir maddeyi olduğundan daha zor ve daha az ayırt edici hale getirebilir (Nitko ve Brookhart, 2011; Yıldırım 2021).

Araştırmada madde kökü bağlamında inceleme yapıldığında genel olarak aşırı detay veya aşırı genel içerikten kaçınıldığı, madde kökünde kullanılan yönergelerin açık olduğu belirlenmiştir. İyi hazırlanmış bir çoktan seçmeli maddenin kökü, öğrencilerden beklenen görevi açık biçimde sunmalıdır. Ancak, madde kökü böyle değilse, öğrencinin madde kökündeki görevi anlamak için maddeyi tekrar tekrar okuması gerekebilir (Popham, 2011). Bu durum öğrencinin kendisinden beklenen asıl görevi anlamasını güçleştirebilir ve öğrencinin zaman kaybetmesine neden olabilir. Bu başlık altında yapılan incelemeler sonucunda, maddelerin çoğunluğunun belli bir görüşe veya kanıya dayalı olmadığı, yanlılık içerebilecek ifadeler içermediği belirlenmiştir. Bir maddenin geçerli sonuçlar sağlayabilmesi, tüm yanıtlayıcılar için adil bir ölçme yapmasına bağlıdır. Madde yazımında herhangi bir katılımcı grubun duygu ve düşüncelerini rencide edecek bir dil, üslup ve bağlamın kullanımı veya belli bir grup için maddeyi yanıtlamanın avantaj veya dezavantaj oluşturması maddenin geçerliğini olumsuz etkiler (Yıldırım, 2021).

Madde köküne dayalı yapılan incelemelerde fen bilgisi ve sosyal bilgilerin her ikisinde de birleşik yanıt vermeyi gerektiren maddelere yer verildiği gözlenmiştir. Sireci ve diğerlerinin (1998), geniş ölçekli testlerde bulunan 285 madde üzerinde yaptıkları araştırmada en fazla ihlal edilen ilkenin birleşik yanıt gerektiren madde türü olduğu

belirlenmiştir. Bu kullanım maddenin anlaşılırlığını zorlaştırmakta ve madde ayırt ediciliğini düşürmektedir (Haladyna ve Downing, 1989; Kreiter ve Frisbie, 1989; Sireci vd. 1998).

Araştırmada, her iki alan için, madde köklerinde okuma yükünü artıran ve maddeyle ilişkili olmayan görsellere veya metinlere yer verildiği görülmüştür. Bu bulguyu destekler biçimde, Şengül-Avşar ve Barış-Pekmezci (2020) tarafından yapılan çalışmada, Milli Eğitim Bakanlığı Türkçe dersi maddelerindeki görsel ve metinlerin etkili bir biçimde kullanılamadığı ifade edilmiştir. Maddede uyarıcıların kullanımda yazarların dikkat etmesi gereken iki önemli soru bulunmaktadır. Bunlardan biri öncülün maddenin yanıtlanması için gerekli olup olmadığıyla ilgilidir. İkinci soru da öncülün öğrenci için anlamlı olup olmadığıyla ilgilidir. Eğer öncül kullanılmadan da madde yanıtlanabiliyorsa, bunlara maddede yer verilmemelidir. Gereksiz unsurlar maddenin yanıtlanmasını zorlaştırır ve öğrencide kafa karışıklığına neden olur (Bilican-Demir, 2021).

Madde kökünde olumsuz ifadenin kullanılması durumu incelendiğinde olumsuz madde kökünün az da olsa kullanıldığı ve olumsuzluk içeren kelimelerin vurgulandığı belirlenmiştir. Downing (2005)'in dört testteki 219 maddenin incelenmesi üzerine yaptığı araştırmasında testlerin % 35 ile % 65 oranında madde yazım ilkesini ihlal ettiği ve iki testte en çok görülen ihlalin maddenin olumsuz yazılması olduğu belirlenmiştir. Öğrencilerin olumlu maddelere göre olumsuz maddeleri anlaması daha zordur. Tamir (1993) öğrencinin olumsuz maddeleri anlamak için aynı maddenin olumlu haline göre iki kat daha fazla işleyen belleğini kullandığını belirtmiştir (Akt. Haladyna, 2004). Downing (2005) de olumsuz maddelerin madde güçlük düzeyinin diğer maddelere göre daha yüksek olduğunu bulmuştur.

Maddelerin seçenekleri incelendiğinde maddelerin büyük bir çoğunluğunda seçeneklerin mantıksal ve anlamlı bir sırada düzenlendiği, seçeneklerde tekrar eden ifadelere yer verilmediği belirlenmiştir. Seçeneklerde "yukarıdakilerin hepsi" veya "yukarıdakilerin hiçbiri" gibi ifadeler fen bilgisindeki maddelerde gözlenmezken, sosyal bilgilerde bazı sorularda bu ifadelere yer verilmiştir. Sireci vd. (1998) inceledikleri 285 madde içerisinde yukarıdakilerin hepsi veya hiçbiri ilkesinin ihlal edilmediğini, Downing (2005) ise 219 madde içerisinde bu ilkeyi ihlal eden madde sayısının çok az olduğunu belirtmiştir. Bu tür seçeneklerin kullanılması öğrenciye cevaplamada ipucu verebilir. Örneğin öğrenci, verilen seçenekler arasından ikisinin doğru olduğunu düşünürse bu durumda doğru yanıt hepsi seçeneği olacaktır (Nitko ve Brookhart, 2011). Haladyna (2004) bu tür seçeneklerin çoklu Doğru-Yanlış türü maddeler dışında kullanılmamasını önermektedir.

Madde seçeneklerinin dil bilgisi ve içerik bakımından madde kökü ile ve kendi içerisindeki uyumu incelendiğinde diğer madde seçeneklerinde uyulması gereken ilkelere göre bu ilkenin daha fazla ihlal edildiği görülmüştür. Doğru yanıta ilişkin ipucu içeren seçeneklere sahip maddelerin olduğu gözlenmiştir. Ayrıca, seçeneklerin uzunluk açısından birbirine benzer olmasına yeteri kadar dikkat edilmediği belirlenmiştir. Maddelerde doğru yanıt seçeneğinin çeldiricilere göre genellikle daha uzun olduğu

gözlenmiştir. Bu bulguyu destekler biçimde, Tarrant vd. (2006)'nin çalışmasında, doğru yanıtın çeldiricilerden daha uzun olması en sık rastlanılan ihlaller arasında yer almıştır. Öğretmenlerin doğru seçeneği daha açık ve nitelikli yazma çabası bazı durumlarda doğru yanıt seçeneğinin çeldiricilere göre daha uzun olmasıyla sonuçlanabilir. Bu durum hem öğrenciye bir ipucu sağlar hem de maddedeki okuma yükünü artırır. Maddenin cevaplanmasında kolaylık sağlayan ipuçları ya da maddeyi yanıtlamayı zorlaştıran durumlar ölçülmek istenilen yapıyla ilgisiz bir varyansın oluşmasına neden olarak ölçme sonuçlarının güvenirliğini ve geçerliğini düşürebilir (Downing, 2002; Messick, 1989).

Araştırmada, fen ve sosyal bilgiler dersleri için ulusal düzeyde öğrencilerin erişimine sunulmuş bazı maddelerin madde yazımında dikkat edilmesi gereken ilkelere uygunluğu incelenmiştir. Bu incelemeler, maddelerin çoktan seçmeli maddeler için istenen teknik niteliklere ne oranda sahip olduğunu belirlemekle sınırlandırılmıştır. Dolayısıyla, araştırmada maddelerin kazanım ve bilişsel boyutlara uygunluğu açısından bir inceleme yapılmamıştır. Ulusal düzeyde öğrencilerin erişimine sunulmuş olan maddelerin kazanım ve bilişsel süreçlere uygunluğuna ilişkin bir inceleme yapılabilir. Ayrıca, araştırmada yalnızca fen bilgisi ve sosyal bilgiler alanından tesadüfi olarak seçilen üç ünitedeki maddeler değerlendirilmiştir. Araştırmanın kapsamı geliştirilerek ilgili internet sitesinde sunulan diğer alanlardaki maddeler üzerinde de benzer incelemeler yapılabilir. Araştırmada, maddelerin yanlılığı yalnızca uzman görüşüne dayalı olarak değerlendirilmiştir. Maddelerin öğrencilere uygulanmasıyla elde edilecek veri üzerinde detaylı istatistiksel analizler yapılarak maddelerin yanlılığına ilişkin daha fazla bilgi elde edilebilir.

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Investigation of the Test Items Published by Ministry of National Education According to the Item Writing Guidelines

Abstract

The present study aims to investigate the consistency of the sample test items published by The Ministry of National Education of Turkey according to the item writing principles. The 120 items randomly selected from the items published for the seventh-grade science and social sciences courses. The selected items were examined by the researchers based on an item review form developed by the researchers, and the collected data were analyzed based on the descriptive statistics. The results of the study revealed that the items include clues referring to the correct answer, textual or visual materials unnecessary to answer the items. In addition, it was brought out that the complex multiple choice item format (e.g., I, II, II, IV etc.) are frequently used.

When the items are analyzed to see if they meet the style concerns or item stem writing principles (such as the use of correct grammar or clear directions in the item stem), it was found that the items meet the grammatical principles, the main idea are generally presented in the item stem instead of the choices, items have clear instructions, and they are not opinion-based.

Keywords: multiple-choice item writing principles, measurement and evaluation, test development

Ek-1: Madde İnceleme Formu

	Madde İnceleme Formu	Evet	Науп	Uygulanamaz (NA)
	Maddenin Geneli			
1	Maddede belirsiz ve hedef grubun düzeyine uygun olmayan kelimelerden (teknik terim, yabancı kelime, aşina olunmayan kelimeler) kaçınılmıştır.			
2	Doğru dilbilgisi (noktalama işaretleri ve yazım kuralları) kullanılmıştır.			
3	Ana fikir seçeneklerde değil madde kökünde verilmiştir.			
4	Maddede doğru cevaba yönlendirecek ip uçlarından kaçınılmıştır.			
5	Maddeyi yanıtlamada gerekli olmayan ifadelerden kaçınılmıştır			
	Madde Kökü			
1	Aşırı detay ya da aşırı genel içerikten kaçınılmıştır.			
2	Madde bir görüşe ya da kanıya dayalı değildir.			
3	Bileşik yanıt vermeyi gerektiren maddelerden (I, II, III ve IV öncül maddeler) kaçınılmıştır.			
4	Madde kökünün okuma yükü en aza indirilmiştir.			
5	Madde kökündeki yönerge açık ve anlaşılırdır.			
6	Madde kökü belli bir gruba (cinsiyet, din, ırk, vb.) yanlı ifade yoktur.			
7	Madde kökündeki olumsuz ifadeler vurgulanmıştır.			
8	Kullanılan görsel maddeyi yanıtlamak için gereklidir.			
9	Kullanılan metin maddeyi yanıtlamak için gereklidir.			
	Seçenekler			
1	Seçenekler mantıksal ya da anlamlı bir sırada düzenlenmistir.			
2	Seçenekler içerik ve dilbilgisi olarak benzeşiktir.			
3	Seçenek uzunlukları yaklaşık olarak eşittir.			
4	Hepsi veya hiçbiri seçeneklerinden kaçınılmıştır.			
5	Seçeneklerde tekrar eden ifade yoktur.			
6	Anlamsız, maddeyle ilişkisiz (saçma) seçenekler yoktur.			

Fen Bilimleri Öğretmenlerinin Üst Düzey Öğrenme Düzeyini Ölçen Soru Geliştirme Öz-Yeterlikleri

Ahmet Bolata, Sevilay Karamustafaoğlub ve Özgen Korkmazc

Öz

Bu çalışmada fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği çeşitli değişkenler açısından incelenmiştir. Çalışma nicel kökenli tarama modelindedir. Çalışmanın örneklemini Türkiye'de Millî Eğitim Bakanlığı'na bağlı resmi ortaokullarda görev yapan 492 fen bilimleri öğretmenleri oluşturmaktadır. Veriler elektronik ortam yoluyla araştırmacılar tarafından geliştirilen "Fen Bilimleri Öğretmenlerinin Üst Düzey Öğrenme Becerisini Ölçen Soru Yazma Öz-Yeterliği Ölçeği" ile toplanmıştır. Verilerin analizi betimsel istatistik ve fark testleri ile yapılmıştır. Sonuçta fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği puan ortalamalarının yüksek olduğu kıldem ve öğretmenleri eyenin düzeyi açısından anlamlı fark olmadığı ancak cinsiyet bakımından erkek öğretmenler lehine anlamlı fark olduğu belirlenmiştir. Çalışmanın sonunda öğretmenlere üst düzey düşünme becerileri ölçen soru yazma eğitim programlarının düzenlenmesi, akademik destek sağlanması yönünde önerilerde bulunulmuştur.

Keywords: ölçme ve değerlendirme, soru yazma öz-yeterliği, fen bilimleri öğretmenleri, üst düzey düşünme becerileri

Makale Hakkında

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Giriş

Dünyada ve ülkemizde, üniversitelerin eğitim fakültelerinde öğretmenlik eğitimi alan öğretmen adaylarına kazandırılması gereken birtakım beceriler bulunmaktadır. Bu beceriler, Millî Eğitim Bakanlığı tarafından 2006 yılında öğretmenlik mesleği genel yeterlikleri çerçevesinde hazırlanarak yayınlanmıştır. Yayınlanan bu belgeye göre öğretmenlik mesleği 6 ana yeterlik alanına ayrılmıştır. Bu ana yeterlikten birisi öğrenmeyi, gelişimi izleme ve değerlendirmedir (Millî Eğitim Bakanlığı [MEB], 2006). Daha sonra Avrupa Birliği ve Avrupa Parlamentosu'nun Avrupa Yeterlik çerçevesini

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kabul etmesiyle birlikte tüm ülkelerden bu çerçeveyle uyumlu ulusal yeterlik çerçevesinin belirlemesi Avrupa Birliği ve Avrupa Parlamentosu tarafından tavsiye edilmiştir. Ülkemiz de bu tavsiyeyle 2017 yılında yeni öğretmenlik mesleği genel yeterliklerini güncellemiştir. Güncellenmiş mesleki yeterlik çerçevesinde 3 ana yeterlik ve bunların altında 11 alt yeterlik belirlenmiştir. Mesleki beceri ana yeterliliği altında ölçme ve değerlendirme yeterliği alt yeterlik olarak belirlenmiştir. Ölçme değerlendirme alt yeterliği "Ölçme değerlendirme yöntem, teknik ve araçlarını amacına uygun kullanır" şeklinde ifade edilmiştir (MEB, 2017).

Ölçme değerlendirme alt yeterliğinin 5 yeterlik göstergesi bulunmaktadır. Yeterlik göstergelerden birisi "alanına ve öğrencilerin gelişim seviyelerine uygun ölçme değerlendirme araçları hazırlar ve kullanır" şeklindedir (MEB, 2017). Bu durumda öğretmenlerden öğrencilerinin gelişimini izlemek ve değerlendirmek amacıyla ölçme değerlendirme araçların hazırlaması beklenmektedir. Eğitim süreçlerinde ölçme değerlendirme araçları yaygın bir şekilde sorulardan oluşmaktadır (Turgut ve Baykul, 2019). Sınav kitapçıklarında yer alan sorular yoluyla öğretmenler öğrencilerinin gelişimlerini izleyip değerlendirmektedirler. Öğretmenlerin öğrencilerinin gelişimini geçerli ve güvenilir bir şekilde izleyebilmeleri için hazırlamış oldukları soruların ölçme değerlendirme ilklerine ve günümüzün bireylerden beklentilerine uygun olması gerekmektedir.

Özdemir, Özdemir ve Gelbal (2021) tarafından yapılan araştırmada öğretmenler ölçme değerlendirme süreçlerinde kendilerini yetersiz görmektedirler. Gelbal ve Kelecioğlu (2007) yaptıkları araştırmada geleneksel ölçme değerlendirme yöntemlerini kullandıklarını ve öğretmenlerin ölçme tekniklerinin hazırlanması ve kullanılması konusunda hizmetiçi eğitime ihtiyaç duyduklarını belirlemişlerdir. Benzer şekilde Özeren (2013) öğretmenlerin ölçme değerlendirme konusundaki becerilerinin geliştirilmesine ihtiyaç olduğunu ifade etmiştir. Ersoy (2008) fen ve teknoloji dersinin değerlendirilmesine yönelik yaptığı araştırmalarda sınıf öğretmenlerinin ölçme değerlendirme konusunda hizmetiçi eğitime ihtiyaç duyduklarını tespit etmiştir.

Diğer taraftan bireylerden beklenen bilgi ve becerilerin türü zamanla değişmektedir. Son yıllara kadar öğrencilerin bilgiye sahip olması yeterliyken bilim ve teknolojinin gelişmesiyle birlikte sadece bilgiye sahip olmak yeterli olmamaktadır. Artık toplumu oluşturan bireylerden bilgiye sahip olması, sahip olduğu bilgiyle yeni bilgi üretmesi beklenmektedir. Üretilen bilgilerle gündelik yaşamda ve toplum yaşamda karşılaşılan sorunların çözülmesi amaçlanmaktadır. Bu durum öğrencilerin üst düzey düşünme becerisi göstermesini gerektirmektedir. Üst düzey düşünme becerilerine sahip bireyler bilgiye ulaşır, ulaşılan bilgiyi analiz eder, analizler sonucunda var olan problemleri çözüme kavuşturur (Akpınar ve Aydın, 2010). Yapılan çalışmalar öğrencilerin düşünme becerilerinin geliştirilebileceğini göstermektedir (Güneş, 2012). Düşünme becerilerinin alt düzeyden üst düzeye çıkarılabilmesi için eğitim sürecinde izlenmesi ve değerlendirilmesi gerekmektedir (Doğan, 2020). İzleme ve değerlendirme faaliyetlerini eğitim kurumlarında öğretmenler yaptığı için öğretmenlerin üst düzey düşünme becerileri ölçme yeterliğine sahip olması gerekmektedir.

Düşünme becerileri çeşitli şekillerde sınıflandırılmıştır. En yaygın kabul edilen sınıflandırma Bloom Taksonomisi'dir. Bu taksonomi bilişsel davranışları, dört boyut altı düzeyde sınıflandırmaktadır. Bu düzeyler hatırlama (bilgi), anlama (kavrama), uygulama, çözümleme (analiz), değerlendirme ve yaratma (oluşturma)'dır (Anderson ve Krathwohl, 2010). Son üç basamak olan çözümleme, değerlendirme ve yaratma basamağı üst düzey düşünme becerileri olarak kabul edilmektedir (Şahinel, 2002). Çözümleme materyali kısımlarına ayırmak, kısımların birbiri ve bütün ile ilişkisini belirleyebilmektir. Değerlendirme, ölçüt ya da standartlara göre yargılamalar yapmaktır. Yaratma ise öğeleri aynı amaca hizmet edecek şekilde bir araya getirmektir (Paul ve Nosich, 1992). Üst düzey düşünme becerileri taksonomideki alt düzeyler, üst düzeylerin ön koşulu olduğundan üst düzey düşünme becerilerine sahip olabilmek için alt düzey olan hatırlama, anlama ve uygulama düzeyini aşmak gerekir (Ardahanlı, 2018). Dolayısıyla bireylerin üst düzeye ulaşabilmeleri için bilgiyi hatırlamaları, anlamaları ve farklı duruma uygulayabilmeleri gereklidir.

Diğer taraftan öğrenmenin gerçekleşebilmesi için öğrenenenin öğrenme süreçlerinde belirli düzeyde öz-yeterliğe sahip olması gerekmektedir (Marsh vd., 1992). Özyeterliği yüksek olan davranışlarda bireyler o davranışı yerine getirme konusunda kendilerini yeterli, özyeterliği düşük davranışlarda ise kendilerini yetersiz olduklarını düşünmektedir. Özyeterlik bir anlamda bireylerin herhangi bir işi başarabileceğine yönelik kendine duyduğu inancıdır (Bandura, 1977). Öğretmen özyeterliği ise öğretmenlerin öğretim ile ilgili bir görevi yerine getirebileceğine dair inancıdır. Son yıllarda yapılan araştırmar öğrenci başarısının öğretmenin öz yeterliğinden etkilendiğini göstermektedir (Özerkan, 2007; Woolfolk Hoy ve Spero, 2005;). Öğretmenlerin üst düzey düşünme becerileri ölçen soru hazırlayabilmeleri için gerekli ön şartlardan birisi de bu konuda öz yeterliğe sahip olmalarıdır. Yüksek düzeyde öz yeterliğe sahip olan öğretmenler üst düzey düşünme becerileri ölçen soru hazırlayabilme noktasında önemli bir eşiği atlatmış olabilir.

Literatür incelemesi yapıldığında ülkemizde kullanılan ders kitaplarında yer alan soruların çoğunluğunun alt düzey düşünme becerisini ölçmeye yönelik olduğu belirlenmiştir (Aybek vd. 2014; Akçay vd., 2017; Doğan, 2019). Literatürde merkezi sınavlarda sorulan soruların bilişsel düzeyini inceleyen çalışmalara da rastlanmaktadır (bkz. Arı ve İnci, 2015). 2013-2014 eğitim-öğretim yılında ülke genelinde uygulanan ortak sınavdaki fen ve teknoloji sorularının daha çok alt düzey düşünme becerilerini ölçmeye yönelik olduğunu belirlemiştir. Aksine 2001 LGS soruları %52 oranında üst düzey düşünme becerisini ölçmeye yöneliktir (Mutlu vd., 2003). Sezer (2018), 2016-2017 1. dönem TEOG sorularının daha çok alt düzey düşünme becerisini ölçecek nitelikte olduğunu belirlemiştir.

Literatür incelendiğinde gerek öğretmen adayları gerekse görevde olan öğretmenlerin hazırladıkları soruların önemli bir kısmı alt düzey düşünme becerilerini ölçmeye yöneliktir. Hazırlanan soruların çok küçük bir kısmı üst düzey düşünme becerilerini ölçecek şekilde hazırlanmaktadır. Yapılan bazı araştırmalara göre fen bilimleri/fen ve teknoloji öğretmen adaylarının hazırlamış oldukları sorular büyük oranda Bloom Taksonomi'sinin bilgi, kavrama düzeyinde yer almaktadır (Koray vd.,

2005; İskamya, 2011; Özcan ve Akcan, 2010). Öğretmenlerle ilgili yapılan çalışmalarda öğretmenlerin hazırlamış oldukları yazılı sınav yoklamaları incelenmiştir. Bu çalışmalar kapsamında öğretmenlerin okullarda uyguladıkları sınav formları incelenmiştir. İncelemeler sonucunda fen bilimleri öğretmenlerinin hazırlamış oldukları soruların daha çok alt düzey düşünme becerisini ölçtüğü sonucuna ulaşmışlardır (Akpınar ve Ergin, 2006; Ayvacı ve Şahin, 2009; Cansüngü Koray ve Yaman, 2002; Dindar ve Demir, 2006; Mutlu vd., 2003).

Konu ile ilgili literatür değerlendirildiğinde ders kitaplarında ve merkezi sınavda yer alan soruların çoğunlukla alt düzey düşünme becerilerine yönelik olduğu görülmektedir. Öğretmen adayları ve öğretmenlerin hazırlamış olduğu soruların da coğunlukla alt düzey düşünme becerilerini ölçmeye yönelik olduğu anlaşılmaktadır. Ulusal literatürde yer alan çalışmaların var olan durumu betimlemeye odaklandığı, bu durumların nedenlerine ve çözümüne yönelik çalışmaların sınırlı olduğu görülmektedir. Bu çalışmalardan Pektaş (2010) ile Yeşilyurt ve Yaraş (2011) yaptıkları araştırmada öğretmenlerin geleneksel ölçme ve değerlendirme konusunda öz-veterlik algılarının orta ve yüksek düzeyde olduğunu belirlemistir. Gelbal ve Kelecioğlu'nun (2007) yaptığı araştırmada ise öğretmenler geleneksel ölçme ve değerlendirme konusunda yeterli, alternatif ölçme ve değerlendirme yöntemlerinde ise orta düzeyde yeterli görmektedirler. Ayrıca bu çalışmaya göre öğretmenler sınıfların kalabalık oluşunu ve zaman yetersizliğini etkin ölçme değerlendirme yapmalarının önünde engel olarak görmekte, hizmetiçi eğitim ihtiyacını dile getirmektedirler. Fen okuryazarlığı kursuna katılan öğretmenlerin soru yazma becerilerinin (Çepni vd., 2020), nitelikli yaşam temelli açık uçlu soru hazırlama kursunun (Ar, 2019) öğretmenlerin açık uçlu soru yazma becerilerini geliştirdiği belirlenmiştir.

Genel bir değerlendirme yapıldığında öğretmenlerin üst düzey düşünme becerisinin ölçümüne yönelik soru hazırlama konusundaki yetersizliklerinin nedenlerini belirleme ve geliştirilmesine yönelik literatürde sınırlı sayıda çalışma olduğu anlaşılmaktadır. Bu çalışma ile fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru hazırlama öz-yeterlik düzeyini belirlemek ve bazı değişkenler açısından incelemek amaçlanmıştır. Çünkü herhangi bir görevi yerine getirebilmenin ön şartlarından birisi de yapılacak görevle ilgili başarma inancıdır (Bandura, 1977).

Bu çalışmanın ana problemini "Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği düzeyi nedir?" oluşturmaktadır. Ana probleme bağlı olarak asağıdaki alt problemler belirlenmistir:

- 1. Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği düzeyi öğretmenlerin cinsiyeti bakımından farklılasmakta mıdır?
- 2. Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği düzeyi öğretmenlerin hizmet süresi (kıdem) bakımından farklılasmakta mıdır?

3. Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği düzeyi öğretmenlerin öğrenim düzeyi bakımından farklılaşmakta mıdır?

Yöntem

Araştırmanın Modeli

Bu çalışma betimsel tarama modeline uygun bir şekilde tasarlanmıştır. Betimsel tarama modeli geçmişte ya da günümüzde var olan bir durumu olduğu gibi açıklamayı hedefleyen bir araştırma yöntemidir (Karasar, 2000). Bu çalışmada, fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru geliştirme öz-yeterliği herhangi bir müdahale olmadan olduğu gibi incelenmek istendiğinden araştırma bu modele uygun şekilde tasarlanmıştır.

Evren ve Örneklem

Bu araştırmanın evrenini; Türkiye'deki Millî Eğitim Bakanlığı bünyesinde resmi ortaokullarda çalışan fen bilimleri öğretmenleri oluşturmaktadır. Çalışmanın örneklemini ise Türkiye'deki Millî Eğitim Bakanlığı bünyesinde resmi ortaokullarda çalışıp; araştırmaya gönüllü olarak katılan toplam 492 fen bilimleri öğretmenleri oluşturmaktadır. Uygulamada yer alan öğretmenlerin bazı kişisel özelliklerine göre dağılımı Tablo 1'de sunulmuştur.

Tablo 1Örneklem Grubunu Oluşturan Öğretmenlerin Kişisel Özelliklerinin Frekans ve Yüzde Dağılımı

Özellik		Frekans (f)	Yüzde (%)
Cinsiyet	Erkek	224	45,53
	Kadın	268	54,47
	Toplam	492	100
	0-5 Yıl	90	18,3
	6-10 Yıl	158	32,11
Kıdem	11-15 Yıl	112	22,76
	16-20 Yıl	53	10,77
	21-25 Yıl	42	8,54
	26 Yıl ve üzeri	37	7,52
	Toplam	492	100
Öğrenim Düzeyi	Ön Lisans	1	0,2
	Lisans	379	77,03
	Yüksek Lisans	100	20,33
	Doktora	12	2,44
	Toplam	492	100

Çalışmanın örneklemini oluşturan fen bilimleri öğretmenlerinin kişisel özelliklerinin frekans ve yüzde dağılımının sunulduğu Tablo 1. incelendiğinde; öğretmenlerin cinsiyet

bakımından kadın öğretmenlerin sayısının kadın öğretmenlerin sayıca fazla olmakla birlikte oransal bakımından dengeli dağıldığı anlaşılmaktadır. Öğretmenlerin kıdemi açısından örneklem grubu değerlendirildiğinde; en fazla sayıda 6-10 yıl arası kıdemi olan öğretmenlerin, en az sayıda ise 26 yıl ve daha fazla kıdemi olan öğretmenlerin olduğu anlaşılmaktadır. Öğrenim düzeyi bakımından ise çoğunluğunun lisans mezunu olduğu anlaşılmaktadır.

Veri Toplama Aracı

Verilerin toplanmasında Bolat vd. (2021) tarafından geliştirilen "Fen Bilimleri Öğretmenlerinin Üst Düzey Öğrenme Düzeyini Ölçen Soru Yazma Öz-Yeterliği Ölçeği" kullanılmıştır. "Fen Bilimleri Öğretmenlerinin Üst Düzey Öğrenme Düzeyini Ölçen Soru Yazma Öz-Yeterliği Ölçeği", likert tipinde bir ölçek olup tek boyutlu ve 30 maddeli bir ölçektir. Maddeler, "Kesinlikle Katılmıyorum (1), Katılmıyorum (2), Kararsızım (3), Katılıyorum (4), Kesinlikle Katılıyorum (5)" şeklinde ölçeklendirilmiştir. Ölçekten iki örnek madde aşağıda sunulmuştur.

M11: Öğrencilerin bir problemin çözümüne yönelik öneri sunabilme becerisini ölçen soru maddesi yazabilirim.

M17: Öğrencilerin gözlem, çıkarım veya uygulanan deneylere dayanarak geleceğe yönelik muhtemel sonuçlar hakkında tahmin yapabilme becerilerini ölçen soru maddesi yazabilirim.

Ölçeğin KMO değeri 0,967; Bartlett Testi değerleri $x^2 = 8057,031$; sd = 435; p = 0.00'dır. Ölçeğin döndürme öncesi ve sonrası durumunu görmek amacıyla rotasyona tabi tutulmaksızın (unrotated) faktör yükleri hesaplanmış ve 0,713 ile 0,856 aralığında değer aldığı görülmüştür. Ölçekte maddeler ve faktör toplam varyansın %63,86'sını açıklamaktadır. Bütün maddelerin ortak faktör varyans değeri 0,50 değerinden büyüktür. Ölçeğin doğrulayıcı faktör analizi ile hesaplanan uyum indisi değerlerinden $\gamma 2 / d = 2,657$, S-RMR = 0.025, CFI = 0.884, RMSEA = 0.084, GFI = 0.768, NNFI = 0.828. AGFI = 0.729 ve IFI = 0.885'dir. Uvum iviliği indisleri ölceğe ait modelin veriler tarafından doğrulanmış model olduğunu göstermektedir (McDonald ve Ho, 2002). Ölçeğin madde analizi sonuçlarına göre tüm maddelerin ve ölçeğin genelinin alt grup- üst grup puanları arasında anlamlı farklılık (p < 0.05) mevcuttur. Bu sebeple ölçeğin tamamı ve tüm maddeler ayırt edici özelliğe sahiptir (Erkuş, 2019). Ölçeğin madde-toplam korelasyon analizi sonucunda maddelerin korelasyon değerleri 0,70 ile 0,83 arasında değiştiği belirlenmiştir ve maddeler arası ilişkiler pozitif yönlü ve anlamlıdır. Bu sebeple her bir madde geçerli ve ölçeğin tamamı ile tutarlıdır. Bu yüzden tüm maddeler ölçeğin genel amacına hizmet etmektedir. Ölçeğin Cronbach Alpha güvenirlik katsayısı 0,98'dir. Bu değer ölçeğin güvenirliğinin çok yüksek olduğunu göstermektedir (Büyüköztürk, 2020). Ölçeğin psikometrik özellikleri birlikte değerlendirildiğinde (Erkuş, 2019)'un geçerli ve güvenilir ölçekler için belirlediği kriterlere göre, ölçeğin geçerli ve güvenilir olduğu sonucuna ulaşılabilir.

Çalışmanın analizleri SPSS 25 yazılımı yapılmıştır. Temel analizlere geçmeden önce verilerin geçerlik ve güvenirlik çalışması yapılmıştır. Öncelikle toplanan verilerin

güvenirlik analizi yapılmış ve verilerin Cronbach alpha güvenirlik katsayısı 0,98 olarak hesaplanmıştır. Daha sonra toplanan verilerin yapı geçerliğine kanıt aranmıştır. Yapı geçerliği kanıtı sunmak amacıyla ölçeğin tek faktörlü yapısı için veriler, faktör analizine tabi tutulmuştur. Analizler sonucunda KMO örneklem yeterliliği 0,975, Bartlett's küresellik testi ki-kare değeri 13282,57, serbestlik derecesi 435 ve anlamlılık değeri (p) 0,000 olarak hesaplanmıştır. Maddelerin ortak varyansları 0,47 ile 0,68 arasında, faktör yükleri ise 0,69 ile 0,82 arasında değiştiği görülmüştür. Ölçek ile ölçülmek istenen özelliğin %60,75'i açıklanmaktadır. Hesaplanan bu değerler toplanan verilerin ölçek ile ölçülmek istenen özellik bakımından geçerli ve güvenilir olduğunu göstermektedir (Baykul ve Güzeller, 2020; Büyüköztürk, 2020).

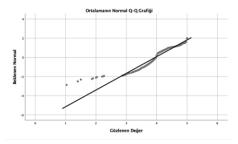
Verilerin Toplanması

Verilerin toplanması Amasya Üniversitesi Sosyal Bilimler Etik Kurulu tarafından 15.05.2020 tarih ve 30640013-044 sayılı kararı ile uygun bulunmuştur. Ölçek ile ilgili elektronik form hazırlanmıştır. Hazırlanan elektronik ölçek formu resmi ortaokullarda görev yapan 492 fen bilimleri öğretmenine uygulanmıştır. Öğretmenlere elektronik posta, mobil anlık yazışma uygulamaları ve sosyal medya yoluyla ulaşılmıştır. Elde edilen veriler, istatistiksel işlemler yoluyla analizlerini yapmak için SPSS 25 programına yüklenmiştir.

Verilerin Analizi

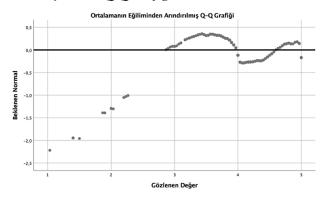
İstatistiksel analizler kapsamında araştırma için toplanan veriler üzerinde analizler yapılmıştır. Fen bilimleri öğretmenlerinin ölçek maddelerinden aldıkları ortalama puanların betimsel istatistikleri yapılmıştır. Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliğinin cinsiyet, kıdem ve öğrenim düzeyi bakımından farklılaşıp farklılaşmadığı incelenmiştir. Bu analizler öncesinde verilerin parametrik testlerin varsayımlarını karşılayıp karşılamadığı sınanmıştır. Bu amaçla Kolmogorov-Smirnov testi yapılmış, verilerin çarpıklık ve basıklık değerleri hesaplanmıştır. Analiz sonucunda Kolmogorov-Smirnov testi anlamlılık değeri (p=0,00), çarpıklık değerinin -1,19 ve basıklık değerinin ise 4,84 olduğu belirlenmiştir. Normal Q-Q grafiğinin doğrusal olmadığı, eğiliminden arındırılmış Q-Q grafiğinde de yatay sıfır çizgisinden çok fazla sapmalar olduğu belirlenmiştir. Normallik testleri sonucu elde edilen grafikler Grafik 1 ve Grafik 2'de sunulmuştur.

Grafik 1 Normal Q-Q Grafiği



Grafik 2

Eğiliminden Arındırılmış Normal Q-Q Grafiği



Ayrıca normallik varsayımları tüm alt değişkenler için ayrı ayrı da sınanmıştır. Cinsiyet ve kıdemin tüm alt değişkenleri içinde normallik varsayımları karşılanmamıştır. Öğrenim düzeyinde ise sadece doktora düzeyi için normallik varsayımı karşılanmış lisans ve yüksek lisans düzeyi için karşılanmadığı belirlenmiştir.

Yapılan analizler sonucunda verilerin normal dağılmadığı tespit edilmiştir. Bu nedenle nonparametrik testler yapılmıştır (Baykul ve Güzeller, 2020; Büyüköztürk, 2020; Can, 2019; Green ve Salkind, 2005). Cinsiyet bakımından farklılaşma Mann Whitney U testi, kıdem ve öğrenim düzeyindeki farklılaşma Kruskal Wallis H Testi ile incelenmiştir. Ayrıca ölçülen özelliğin ortalamaları arasında anlamlı farklılık olması durumunda bu farklılığın daha kapsamlı incelemek için eta-kare (η^2) etki büyüklüğü hesaplanmıştır. Bu hesaplama $\eta^2 = Z^2/N$ formülü ile yapılmıştır (Fritz, Morris ve Richler, 2012). Etki büyüklüğü 0,1'den küçük değerler için düşük düzeyde, 0,3 etki büyüklüğü orta düzey ve 0,5'ten büyük değerler için ise yüksek düzeyde açıkladığı anlamına gelmektedir (Coolican, 2009).

Bulgular

Çalışmanın bu bölümünde verilerin analiz edilmesi sonucu elde edilen bulgular sunulmuştur. Ölçek verileri kullanılarak fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği ölçek madde puanlarına yönelik betimsel istatistikler yapılmış ve analiz sonuçları Tablo 2'de gösterilmiştir.

Tablo 2 incelendiğinde en yüksek puan ortalamasının ($\bar{X}=4,17$) "Öğrencilerin verilen bir olaydaki bağımsız değişkeni belirleme becerisini ölçen soru maddesi yazabilirim." şeklinde olan 10. madde olduğu anlaşılmaktadır. En düşük ortalama puanın ise "Öğrencilerin elde ettiği ürünü paylaşabilme becerisini ölçen soru maddesi yazabilirim." şeklinde olan 22. madde ve "Sentez düzeyinde öğrenme becerisini ölçen

soru maddesi yazabilirim." şeklinde olan 25. maddedir. Öğretmenlerin ölçekten aldığı toplam puanların ortalaması ise 126,31 olup toplam puan ortalaması yüksektir.

Tablo 2Fen Bilimleri Öğretmenlerinin Üst Düzey Öğrenme Düzeyini Ölçen Soru Yazma Öz-Yeterliliği Ölçek Madde Puanlarına İlişkin Betimsel Analiz Sonuçları

Maddeler	X	SS	Maddeler	Χ̄	SS	
Madde1	3,92	0,77	Madde16	4,00	0,73	
Madde2	4,08	0,71	Madde17	3,86	0,78	
Madde3	4,07	0,72	Madde18	4,04	0,68	
Madde4	4,04	0,71	Madde19	3,83	0,79	
Madde5	3,85	0,79	Madde20	3,96	0,73	
Madde6	4,17	0,74	Madde21	3,93	0,72	
Madde7	3,95	0,75	Madde22	3,78	0,79	
Madde8	3,95	0,73	Madde23	3,91	0,75	
Madde9	4,14	0,73	Madde24	3,84	0,75	
Madde10	4,17	0,77	Madde25	3,78	0,78	
Madde11	3,95	0,79	Madde26	3,97	0,66	
Madde12	3,93	0,74	Madde27	3,93	0,67	
Madde13	3,97	0,73	Madde28	3,95	0,69	
Madde14	3,91	0,75	Madde29	4,01	0,71	
Madde15	3,97	0,74	Madde30	3,82	0,74	
			Toplam	126,31	18,42	

N = 492, \bar{X} : Ortalama, SS: Standart Sapma

Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma özyeterliği cinsiyete göre farklılık gösterip göstermediğini incelemek için, Mann Whitney U Testi yapılmış ve elde edilen bulgular Tablo 3'te sunulmuştur.

Tablo 3Fen Bilimleri Öğretmenlerinin Üst Düzey Düşünme Becerileri Ölçen Soru Yazma Öz-Yeterliğinin Cinsiyetlerine Ilişkin Mann Whitney U Testi Sonuçları

Cinsiyet	N	X	Sıra Ortalaması	Sıra Toplamı	U	p^*	η^2
Kadın	224	3,94	234,34	58475,5	26756,5	0,04	0.01
Erkek	268	3,97	261,05	62802,5			

^{*} *p* < 0,05

Tablo 3 incelendiğinde, fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği cinsiyet bakımından istatistiksel düzeyde farklılık göstermektedir [U = 26756,5 ve p < 0,05]. Bu farklılık erkek fen bilimleri öğretmenleri lehinedir [$\bar{X}_{erkek} = 3,97$ ve $\bar{X}_{kadın} = 3,94$]. Bu ölçme koşullarının etki büyüklüğü 0,01 olup ölçülen özelliği düşük düzeyde açıklamaktadır.

Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği öğretmenlerin hizmet süresine (kıdem) göre farklılık gösterip

göstermediğini incelemek için, Kruskal Wallis H Testi yapılmış ve elde edilen bulgular Tablo 4'te sunulmuştur.

Tablo 4Fen Bilimleri Öğretmenlerinin Üst Düzey Düşünme Becerileri Ölçen Soru Yazma Öz-Yeterliğinin Kıdeme İlişkin Kruskal Wallis H Testi Sonuçları

Kıdem	Ā	N	Sıra Ortalamaları	Sd	χ^2	p *
0-5 yıl	3,96	90	243,00	5	9,08	0,11
6-10 yıl	3,91	158	238,78			
11-15 yıl	4,07	112	272,07			
16-20 yıl	3,94	53	250,87			
21-25 yıl	3,81	42	199,32			
26 yıl ve üzeri	3,88	37	257,89			

^{*} *p* < 0,05

Tablo 4. değerlendirildiğinde, fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği öğretmenlerin hizmet süresi (kıdem) bakımından istatistiksel düzeyde farklılık göstermemektedir [$\chi^2_{(5)} = 9,08$ ve p > 0,05].

Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği öğretmenlerin öğrenim düzeyine göre farklılık gösterip göstermediğini incelemek için, Kruskal Wallis H Testi yapılmış ve elde edilen bulgular Tablo 5'te sunulmuştur.

Tablo 5Fen Bilimleri Öğretmenlerinin Soru Yazma Öz-Yeterliliğinin Öğrenim Düzeyine İlişkin Kruskal Wallis H Testi Sonuçları

Öğrenim Düzeyi	Ā	N	Sıra Ortalamaları	Sd	χ^2	<i>p</i> *
Lisans	3,94	380	241,68	2	3,45	0,18
Yüksek Lisans	3,97	100	257,12			
Doktora	4,21	12	310,71			
* <i>p</i> < 0,05						

Tablo 5 incelendiğinde fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği öğretmenlerin öğrenim düzeyi bakımından istatistiksel düzeyde farklılık göstermemektedir [$\chi^2_{(2)} = 3,45$ ve p > 0,05].

Tartışma, Sonuç ve Öneriler

Yapılan çalışmada fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği çeşitli değişkenler açısından incelenmiştir. Bu amaç doğrultusunda araştırmacılar tarafından geliştirilen "fen bilimleri öğretmenlerinin üst

düzey düşünme becerileri ölçen soru yazma öz-yeterliği ölçeği" kullanılarak veriler toplanmıştır. Veriler Türkiye'deki Millî Eğitim Bakanlığı'na bağlı resmi ortaokullarda görev yapan 492 fen bilimleri öğretmenlerinin cevapladığı ölçek formu ile elde edilmiştir. Elde edilen veriler uygun bir istatistik programına aktarılarak analiz edilmiştir. Verilerin analizinde betimsel istatistikler ve fark testleri kullanılmıştır. Yapılan analizler sonucunda öğretmenlerin üst düzey düşünme becerilerini ölçen soru yazma öz-yeterliği düzeyi belirlenmiş; ayrıca ilgili öz-yeterliğin öğretmenlerin cinsiyeti, kıdemi ve öğrenim düzeyi bakımından farklılaşması incelenmiştir.

Yapılan analiz sonucunda fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği toplam puan ortalaması, erkek öğretmenlerin ve kadın öğretmenlerin puan ortalaması yüksektir [$\bar{X}_{toplam} = 126,21$, $\bar{X}_{erkek} = 3,97$ ve $\bar{X}_{kadın} = 3,94$]. Hesaplanan değerlere göre fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru hazırlama öz-yeterliğinin yüksek olduğu söylenebilir. Benzer durum Gelbal ve Kelecioğlu (2007), Pektaş (2010) ve Yeşilyurt ve Yaraş'ın (2011) yapmış olduğu çalışmalarda da ortaya çıkmıştır. İlgili çalışmalarda öğretmenlerin ölçme değerlendirme yeterlik algılarının orta ve yüksek düzeyde olduğu belirlenmiştir. İlgili çalışma ve literatürdeki çalışmalar nicel araştırma yaklaşımla yürütülmüştür. Bu çalışmaların sonuçlarını destekleyen nitel araştırmaların yürütülmesi önerilmektedir.

Bununla birlikte cinsiyet bakımından puan ortalamaları arasında erkek öğretmenler lehine anlamlı fark vardır (p < 0.05). Pektaş'ın (2010) yaptığı araştırmada da erkek öğretmen adayları kadın öğretmen adaylarına göre kendilerini ölçme ve değerlendirme konusunda daha fazla yeterli görmektedir. Diğer taraftan ölçme işleminin ölçülen özelliği düşük düzeyde açıkladığı etki büyüklüğü hesabıyla anlaşılmaktadır. Bu durum her ne kadar istatistiksel anlamda cinsiyet bakımından manidar fark olsa da pratikte önemli bir farklılığın olmadığı anlamına da gelebilir. Erkek ve kadınların ortalama öz-yeterlik puanlarının birbirine çok yakın olması da pratikte manidar farklılığın olmayabileceğine işaret etmektedir. Azrak ve Yalçınkaya'nın (2019) yaptığı araştırmada öğretmen adaylarının ölçme değerlendirme okuryazarlıkları cinsiyet bakımından farklılaşmamaktadır. Aslan'ın (2020) yaptığı araştırmada öğretmen adaylarının ölçme değerlendirmeye yönelik tutumları arasında cinsiyet bakımından kadınlar lehine anlamlı fark vardır. Buna karşılık Alaz ve Yarar'ın (2009) yaptığı çalışmaya göre ise sınıf öğretmenlerinin alternatif ölçme değerlendirmeye yönelik özyeterliklerinde erkekler lehine; Karamustafaoğlu, Çağlak ve Meşeci (2012) yaptığı çalışmada ise kadınlar lehine anlamlı fark vardır. Şahin ve Atasoy'un (2018) yaptığı çalışmada sosyal bilgiler öğretmenlerinin alternatif ölçme ve değerlendirmeye yönelik tutumlarında cinsiyet bakımından anlamlı farklılık görülmemiştir. Duran'ın (2017) yaptığı araştırmada sınıf öğretmenlerinin alternatif ölçme değerlendirme özyeterliklerinde cinsiyet bakımından anlamlı farklılık gözlenmemiştir. Benzer şekilde farklı branşlardaki öğretmenlerin ölçme değerlendirmeye yönelik algı, tutum, özyeterlik ve yeterliğinde cinsiyet bakımından farklılık yoktur (Bal, 2009; Banoğlu, 2009; Kuran ve Kanatlı, 2009; Okur, 2008). Literatür çerçevesinde bazı farklı sonuçlara ulaşılsa da cinsiyetin ölçme değerlendirmeye yönelik tutum, öz-yeterlik ve okuryazarlık özelliklerinde anlamlı farklılık göstermediği söylenebilir.

Fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği puan ortalaması, kıdem bakımından anlamlı farklılık göstermemektedir (p > 0.05). Maden ve Durukan'ın (2011) yaptığı çalışmada öğretmenlerin ölçme değerlendirmeye yönelik tutumları arasında kıdem bakımından 1-10 yıl kıdeme sahip öğretmenler lehine anlamlı fark vardır. Aslan'ın (2020) yaptığı araştırmada öğretmen adaylarının ölçme değerlendirmeye yönelik tutumları arasında öğrenim düzeyi bakımından anlamlı fark yoktur. Şahin ve Soylu'nun (2019) yaptığı araştırmada öğretmen adaylarının ölçme değerlendirme ile ilgili bilgi düzeylerinin öğrenin düzeyi ile birlikte arttığını ancak bu artışın yetersiz olduğunu belirlemişlerdir. Şahin ve Atasoy'un (2018) yaptığı çalışmada sosyal bilgiler öğretmenlerinin alternatif ölçme ve değerlendirmeye yönelik tutumlarında kıdem bakımından anlamlı farklılık görülmemiştir. Duran'ın (2017) yaptığı araştırmada sınıf öğretmenlerinin alternatif ölçme değerlendirme öz-yeterliklerinde mesleki kıdem bakımından anlamlı farklılık gözlenmiştir. Bu çalışmanın sonuçlarına göre mesleki kıdem arttıkça öğretmenlerin özyeterlik algısı azalmaktadır. Benzer şekilde Kaplan (2007) ve Nazlıçiçek ve Akarsu (2008) araştırmalarında öğretmenlerin mesleki kıdemlerinin öğretmenlerin ölçme değerlendirme uygulamalarında farklılığa neden olmamaktadır. Öğretmenlerin ölçme değerlendirmeye yönelik, tutum, öz-yeterlik ve yeterlikleri literatür ışığında değerlendirildiğinde genel olarak kıdemden etkilenmediği, bazı araştırma sonuçlarına göre ise kıdem artıkça ölçme değerlendirmeye yönelik tutum, öz-yeterlik ve yeterliğin azaldığı düşünülebilir. Öz-yeterlik kişisel deneyimler, dolaylı deneyimler, toplumsal onay, bireyin fizyolojik ve duygusal durumundan etkilenmekle birlikte en fazla kişisel deneyimlerden etkilenmektedir (Bandura, 1995). Yapılan araştırmalar öğretmenlerin kıdemi arttıkça iş doyumunun arttığını, tükenmişlik düzeyinin azaldığını göstermektedir (Filiz, 2014). Diğer taraftan gerek üst düzey düşünme becerileri gerekse bu becerilerin ölçümü ile ilgili lisans düzeyinde bir ders ya da kapsamlı içerik yoktur (Yüksek Öğretim Kurumu [YÖK], 2022). Öğretmenlerin bu konuda gelişimini sağlaması daha çok lisansüstü eğitim yapmaları sayesinde gerçekleşir. Ancak Millî Eğitim Bakanlığı'nda görev yapan tüm personelin (öğretmen + idari personel) sadece %11,55'si lisansüstü eğitim görmüştür (MEB, 2022). Öğretmenin kişisel deneyimine dair olumlu ve olumsuz yöndeki durumlar kıdem faktörü bakımından öz-yeterlikte değişime neden olmamış olabilir. Yeni arastırmalarda kıdemin üst düzey düsünme becerilerini ölcen soru yazma öz-yeterliğini nasıl açıkladığı farklı tür veri toplama araçları ve yöntemlerle araştırılabilir. Ayrıca öğretmenlerin mesleki kıdeminin artışı ile birlikte ölçme değerlendirmeye yönelik tutum, öz-yeterlik ve yeterliğin azalmasına yönelik önlemler bakanlık ve yüksek öğretim kuruluşları iş birliği ile alınabilir.

Benzer şekilde fen bilimleri öğretmenlerinin üst düzey düşünme becerileri ölçen soru yazma öz-yeterliği puan ortalaması, öğrenim düzeyi bakımından anlamlı farklılık göstermemektedir (p>0.05). Şahin ve Atasoy'un (2018) yaptığı çalışmada sosyal bilgiler öğretmenlerinin alternatif ölçme ve değerlendirmeye yönelik tutumlarında öğrenim düzeyi bakımından anlamlı farklılık görülmemiştir.

Literatürde bu çalışma ile benzer nitelikteki çalışmalar incelendiğinde Ayvacı ve Şahin (2009) yaptıkları yazılı sınavlarda öğretmenlerin üst düzey sorular sorduklarını; buna karşılık hazırlanan soruların çoğunlukla alt düzey soru olduklarını

belirlemiştir. Bir başka çalışmada ise fen bilimleri öğretmenlerinin hazırladıkları soruların %17'si üst düzey sorulardan oluşmaktadır (Dindar ve Demir, 2006). Bu çalışmanın sonuçlarını destekleyen çalışmalara karşılık Mutlu vd. (2003) fen bilimleri öğretmenlerinin hazırladıkları soruların sadece %1'i üst düzey sorulardan oluştuklarını belirlemiştir. Benzer bulgulara Akpınar ve Ergin (2006) ile Cansüngü Koray ve Yaman'ın (2002) çalışmalarında da rastlanmıştır. Bu çalışmalardan yola çıkılarak fen bilimleri öğretmenlerinin hazırladıkları soruların daha çok alt düzey olduğu, bununla birlikte üst düzey soru da hazırlayabildikleri düşünülebilir. Ayrıca öğretmenlerin üst düzey düşünme becerilerini ölçen soru hazırlama konusunda öz-yeterliklerinin yüksek olmasından dolayı literatürde görülen yetersizliklerin nedeninin öz-yeterlik olmadığı; öğretmenlerin üst düzey düşünme becerilerini ölçen soru hazırlama konusunda bilgi ve tecrübe eksikliğinin olabileceği düşünülebilir (Ar, 2019; Çepni vd., 2020). Bu nedenle öğretmenlere hizmetiçi yoluyla bilgi düzeyleri artırılabilir. Eğitimlerin uygulamalı bir şekilde yapılması öğretmenlerin soru yazma tecrübesine katkı sağlayabilir. Ayrıca öğretmenlere soru yazma çalışmaları yaptırılabilir.

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Self-Efficacy of Question Development, which Measures the Higher Order Thinking Skills of Science Teachers

Abstract

In this study, the self-efficacy of the question item writing self-efficacy, which measures the context-based high level learning level of science teachers, has been examined in terms of various variables. The study is in quantitative scanning model. The sample of the study consists of 492 science teachers who work in public secondary schools in Turkey depend on the Ministry of Education. The data were collected through "a questionnaire self-efficacy scale that measures the science-based high level learning skill of science teachers" via electronic media. The analysis of the data was done with descriptive statistics and difference teats. As a result, it was determined that there is no significant difference in terms of seniority and education level, which has a high average of self-efficacy in question writing, which measures the higher order thinking skills of science teachers, but there is a significant difference in favor of male teachers in terms of gender. At the end of the study, a series of suggestions were made to the teachers, such as organizing higher order thinking skills question writing training programs and providing academic support.

Keywords: measurement and evaluation, question writing self-efficacy, science teachers, higher order thinking skills

Mesleki Gelişimde Öğrenme Topluluğu Yaklaşımı: Fen ve Matematik Öğretmenleri için Bir Ölçme ve Değerlendirme Programı^a

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Öz

Bu makale matematik ve fen bilimleri alan öğretmenlerinin ölçme ve değerlendirme bilgi ve becerilerini artırmak için tasarlanan bir mesleki gelişim programının ortaya çıkardığı firsatları, programın uygulanmasında karşılaşılan engelleri ve zorlukları öğretmenlerin ve araştırmacıların gözüyle sunmaktadır. topluluğu yaklaşımıyla tasarlanan bu programda öğretmenlerin araştırmacı rolünde olmaları sağlanarak kendi sınıflarında yaşadıkları ölçme ve değerlendirmeyle ilgili sorunlara çözüm bulmaları amaçlanmıştır. Program süreçleri nitel durum çalışması yöntemiyle incelenmiştir. Veriler, program katılımcılarından seçilen öğretmenlerin katıldığı program başında, ortasında ve sonunda olmak üzere üç farklı odak grup görüşmesi ve uygulamanın sonunda, çalışmayı yürüten araştırmacıların katıldığı tek bir odak grup görüşmesi yoluyla toplanmıştır. Sonuçlara göre bu mesleki gelişim programı iş birliği, ortak hedef, sınıf uygulamalarına uygun içerik gibi nitelikli mesleki gelişim programı özelliklerini ön plana çıkararak öğretmenlerin pedagojik bilgilerini destekleyen programlara somut bir örnek olmuştur. Programın güçlü ve gelişime açık yönleri makalede tartışılmıştır.

Keywords: Ölçme ve değerlendirme, mesleki gelişim programı, öğrenme topluluğu, fen ve matematik öğretmenleri

Makale Hakkında

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Giriş

Mesleki gelişim programları öğretmenlerle akademisyenleri bir araya getirerek teorik bilgilerin paylaşıldığı ve uygulamaların yapıldığı öğrenme ortamları oluşturmayı

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hedefler. Öğretmenler için tasarlanan ve sayıları giderek artan mesleki gelişim programlarının ne kadar etkili olduğu tartışma konusudur. Öğretmenler genellikle, katıldıkları programların sınıf içinde deneyimledikleri sorunlar ile ilgili olmayan, sorunlara fazla teorik ve uygulanması güç çözümler getiren ve kısa süre içerisinde ipucu ve püf noktalar vermeye dayanan eğitimler olduğunu belirtmektedirler (Ball & Cohen, 1999; Buldu, 2014; Özdemir, 2016; Sıcak & Parmaksız, 2016; Uştu et al., 2016). Akademisyenler ise öğretmenlerin öğretim programlarını yetiştirme kaygısı ve merkezi sınavların yarattığı baskılar gibi sebeplerle eğitimlerde aktarılan bilgi ve uygulama örneklerini kullanmadıklarını, öğretim programının tüm boyutlarını programda yer aldığı gibi uygulayamadıklarını, sorunlarına arastırma yaparak veri temelli cözümler üretme konusunda sınırlı kalarak hazır cözümler beklediklerini belirtmektedir (Cetin & Ünsal, 2019). COVID-19 pandemisi sonrası sayısı hızla artan, özellikle teknoloji kullanımına odaklanan çevrimiçi mesleki gelişim programlarıyla bu sorunlar yine gündeme gelmektedir (Bragg vd., 2021). Pandemi sonrası dönemde öğretmen mesleki gelişim programlarına duyulan ihtiyaç ve katılım artmış (Agnello, 2021) ancak bu programların çoğunda etkileşim boyutu yeterince desteklenememiştir (Bergdahl, 2022; Bragg vd., 2021). Bir akademisyen aynı anda yüzlerce kişiye konuşmalar yapabilmekte ancak eğitimlere aktif olarak katılan öğretmen sayısı çok sınırlı olmaktadır. Bir diğer sorun ise tek oturumla yapılan tek taraflı bilgi aktarımının bir katkısının olmaması, etkisinin çok sınırlı kalmasıdır (Ball & Cohen, 1999; Borko, 2004; Desimone, 2009; Garet vd., 2001; Putnam & Borko, 2000; Tekkumru-Kısa vd., 2017; van Es & Sherin, 2010). Tüm bu etkenler günümüzde tasarlanan öğretmen mesleki gelişim programlarında benimsenen öğrenme ilkelerine ve kullanılacak yöntemlerin bu ilkelerle uyumlu olmasına verilecek önemi daha da artırmaktadır.

Özellikle eğitimde ölçme ve değerlendirme alanyazınının çoğunluğunu oluşturan Amerika Birleşik Devletleri'nde gerçekleştirilen çalışmalarda öğretmenlerin ölçme ve değerlendirme okuryazarlığının düşük olduğu (Murphy Odo, 2016) ve bu durumun öğretmen eğitiminde ölçme ve değerlendirme becerilerinin yeteri kadar vurgulanmamasından kaynaklandığı belirtilmektedir (Popham, 2004; Stiggins, 1999; Volante & Fazio, 2007). Ülkemizde eğitim fakültelerinde ölçme ve değerlendirme dersine yer verilmesine rağmen uluslararası alanyazında belirtilenlere benzer şekilde Türkiye'deki öğretmenlerin de ölçme ve değerlendirme yeterliklerinin sınırlı olduğu göze çarpmaktadır (Çakan, 2004; İzci, 2018; Karaman & Şahin, 2014). Uluslararası alanyazında öğretmenlerin ölçme ve değerlendirme becerilerinin nasıl geliştiğini açıklayan veya ne tür mesleki gelişim programlarının öğretmenlere ve öğrencilerine fayda sağladığını gösteren çalışmaların sınırlı olduğu bilinmektedir (Afflerbach, vd., 2007, akt. Murphy Odo, 2016). Bu çalışmayla geliştirilen ölçme ve değerlendirme mesleki gelişim programı ile öğretmen öğrenmesine ve mesleki gelişim programı tasarımına katkı sağlanması amaçlanmaktadır.

Bu çalışma kapsamında tasarlanan mesleki gelişim programında öğretmenlerin araştırmacı öğretmen rolünde olmaları sağlanarak kendi sınıflarında yaşadıkları ölçme ve değerlendirmeyle ilgili sorunlara çözüm bulmaları amaçlanmıştır. Yaklaşık bir akademik yıla yayılan bu programda öğretmenlerin akademisyenlerle ortak bir dil yakalayarak bilimsel araştırma süreçlerine uygun şekilde bir ürün ortaya çıkarmaları

hedeflenmiştir. Bu mesleki gelişim programı, program çıktıları ve oluşturduğu eğitim ortamı bağlamında değerlendirilmiştir. Bu makalede, programa katılan öğretmenlerin ve uygulamayı gerçekleştiren araştırmacıların bakış açısından, mesleki gelişim programının ortaya çıkardığı fırsatlar ve programın uygulamasında karşılaşılan engellerle zorluklar sunulmaktadır.

Öğretmen Öğrenmesi ve Mesleki Gelişim

Ball ve Cohen (1999) eğitim politikalarında yapılan (müfredat, ölçme ve değerlendirme, öğretmen uygulamaları vb.) değişikliklerin çoğu zaman öğrenci öğrenmesinde beklenen gelişimi sağlayamadığını belirtmektedir. Bu politika değişikliklerinin, öğretmenlerin sınıf içi uygulamalarına yansımamasının en temel nedeninin mesleki gelişim fırsatlarının yetersizliği ve eksikliği olduğu vurgulanmaktadır (Borko, 2004). Örneğin, bu fırsatlardan biri olan mesleki gelişim programlarının çoğu genellikle kısa süreli ya da tek seferlik olup, kapsamları da coğu zaman öğretmen uygulamaları hakkında ipucları vermekten ileri gidememektedir (Ball & Cohen, 1999; Özdemir, 2016; Sıcak & Parmaksız, 2016). Kısa süreli mesleki gelişim programları ile öğretmenler, politikalar ile belirlenen değişiklikleri kendi sınıf ortamlarına ve eğitim bağlamlarına uyumlu hale getirememekte ve yapılmak istenen değişiklikleri tam anlamı ile uygulayamamaktadırlar (Cohen, 1990; Jackson vd., 2015). Mesleki gelişim programlarının bir süreç olarak görülmesi, bu süreçlerde öğretmenlerin mevcut bilgi ve uygulamalarına dönütler sunulması ve öğretmenlerin kendi uygulamaları, düşünceleri ve katkıları üzerinden bir eğitim almaları mesleki gelişim olanaklarından gerektiği şekilde faydalanmaları için önemlidir (Jackson vd., 2015). Alanyazında, mesleki gelişim programlarının öğretmenlere faydalı olabilmesi için, bu öğrenme ortamlarının durumlu öğrenme prensiplerinin yukarıda bahsedilen özellikleriyle tasarlanmış olması gerektiği vurgulanmaktadır. Durumlu öğrenme prensipleri ile tasarlanmıs mesleki gelisim programlarının öğretmenlerin mesleki bilgilerinde ve sınıf içi uygulamalarında önemli bir gelişim sağladığı belirtilmiştir (Ball & Cohen, 1999; Borko, 2004; Desimone, 2009; Jackson, vd., 2015; Little vd., 2003; Putnam & Borko, 2000; Tekkumru-Kısa vd., 2017; van Es & Sherin, 2010).

Durumlu öğrenme, bilişi üç temel alt başlıkta inceler. Öncelikle biliş durumsaldır ve ortaya çıktığı fiziksel ve sosyal bağlamın bir parçasıdır. Bu nedenle, öğrenme etkinlikleri içerisinde bulundukları fiziksel ve sosyal bağlamlar ile ayrılmaz bir bütündür. Dolayısıyla, öğrenme de bu bağlamlardan ayrıştırılamaz. Öğretmenler kendi uygulamalarına yakın uygulamalarından veya kendi diğer öğretmenlerin uygulamalarından daha verimli öğrenmektedir (Tekkumru-Kısa vd., 2017; van Driel vd., 2012; van Es & Sherin, 2010). Bilişin bir diğer özelliği ise sosyal olmasıdır. Biliş bireysel olarak farklılık gösterse de içerisinde üretildiği sosyal ortamın bir ürünüdür. Birey de bu toplumun bir parçası olarak aydınlanır. Örneğin bilimsel bilginin ortaklaşa üretildiği fizik, matematik, tarih gibi disiplinlerin model olarak kullanıldığı sosyal öğrenme ortamları oluşturulabilir (Brown vd., 1989). Başka bir bakış açısına göre ise öğrenmenin de öğrenildiği yeni bir öğrenme topluluğu oluşturulmaya çalışılabilir (Brown vd., 1993). Bilişin bir başka özelliği ise ortaya çıktığı sosyal ve fiziksel araçlara dağıtılmış olmasıdır (Hutchins, 1990). Büyük Hadron Çarpıştırıcısı deneyi bilişin dağıtılmış olmasına iyi bir örnek teşkil eder. Büyük Hadron Çarpıştırıcısı'nda, parçacıkların çarpıştırılması için gereken bilgi farklı disiplinlerden bilim insanları, mühendisler, teknikerler, bilgisayarlar ve birçok teknolojik cihaz tarafından paylaşılmıştır. Bu sayede bilişin dağıtık olduğu cihazlar ve bireyler, uzmanlıklarını veya yeterliliklerini bir araya getirerek deneyi yürütmektedir. Farklı uzmanlıklar ve iş güçleri bir araya gelerek atom altı parçacıklar hakkında bilgi edinilmesine katkı sağlamaktadır.

Desimone'a (2009) göre durumlu öğrenme prensiplerinden yararlanarak hazırlanan sosyal ve etkileşimli bir öğrenme ortamı öğretmenlerin mesleki gelişimi için cok güçlü bir mekanizmadır. Bu tür öğrenme ortamlarının birkac temel özelliği vardır. Öncelikle içerik odağı güncel ve kanıta dayalı bilimsel bilgiye olan ihtiyacı ön plana çıkarmalıdır (van Driel vd., 2012). Öğretmenlerin kendi uygulamalarının gözlemlendiği, diğer öğretmenlerin uygulamalarını gözlemleyebildiği ve bilimsel bilgilerden faydalanarak birbirlerinin uygulamalarına geri bildirimde bulundukları öğrenme topluluklarının olusturulması gerekmektedir (Desimone, 2009). Dahası, bu ortamda öğrenilen bilgiler yerel ve ulusal eğitim politikalarını ve öğretmenlerin güncel bilgi ve uvgulamalarını vakından ilgilendiren konuları icermelidir (Desimone, 2009; van Driel vd., 2012). Mesleki gelişim programının toplam süresi bir diğer önemli unsurdur. Mesleki gelişim programları ile ilgili alanyazında belirli bir süreden bahsedilmese de öğretmenlerin dönem boyunca öğrenme ve öğretme etkinliklerinin takip edildiği, sürece yayılmış bir eğitim modelinin çok daha faydalı olduğu bildirilmiştir (Desimone, 2009; van Driel vd., 2012; Yoon vd., 2007). Son olarak, bu tür öğrenme ortamlarında kolektif bir öğrenme ortamının sağlanması gerekmektedir. Ortak uygulama alanları olan öğretmenlerden oluşturulan öğrenme topluluklarının daha fazla paylaşımda bulunabildikleri gözlemlenmiştir (Desimone, 2009; Little, 1993; Little vd., 2003).

Öğretmen öğrenme toplulukları yukarıda özetlenen kuramsal ilkeler ışığında geliştirilmiş ve oldukça yaygın olarak kullanılan bir mesleki gelişim programı tasarım prensibidir. Öncelikle, bu prensip ile hazırlanmış bir öğrenme ortamında öğrenmenin daha etkili olması için gereken birkaç öğe vardır. İlk olarak, öğretmenlerin birbirlerinin konu uzmanlığından yararlanmasına imkân tanımak öğretmen öğrenme topluluğunun önemli bir öğesidir. Bir diğer öğe ise, öğretmenlerin kendi amaçları ve hedefleri doğrultusunda esnek bir çalışma (örneğin: aktiviteler için önerilen zamanı nasıl kullanacaklarına veya hangi protokolü uygulayacaklarına kendilerinin karar vermesi) sergileyebilmesidir. Ayrıca, bu şekilde çalışmaları öğretmenlerin daha verimli öğrenmelerine neden olmakta ve öğrendikleri bilgileri sınıf içi uygulamalarına aktarmalarına yardımcı olmaktadır (Little vd., 2003). Öğretmenlerin birbirlerinin uygulamalarına, fikirlerine veya bilgilerine rahatlıkla olumlu veya olumsuz eleştirilerde bulunabildiği güvenli bir tartışma ortamı oluşturmak, öğretmen öğrenme topluluğun bir diğer önemli özelliğidir. Little vd. (2003), öğretmenlerin sürekli olarak birbirlerine meydan okudukları veya birbirlerini onayladıkları bir öğrenme topluluğunun, öğretmen öğrenmesi açısından oldukça verimsiz olacağını belirtmiştir. Öğretmen öğrenme topluluklarında en verimli tartışma ortamı, öğretmenlerin birbirlerine bilimsel bilgiye dayalı yapıcı eleştirilerde bulundukları ortamlardır (Tekkumru-Kısa vd., 2017). Son olarak, öğretmen öğrenme topluluklarında önceden geliştirilmiş bazı protokol ve yönergeler tartışma ortamının doğru şekillenmesi için faydalı olacaktır (Little vd., 2003).

Öğretmenlerin Ölçme ve Değerlendirme Bilgi ve Becerileri

Öğretmenlerin ölçme etkinliklerini planlama, uygulama ve sonuçları yorumlama ile ilgili bilgi ve becerileri yetersiz olduğu için genelde ölcme ve değerlendirme etkinlikleri gelisigüzel vapılmakta ve bu durumun öğrenme üzerine istenmedik etkileri olmaktadır (Çakan, 2004; İzci, 2018; Karaman & Şahin, 2014; Schafer, 1993). Alanyazında öğretmenlerin pratiklerindeki hatalara yer verilmektedir ve öğretmenlerin ölçme ve değerlendirme alanında mesleki gelişim desteklerinin eksikliğinden bahsedilmektedir. Bu nedenle alanın önde gelen uzmanları ölçme ve değerlendirme hizmet içi eğitimlerinin öncelikli olarak gerçekleştirilmesi gerektiğini belirtmektedirler (örn., Aksu, 2013; Bayat & Şentürk, 2015; Stiggins, 1991; Cakan, 2004; İzci, 2018; Nazlıcicek & Akarsu, 2010; Tanuğur, 2017). Amerika Birlesik Devletleri'nde üç dernek öğretmenler için yeterlilikler belirlemişlerdir: Bunlar (1) öğretim kararları için uygun değerlendirme yöntemlerini seçme; (2) öğretim kararları için uygun olan değerlendirme yöntemlerini geliştirme; (3) hem dışarıdan hem de öğretmen tarafından üretilen değerlendirme yöntemlerinin sonuçlarını puanlamak ve yorumlamak; (4) bireysel öğrenciler hakkında kararlar alırken, öğretimi planlarken, müfredat geliştirirken ve okul gelişiminde değerlendirmede sonuçlarını kullanmak; (5) öğrenci değerlendirmelerini kullanan geçerli öğrenci notlandırma prosedürleri geliştirmek; (6) değerlendirme sonuçlarını öğrencilere, ebeveynlere, diğer meslekten olmayan paydaşlara ve diğer eğitimcilere iletmek ve (7) etik olmayan ve uygunsuz değerlendirme yöntemlerini ve değerlendirme sonuçlarının kullanımlarını fark etmek olarak belirlenmiştir. Bu yeterlikler, bir öğretmenin bir eğitimci rolü için kritik olan bilgi ve becerilerdir. Bu yedi standardın, gelecekteki öğretmen mesleki gelişim programlarına dahil edilmesi önerilmektedir (Amerika Ögretmenler Federasyonu [American Federation of Teachers] vd., 1990).

Öğretmenlerin ölçme ve değerlendirme alanı bilgi ve becerileri üzerine yapılan arastırmalarda, öğretmenlerin bu alanda eksik bilgilerinin bulunduğu ve hizmet ici eğitime ihtiyac duyulduğu ortaya cıkmıstır (örn., Chen vd., 2021; Cakan, 2004; Daniel & King, 1998; Karatay & Dilekçi, 2019; Mertler, 1999). Kilmen ve Beyhan'ın (2011) yürüttüğü araştırma, öğretmenlerin kullandıkları ölçme ve değerlendirme kavramları ile araştırmacıların kullandığı ölçme ve değerlendirme kavramlarının birbiri ile tutarsız olduğunu göstermiştir. Ayrıca, öğretmenlerin özellikle son yıllarda ortaya çıkan ölçme ve değerlendirme kavramlarına ilişkin yanılgılarının mevcut olduğu saptanmıştır (Kilmen & Beyhan, 2011). Schelling ve Rubenstein (2021) öğretmenlerle yaptığı görüşmelerde, öğretmenlerin veriye bağlı karar alma mekanizmalarına (ölçme ve değerlendirme) inandıklarını fakat bu süreçleri yürütecek kadar becerilere sahip olmadıklarını düşündüklerini tespit etmişlerdir. Ulusal alanyazınında sınıf içi ölçme ve değerlendirme alanında öğretmenlerle gerçekleştirilmiş birçok çalışma bulunmaktadır. Bu çalışmalar temelde öğretmenlerin sınıf içi uygulamalarına ve öğretmen yeterliliklerine odaklanmaktadır. Gelbal ve Kelecioğlu (2007) tarafından yapılan araştırmada, öğretmenlerin geleneksel ölçme yöntemlerini (kâğıt-kalem testleri) daha

sık kullandıkları ve bu yöntemleri kullanmada kendilerini daha yeterli gördükleri ortaya çıkmıştır. Bu bulgular ile tutarlı olarak, Benzer ve Eldem'in (2013) Türkçe ve Türk dili ve edebiyatı öğretmenleri ile yürüttükleri araştırmada, öğretmenlerin geleneksel olarak tanımlanan ölçme ve değerlendirme tekniklerini benimsedikleri, ancak yazma becerilerine ilişkin farklı ölçme araçlarına yönelik bilgi düzeylerinin sınırlı olduğu tespit edilmistir.

Ölçme ve Değerlendirme Mesleki Gelişim Programı

Bu çalışmada tasarlanan mesleki gelişim programı ölçme ve değerlendirme konusunu bilimsel araştırma yaklaşımıyla ele almaktadır. Ölçme ve değerlendirme pratikleri bilimsel araştırma yaklaşımı çerçevesinde ele alındığında eğitim ve öğrenme ortamlarında kullanılan her ölçme aracı araştırılan değişkenin işlevsel (operasyonel) tanımına karşılık gelir. Bu açıdan bakıldığında öğrencilere verilen her puan araştırılan değişkenin bir değerini oluşturur. Öğrencilere verilen puanların incelenmekte olan değişkenin farklı değerleri olduğu anlaşıldığında hem hangi değişkenin incelenmekte olduğunun net olarak belirlenmesi hem de o değişkenin tanımı olan ölçme aracının istenen niteliklere sahip olması önem kazanır. Bu bakış açısı öğretmenlere öğrencileri değerlendirdikleri zaman aslında hangi özelliğe ilişkin veri toplamakta olduklarını ve veri toplama aracının amaca uygun olup olmadığını sorgulama fırsatı verir. Sağlıklı veri toplamak bilimsel araştırma yürütmenin olmazsa olmazıdır. Bu bakış açısıyla öğrenme ortamlarında yapılan ölçmelerin sağlıklı veri elde etmeye yönelmesi, değerlendirmenin de bu verilere dayanarak yapılması, dolayısıyla daha sağlıklı kararlara dayanak olusturması beklenir.

Tasarlanan ölçme ve değerlendirme mesleki gelişim programında, halen öğretmenlik yapan fen ve matematik alan öğretmenlerinin, sınıflarında deneyimledikleri problemlerden yola çıkarak, ölçme ve değerlendirme problemlerini araştırmacı bakış açısıyla ele alarak ölçme ve değerlendirme kavram ve becerilerini kazanmaları hedeflenmistir. Öğretmenlerin sınıflarında deneyimledikleri problemler üzerine calısmaları mesleki gelisim programlarında edindikleri deneyimleri sınıf uygulamalarına aktarabilmelerini sağlamaktadır (Desimone, 2009; Tekkumru-Kısa vd., 2017). Öğretmen öğrenme toplulukları içinde öğretmenlerin deneyimlerini paylasması ve diğer öğretmenlerden bilimsel bilgiye dayalı dönütler alması, bu toplulukların en temel öğrenme etkinliklerindendir (Little vd., 2003). Bu nedenle, tasarlanan mesleki gelişim programı ile, öğretmenlerin deneyimlerinden çıkan sınf içi ölçme ve değerlendirme problemlerine çözüm üretmeleri amaçlanmıştır. Öğretmenlerin sınıf içi ölçme değerlendirme problemlerini araştırma sorusuna dönüştürmeleri, bilimsel araştırma yöntemlerinin basamaklarını izleyerek gruplar halinde araştırma planlayıp, veri toplayıp, verileri analiz ederek bir araştırmada aktif rol oynamaları sağlanmıştır. Bu bağlamda öğretmenlere bir bilimsel araştırma deneyimi yaşatarak, ölçme ve değerlendirme konusunda bilgi edinmeleri ve kendi sorunlarını arastırabilen ve cözebilen bir araştırmacı öğretmen kimliği de kazandırmak hedeflenmiştir.

Bu amaç ve hedefler doğrultusunda, 2020-2021 akademik yılı içerisinde, İstanbul İl Millî Eğitim Müdürlüğü (İLMEM) Ölçme Değerlendirme Merkezi (ÖDM) iş

birliğiyle, eğitimde ölcme ve değerlendirme ve öğrenme bilimleri alanlarında calısan yedi araştırmacı öğretmenler için bir mesleki gelişim programı tasarlamıştır. Programda matematik ve fen bilimleri alanlarından 32 öğretmen yer almıştır. Katılımcı öğretmenler, iki haftada bir çevrimiçi ortamda gerçekleştirilen toplam 11 ortak oturuma katılmıştır ve bu oturumlar programı tasarlayan yedi araştırmacı tarafından yürütülmüştür. Programın ilk yedi haftasında her oturum sonunda öğretmenlere üzerinde bireysel olarak çalışabilecekleri görevler verilmiştir. Bu görevler Google Classroom üzerinden toplanmıştır. Öğretmenlerden beklenen bu rutin görevlerin içeriklerini sırası ile "bir problem cümlesi oluşturma ve bu problemin değişkenlerini belirleme", "ölçmenin bilimsel arastırmadaki ile sınıf içindeki rolünü karsılastırma", "karsılasılan ölcme ve değerlendirme sorunlarına iliskin problem cümlesi yazma", "arastırmacılar tarafından yapılan sunuları özetleme", "proje taslağı oluşturma" ve "literatür taraması" oluşturmuştur. Bu görevlerden elde edilen veriler ile öğretmenlerin gelişimi izlenirken, ihtiyaçları saptanarak bir sonraki oturumun içeriği planlanmıştır. Örneğin, beşinci oturum sonunda verilen haftalık görevlerde, öğretmenlerin yazdıkları problem ve alt problemler sınıflandırılmış ve belirli bir ölçme ve değerlendirme konusunun altında değerlendirilmiştir. Böylece, altıncı oturumun içeriği madde yanlılığı, bilgisayar ortamında bireye uyarlanmış testler, madde tepki kuramı, ölçme değişmezliği, test eşitleme, test geliştirme ve uyarlama konularında öğretmenleri bilgilendirmek üzere sekillenmiştir. Böylelikle, projenin ilk yedi oturumu öğretmenlerin kendi araştırma problemlerini belirlemesi üzerine yapılandırılmıştır. Bu oturumlarda toplu paylaşımlardan sonra bir ya da iki araştırmacının rehberlik ettiği küçük grup çalışmaları da yapılmıştır. Öğretmenler ve araştırmacılar bu aşamada oluşturulan küçük gruplara rastgele atanmıştır. Bu sayede, katılımcılara diğer katılımcılar ve araştırmacılar ile çalışma olanağı verilerek öğrenme topluluklarının oluşmasına zemin hazırlanmıştır.

Yedinci oturumda öğretmenlerin birlikte çalışıp proje yürütecekleri küçük araştırma grupları, çalışmak istedikleri konulara bakılarak "öğrenme toplulukları" yaklaşımı bağlamında oluşturulmuştur. Küçük gruplar, belirledikleri proje konuları üzerinde bir veya iki araştırmacının danışmanlığında çalışmalarını tamamlamışlardır. Gruplar iki haftada bir yapılan ortak oturumlar dışında kendi ihtiyaçları doğrultusunda çalışmalarını yapmak üzere farklı zamanlarda da bir araya gelmişlerdir. Küçük grupların oluşturulmasından sonra verilen görevler aralarında benzerlik göstermekle beraber, grupların üzerinde çalıştıkları konular bağlamında farklılaşmış ve bu görevler her bir gruptaki danışman araştırmacılar tarafından değerlendirilerek öğretmenlere geri bildirim verilmistir.

Bu çalışmanın somut başarı göstergelerinden biri öğrenme gruplarının sistematik bir bilimsel araştırma sürecini izleyerek (problem belirleme, literatür tarama, veri toplama, veri analiz ve bulguları raporlaştırma) gerçekleştirdikleri araştırma projeleridir. Bu projelerin sonucunda ortaya çıkan ürünler (sunumlar) öğretmen kazanımlarının bir göstergesi olarak kullanılmıştır.

Yöntem

Arastırmanın Modeli

Bu araştırma geliştirilen bir mesleki gelişim programının yürütülen ilk uygulamasının katılımcı öğretmenlerin ve araştırmacıların görüşlerine göre incelendiği bir nitel durum çalışmasıdır. Geliştirilen ve bu çalışmada ilk uygulaması yapılan mesleki gelişim programı bu araştırmada ele alınan durumu oluşturmaktadır. Creswell (2013) incelemeye alınan durumun farklı veri kaynakları kullanılarak tüm zenginliğiyle ele alınmasının ve detaylı bir şekilde betimlenmesinin nitel durum çalışması yönteminin temel özellikleri arasında bulunduğunu belirtmektedir.

Programın Katılımcıları

Arastırmanın hedef grubunu İstanbul'da matematik ve fen bilimleri alanlarında öğretmenlik yapan, en az üç yıl mesleki deneyime sahip öğretmenler olusturmustur. Programın duyurusu yapılarak öğretmenlere başvuru için çağrı yapılmıştır. Başvuru formunu dolduran 249 öğretmenle çevrimiçi toplantı yapılarak, çalışmanın detayları anlatılmış ve öğretmenlere bir bilgi anketi uygulanacağının bilgisi verilmiştir. Başvuru yapan 249 öğretmenden 127'si, ölçme ve değerlendirme konusundaki temel kavramlara ilişkin çoktan seçmeli 15 sorudan oluşan bu bilgi anketini doldurmuştur. Anket sonuçlarına göre 15 sorudan 10 ve üzeri soruya doğru cevap veren öğretmenler arasından, öğretmenlerin lisansüstü eğitim durumu, cinsiyet ve branş dağılımları da dikkate alınarak 35 katılımcı seçilmiştir. Bu öğretmenlerden üçü duyuru yapıldıktan sonra katılmaktan vazgeçmiş ve programa 32 (11 erkek ve 21 kadın) öğretmen ile başlanmıştır. Öğretmenlerin 18'i (%56,2) matematik alanında görev yaparken 14'ü (%43.8) fen bilimleri alanındandır. Öğretmenlerin 26'sı (%81,3) meslekte 10 yıldan daha kısa süre çalışmıştır. Araştırmacıların görev aldığı üniversitenin İnsan Araştırmaları Etik Kurulu'ndanⁱ onay alınan bu çalışmaya katılan tüm öğretmenler, bilgilendirilmiş onam formu doldurarak programa ve araştırmaya kendi rızalarıyla katıldıklarını belirtmiştir.

Veri Toplama

Bu çalışmada veriler, programa katılan öğretmenlerin katıldığı üç farklı odak grup görüşmesi ve çalışmayı yürüten araştırmacıların katıldığı tek bir odak grup görüşmesi yoluyla toplanmıştır. Odak grup görüşmesi yöntemi ile katılımcıların birbirleriyle etkileşim içerisinde programa ilişkin görüşlerini tek başlarına ifade edebileceklerinden daha zengin şekilde ortaya koymaları hedeflenmiştir (Creswell, 2013). Odak grup görüşme süreçleri aşağıda paylaşılmıştır.

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Öğretmen Odak Grup Görüşmeleri

Projenin başında, ortasında ve sonunda olmak üzere öğretmenlerle üç odak görüşmesi gerçekleştirilmiştir. Odak gruplarda derinlemesine görüşme yapmak amacıyla her bir oturumdaki öğretmen sayısı 5-6 kişi ile sınırlandırılmıştır (Kitzinger, 1995). Katılımcılar arasından cinsiyet, okul türü ve katıldıkları çalışma grubuna göre çeşitlilik sağlayacak şekilde odak grup katılımcıları belirlenmiştir. Böylece programa katılan 32 öğretmenden 18'i odak grup görüşmelerine davet edilmiştir. Ancak bir öğretmen uygun olmadığından dolayı görüşmeye katılamamıştır. Araştırmacılar tarafından hazırlanan odak grup görüsme soruları her bir görüsme öncesinde gözden gecirilmis ve gerekli değisikler yapılmıştır. Buna göre ilk ve ikinci odak grup görüşmesinde katılımcılara dört yarı yapılandırılmış ana soru yöneltilmiş ancak görüşme sürecinde, katılımcıların verdikleri yanıtlara göre sonda sorular da kullanılmıştır. Her iki görüsmedeki soruların odağında öğretmenlerin programdan elde ettikleri kazanımlar, akademisyen-öğretmen rolleri ve projenin verimli ve zorlayıcı yönleri yer almıştır. Üçüncü görüşmede ise beş soru kullanılmış ve diğer görüşmelerden farklı olarak program sonunda bilimsel bir kongrede ürün sunmanın öğretmenlere ve programa olan katkısı da değerlendirilmiştir. Odak gruplarına yöneltilen sorular Ek-1'de yer almaktadır. Birinci ve üçüncü odak grup görüşmesinde altı (1. görüşmede 3'ü kadın ve 3. görüşmede tümü kadın) öğretmen yer alırken, ikinci görüşmeye beş (tümü kadın) öğretmen katılmıştır. Her odak görüşmesine farklı öğretmenler katılmıştır. Katılımcı listelerini oluştururken farklı araştırma gruplarındaki öğretmenlerin görüşmede yer almasına dikkat edilmiştir. Katılımın gönüllük esasına bağlı olduğu odak grup görüşmeleri öncesinde, seçilen öğretmenler eposta yoluyla davet edilmişlerdir. Çevrimiçi yüz yüze platformda gerçekleştirilen görüşmeler katılımcıların onayıyla kayıt altına alınmıştır. Odak grup görüşmeleri biri moderatör diğeri ise raportör rolünde olmak üzere araştırmacı ekibinden iki araştırmacı tarafından yürütülmüstür. Görüsmeler 58-74 dakika arasında sürmüstür.

Araştırmacı Odak Grup Görüşmesi

Öğretmenler ile yapılan görüşmelere ek olarak, programın bitiminde programı tasarlayan ve uygulayan yedi araştırmacının beşi ile odak grup görüşmesi gerçekleştirilmiştir. Beş araştırmacının ikisi ölçme ve değerlendirme alanında uzmanken diğer üç araştırmacı öğrenme bilimleri alanında çalışmaktadır. Bu görüşmenin odağını da öğretmenlerin programdan edindikleri kazanımlar, akademisyen-öğretmen rolleri, programın eksik ve üstün yanları oluşturmuştur. Öğretmen odak grup görüşmelerini gerçekleştiren araştırmacı bu odak grubunun da moderatörlüğünü gerçekleştirmiştir. Çevrimiçi yüz yüze platformda gerçekleştirilen görüşme 80 dakika sürmüştür ve katılımcıların bilgisi dahilinde kayıt altına alınmıştır. Odak grubuna yöneltilen sorular Ek-2'de yer almaktadır.

Veri Analizi

Veri analizine hazırlık olarak ses ve görüntü kaydı alınan odak grup görüşmeleri deşifre edilmiştir. Bu deşifrelerde katılımcı kimliklerini gizli tutmak için öğretmenlere ve araştırmacılara birer kod verilmiştir. Birinci öğretmen odak grubundan son odak gruba

kadar, her bir gruba katılan öğretmenlere odak gruptaki konuşma sıralarına göre sıra sayısı verilmiştir. Örneğin 1. odak grupta 4. sırada söz alan bir öğretmen Ö-4 olarak adlandırılırken, 2. odak grupta ilk sırada söz alan öğretmen Ö-7 olarak adlandırılmıştır. Benzer şekilde araştırmacılar da A-1, A-2, ..., A-5 şeklinde adlandırılmıştır.

Deşifre edilen nitel veriler içerik analizi ile çözümlenmiştir. İçerik analizi elde edilen verileri kavram ve ilişkilere ulaşarak açıklamayı amaçlar. Çok sayıdaki yazılı veriyi birbirleri ile karşılaştırarak anlamlı bir biçimde bir araya getirmek amacıyla (Creswell, 2013) veriler; kodlama, temaların oluşturulması, kodların ve temaların düzenlenmesi ve bulguların yorumlanması olmak üzere dört adımda tamamlanmıştır. Kodların oluşturulma sürecinde tümevarımcı yaklaşım dikkate alınarak verilerden çıkarılan kavramlara göre kodlama yapılmıştır (Yıldırım & Şimşek, 2016). Veriler üç araştırmacı tarafından kodlanmış ve kodlayıcılar arası uzlaşıyı sağlamak amacıyla bu araştırmacılar düzenli zaman aralıklarıyla bir araya gelerek çevrimiçi ortamda bir kodlama kitapçığı oluşturmuştur. Bu aşamada üzerinde uzlaşılamayan kodlar araştırmacılar tarafından tartışılmış ve fikir birliğine varılmıştır. Odak grup verileri çalışma sırasında farklı zamanlarda toplanmış olsa da bu görüşmelerde konuşulan konular çalışma sürecinde araştırmacılar tarafından tartışılarak programın işleyişine dolaylı olarak etki etmiştir. Ancak odak grup görüşmelerinden elde edilen veriler, bütünlük sağlamak adına programın tamamlanmasından sonra analiz edilmiştir.

Bulgular

Öğretmenlerin ve akademisyenlerin program hakkındaki görüşlerini toplamak amacıyla yapılan toplam dört odak grup görüşmelerinden elde edilen verilerin analizi sonucunda üç ana tema ve her biri için alt temalar oluşturulmuştur. Sadece ilk ana temada üçüncü seviye olarak kategorilere ihtiyaç duyulmuştur. Bu ana temalar sırasıyla öğretmenlerin kazanımlarına, programda oluşan öğrenme ortamına ve benzer programlar tasarlanırken dikkat edilmesi gereken hususlara yoğunlaşmaktadır. Oluşturulan ana ve alt temalar Tablo 1'de sunulmuştur.

Programdan Edinilen Kazanımlar

Öğretmenlerin programdan elde ettikleri kazanımların bilişsel boyut ve duyuşsal boyut olmak üzere iki alt tema başlığı altında toplandığı görülmüştür. Bilişsel boyuttaki kazanımlar, öğretmen bilgisinin farklı boyutlarıyla eşleştirilerek öğretmenlerin pedagojik alan bilgisi ve pedagoji bilgisi olarak iki kategori altında toplanmıştır. Program esnasında duyuşsal boyutta ele alınan öğretmen tutumlarının olumlu yönde değiştiğine dair de bulgular elde edilmiştir. Ayrıca öğretmenlerin programa ve programdaki gelişimlerine ilişkin ayrıntılı yorumlarından programdaki çalışmaların ve oluşan öğrenme ortamının öğretmenlerin kazanımlarına dair özfarkındalığını beslediği görülmüştür.

Tablo 1Veri Analizi Sonucu Elde Edilen Tema ve Alt Temalar

Ana Temalar	Alt Temalar	Kategoriler	
1.Programdan elde edilen kazanımlar	1. Bilişsel boyut	1. Pedagojik alan bilgisi	
kazanimiar		2. Pedagoji bilgisi	
	2. Duyuşsal boyut	1. Olumlu tutum geliştirme	
		2.Öğrenme ortamının öğretmenin öz farkındalığını beslemesi	
2. Programda oluşturulan öğrenme ortamı	Öğretmenler ve araştırmacılar arasındaki etkileşim ve iş birliği		
	Katılımcı rollerinin belirginleşmesi ve grup içinde çalışma		
3. Programın gelişime açık	1. Belirsizlik		
yönleri	2. Programın sürdürebilirliği		
	3. Kazanımlara ilişkin somut veriler toplama		

Öğretmenlerin odak grup görüşmelerindeki ifadelerinden bu programdaki deneyimlerinin, onları ölçme ve değerlendirmeye sadece sınav yapıp not verirken göz önünde bulundurulacak bir alan şeklinde sınırlı bir bakış açısıyla yaklaşmaktan uzaklaştırdığı anlaşılmaktadır. Ayrıca öğretmenlerin bu deneyimlerini sınıflarında kullanabilecekleri farklı ölçme ve değerlendirme uygulamaları olduğunu fark edip bu konuda kendilerini geliştirmek ve alana dair bilgilerini artırmak için bir fırsat olarak değerlendirdikleri görülmüştür. Bu bağlamda öğretmenler programın hem öğretmenlerin eksikliklerini fark etmelerine hem de ölçme ve değerlendirme alanını öğrenmelerine ve ileride de öğrenip kullanabileceklerine odaklanmalarını sağladığına değinmiştir.

Yeri geliyor 50 tane sınav içerisinden şimdi fende görseller çok kullanıldığı için bazen sınavlardan parçalar birleştirip yeni sınav hazırlamak durumunda kaldığım zamanlar oldu mesela kazanımlara dikkat etmediğimi fark ettim... Bundan sonra herhalde sınav hazırlarken en çok dikkat edeceğim şeylerden biri kazanım, içerik bir de bilişsel alan basamakları olacak diye düşünüyorum. (Öğretmen-14 [Ö-14], Odak Grup 3 [OG-3])

Yukarıdaki alıntıda Ö-14, sınıflarındaki ölçme ve değerlendirme uygulamalarını ne şekilde yapması gerektiğine dair program sırasındaki kazanımlarına değinirken, bunu ileriye dönük olarak uygulamalarında kullanma planından da bahsetmektedir. Benzer

şekilde Ö-4 ve Ö-17 de programda deneyimledikleri yaklaşımı, ileride farklı ölçme ve değerlendirme uygulamalarını planlı bir şekilde sınıflarında kullanmayı düşündüğünü belirtmistir.

Biz ölçme ve değerlendirme deyince işte sınav haftası, not haftası böyle çok kısacık bir zamana sıkıştırmış bir aktivite olarak düşünüyordum ama aslında daha planlı olabiliriz. Hani dönemin başından itibaren dönemin sonuna geldiğimizde ne elde etmek istediğimizi, yani ölçme değerlendirme adına hangi araçları kullanmak istediğimizi, bu araçları nasıl geliştireceğimizi başından planlayabilirsek aynı buradakine benzer bir süreçle daha kaliteli bir ölçme ve değerlendirme süreci olur diye düşünüyorum. (Ö-17, OG-3)

Tabii direkt projede öğrendiğim şeyleri vurduğumda mesela bobutları^j kullanabilir miyim diye düşünüyorum bazen o bireye uyarlanmış testleri çünkü onlarla biraz şey yaptığımda kâğıt kalem testlerini biraz böyle çok maddeli de olsa yazılabilir ve çocuklara uygulanabilir olabileceğini düşünüyorum. (Ö-4, OG-1)

Programın bakış açılarındaki etkilerine dair öğretmenlerin rapor ettiği noktalara özellikle programın sonunda yapılan odak grup görüşmesinde yoğun olarak rastlanmıştır. Ancak programın tamamlanmasından iki ay önce yapılan görüşmede de öğretmenlerin programda bir araştırma kapsamında kullandıkları uygulamalardan elde ettikleri pedagojik ölçme ve değerlendirme alan bilgisini benzer bakış açısıyla ileride sınıflarında kullanmayı planladıklarına dair düşüncelerin dile getirilmiş olması, bu bakış açısının programdaki uygulamalar sırasında şekillenmeye başladığının bir göstergesi kabul edilebilir.

Öğretmenlerin görüşmelerde vurgu yaptıkları bir konu da programda uygulanan pedagojik yaklaşımı ileride sınıflarında öğrencileriyle kullanma istekleridir. Özellikle programda benimsenen, ölçme ve değerlendirme alanına dair konuları araştırma bakış açısıyla ele alma fikri öğretmenlere ilham vermiş ve aşağıdaki alıntılarda görüldüğü şekilde bu durum öğretmenler tarafından son odak grup görüşmesinde dile getirilmiştir.

Aynı bu şekilde araştırma TÜBİTAK projesi yazıp kendi öğrencilerimle de haftalık eylem planı yapıp bunun çok daha minik halini öğrencilerimle yapmayı düşünüyorum ben. Onlara da bilimsel araştırmayı öğretecek şeklinde bir araştırma projesi düşünüyorum. (Ö-16, OG-3)

Ben kendi kurumumda da öğrencilerime bilimsel araştırma yöntemleri dersleri veriyorum o yüzden bu araştırmalar sırasında bazı haftalar örneğin yaptığım bir şeyi yine kendi dersime yansıtarak kullanmaya çalıştım ya da öyle denk geldi. Yani hem pratikte hem de gerçekten yöntemde fayda sağladı bana. (Ö-12, OG-3)

^j Bobut: Bilgisayar ortamında bireye uyarlanmıs test

Yukarıdaki alıntılarda öğretmenler programdaki araştırma deneyimlerini bir pedagojik yöntem olarak sınıflarına taşımaktan bahsetmektedirler. Bunun yanı sıra öğretmenler programdan edindikleri önemli bir kazanımın, araştırma bakış açısını mesleki vizyonlarına ekleme yolunda attıkları adımlar olduğunun da altını çizmiştir. Meslekte ve uygulamalarında karşılaştıkları sorunları akademik bir araştırma problemi olarak ele alıp, bilimsel yöntemlerle o konuda bilgi üretme ve sorulara cevap arama yolundaki kazanımlar program sırasında gerçekleştirilen görüşmelerde dile getirilmiştir. Ö-7 tarafından dile getirilen aşağıdaki görüş, araştırma bakış açısının program içindeki gelişimine dikkat çekmektedir.

Bununla ilgili kazandıklarım, bu akademinin kazandırdıkları dediğim gibi problem durumunda bir araştırma çıkar mı, bir araştırmayı nasıl yapabiliriz, bir de şunu söyleyebilirim makale okumaya başladım araştırma yaparken bu da benim için güzel bir alışkanlık oldu. (Ö-7, OG-2)

Araştırmacılar ile yapılan odak grup görüşmesinde, araştırmacılar rehberlik ettikleri gruplardaki öğretmenlerin kazanımlara ulaşma düzeyindeki farklılığına sıklıkla değinmekle birlikte, öğretmenlerin çalışmalarını yürütürken bilimsel araştırma bakış açısının gerektirdiği bilgi ve becerileri kullanabilir hale geldikleri konusunda hemfikir olmuştur. Araştırmacılar öğretmenlerin programın başında belirlediği ölçme ve değerlendirme problemleri ile program ilerledikçe gözden geçirilip düzeltilen ya da yeniden oluşturulan araştırma problemlerinin niteliklerine de dikkat çekerek öğretmenlerin anlamlı ve ölçülebilir araştırma problemi üretebilir hale geldiğini vurgulamaktadır. Ayrıca öğretmenlerin kendi araştırma problemlerini bağımsız bir şekilde yürütebilme becerileri ve bu beceriyi kendi sınıf pratiklerine de transfer edebilmeleri araştırmacılar tarafından üzerinde durulan diğer bilişsel kazanımlar olmuştur. Örnek araştırmacı görüşleri şu şekildedir:

Ölçme değerlendirme pratiklerini daha bilimsel temellere dayandırarak yapmalarını bekliyordum ve bu açıdan aslında iki grupta da bu hedefe ulaşıldı. (Araştırmacı-1 [A1])

Yani uygulama yaparak, kendi çalıştıkları konu üzerinde daha detaylı ve hani başka birilerine aktarabilecek kadar, anlatabilecek kadar bir bilgiye sahip oldular. Nasıl yapacaklarını da öğrendiler diye düşünüyorum ben. (A-2)

Yani beylik sorularla ezbere, basmakalıp soru ve cevabı zaten kafasında fikir olarak bulunan cevaplara ulaşmak, onun sağlamasını yapmak yerine veri toplayarak, ölçme kavramlarını da kullanarak yani o kavramlara özgü ve o kavramları yöntem olarak kullanarak, değişkenleri alıp bunları ölçüp araştırmaya koyarak ilerleyebilme yetisi, bence bunu ilk adımlarını attılar. Bu çok temel bir kazanım olduğunu düşünüyorum öğretmenler için ve birçoğu bu bakış açısını kendi sınıflarında da uygulayabilecek, devam ettirebilecek noktaya geldiler. (A-4)

Öğretmenlerin programın ikinci yarısında yaptıkları çalışmalar sonucunda programın hedeflediği gelişime dair görüşlerinin şekillendiği ve araştırma bakış açısının

benimsenmesinin ne demek olduğuna dair somut fikirler edinmeye başladıkları gözlenmiştir. Aşağıdaki ilk alıntıda Ö-13 programın başında ülkedeki geleneksel mesleki gelişim programlarının bakış açısıyla nasıl bir beklenti içinde olduklarını ancak zaman içinde uygulanan programın onları farklı bir noktaya taşıdığını ifade etmiş ve araştırmacı öğretmen olmaya dair görüşlerini paylaşmıştır. Aynı öğretmen, programın sonunda konferansta yaptıkları araştırma sunumunun da edindikleri akademik bakış açısının ve benimsedikleri araştırmacı öğretmen rolünün tamamlayıcı bir parçası olduğunu belirtmiştir.

Eğitimde oluşan sorunları nasıl çözebiliriz gibi tartışma ortamı yaratarak bunlara birkaç çözüm önerisi geliştirerek işte Milli Eğitime geri dönüt sunarız gibi düşünmüştüm ben açıkçası... Gruplara bölündüğümüzde işin resmi daha net ortaya çıktı gibi geliyor bana. Sonrasında "biz bunu yapıyormuşuz, biz bir araştırma yapıyoruz yani evet bir sorun var ya da bir soru var... Bir araştırma sorusu var. Onunla ilgili aslında bir araştırma yapacağız ve onun sonuçlarını inceleyeceğiz. Aslında olması gereken bu" diye sonuçta anlamış olduk sonunda. (Ö-13, OG-3)

...sunum yapılması çok profesyonel olduğunu... bana hissettirdi. Ne kadar güzel bir iş yaptığımı hissettim ve çok tamamlayıcı bir parçasıydı bence. (Ö-13, OG-3)

Araştırmacılar ile yapılan görüşmelerde de öğretmenlerdeki gelişimin sürece yayıldığı vurgusu ön plana çıkmaktadır. A-5, öğretmenlerin kullandıkları dilin programın başından sonuna doğru belirgin bir şekilde farklılaştığını ve araştırmacı kimliğinin bir parçası olarak konuşmaların bilimsel bir dile evrildiğini belirtirken, A-3 de programın uzun bir zaman aralığına yayılmış olmasının ve farklı türde çalışmalar yapılmasının öğretmenlerin birer araştırmacı gibi, o pozisyonun gerektirdiği bilgi ve becerileri kullanabilecek konuma gelmelerinde etkisi olduğu belirtilmiştir.

Öğretmenler başta biraz (...) duygusal mı diyelim farklı bir şekilde yaklaşıyorlardı hem ölçme değerlendirme terimlerine hem yapılan sınavlara hem orada sorulan sorulara ama zaman ilerledikçe ve bu süreç tamamlanmaya başladıkça daha bilimsel temellerde konuşmaya başladıklarını gördük. Bir kere kavramları en azından ortak kullandıkları kavramlar ortaya çıkmaya başladı. (A-5)

Demek istediğim bizim burada yaptığımız eğitimin uzun soluklu olmasının en büyük faydasının sona doğru özellikle geldikçe bu ortaklıkları yakalayabildiğimizi düşünüyorum. Yani artık yanlılık dendiğinde, bireye uyarlanmış test dendiğinde, ölçek geliştirme, test geliştirme dendiğinde işte ya da bilimsel süreçlerle ilgili değişkenler dendiğinde, araştırma sorusu dendiğinde bence ortak bir noktaya doğru gelebildik. (A-3)

Öte yandan aşağıda Ö-13'ün özellikle altını çizdiği, geliştirdikleri araştırmacı öğretmen eylemliliğinin öğretmenler üzerinde yarattığı olumlu his ve tutuma dair ifadeler diğer öğretmenlerin ve araştırmacıların görüşlerinde de yer almıştır.

Gerçekten bunu, ürettiğimiz ürünü birine sunmanın da ne kadar önemli olduğunu da fark ettik aslında çünkü gerçekten o açıdan bakın biz bunu yaptık, bir şey yaptık, bir şey ürettik demek de ayrı bir keyifmiş onu da fark etmiş olduk. (Ö-13, OG-3)

Program sürecinde üzerinde çalışılan araştırma projelerinin tamamlanması ve bulguların öğrenme grupları tarafından bilimsel bir kongrede paylaşılması öğretmenler tarafından somut bir başarı göstergesi olarak algılanmış ve bu sürecin onlar için motive edici olduğu yönünde görüşler ortaya çıkmıştır. Ö-13'ün belirttiklerini destekler şekilde A-1 de program içindeki faaliyetlerin rutin mesleki uygulamalarından farklı olarak öğretmenlere araştırmacı yaklaşımıyla yeni bir öğrenme deneyimi kazandırdığına ve bu deneyimin öğretmenlerde meydana getirdiği öğrenmeye karşı istekli olma durumuna dikkat çekmektedir. Ayrıca araştırmacı programın öğretmenlerin daha sonraki öğrenme firsatları için önemli bir motivasyon kaynağı olduğuna işaret etmektedir.

Hani her şeyin ötesinde bu o rutini kırıp, öğretmenlere bir motivasyon, bir şey, yeni bir şey öğrenmek için motivasyon sağlayacak bir şey oldu, ortam sağladı bizim eğitimimiz. (A-1)

Programda Oluşturulan Öğrenme Ortamı

Odak grup görüşmelerinden elde edilen verilerin analizi sonucunda programda oluşan öğrenme ortamına dair görüşler bir diğer tema olarak ortaya çıkmıştır. Hem öğretmenlerin hem de akademisyenlerin ayrıntılı bir şekilde üzerinde durduğu bu temada program sırasında, özellikle araştırma gruplarında, öğretmenler ve akademisyenler arasındaki etkileşim ve işbirliği birinci alt tema olarak ortaya çıkarken, bu etkileşim sırasında katılımcıların rollerinin belirginleşmesi ve öğretmenlerin beraberce uyum içinde çalışması ikinci alt tema olarak ortaya çıkmıştır.

Öğretmenler özellikle akademisyenlerle küçük gruplar halinde yaptıkları çalışmalardaki etkileşimlerinin olumlu yönlerine dikkat çekerek, bu çalışmalarda araştırmacıların yol gösteren bir mentör rolü üstlendiğini ve bu durumun kendilerini araştırma yürütmek için daha fazla inisiyatif almaya teşvik ettiğini belirtmişlerdir. Bu şekilde programın tasarımı sırasında önem verilen öğretmenlerin uygulama yapması için firsat oluşturulması ilkesinin programdaki uygulamalarda vücut bulması sağlanmıştır. Ayrıca öğretmenlerin kendi mesleki gelişim programının sorumluluklarına ortak olmaları ve diğer araştırmacı öğretmenler ile devamlı olarak bir uzmanlık paylaşımı içerisinde olmaları sağlanarak öğretmen öğrenme topluluğu oluşturmaları hedeflenmiştir. Aşağıdaki alıntılarda son odak grup görüşmesinde iki öğretmenin akademisyen-öğretmen iş birliğine dair vurguladığı önemli noktalar yer almaktadır.

...özellikle grubumuzdaki akademisyen hocalarımızla çok çalıştığımız için bence onlardan çok fazla şey öğrendik. Çünkü biraz böyle hizmet içi eğitim deyince bizim çok daha Milli Eğitimde oluşan çok ayrı bir bakış açısı, yargılar

var ama demek ki isteyince gerçekten akademisyen ve öğretmen iş birliği kurulabiliyormuş bu anlamda da bana umut verdi açıkçası. (Ö-14, OG-3)

Dediğim gibi ben sürece şöyle bir tekrar baktığımda akademisyenler çok iyi birer mentördü ve biz sürekli araştırmacı olarak uygulayıcı olarak sürecin içerisinde yer aldık. Dolayısıyla uygulama sırasında çektiğimiz ya da denk geldiğimiz sıkıntıları yine mentörlerimiz eşliğinde çözmeye çalıştık. (Ö-12, OG-3)

Her iki öğretmen de araştırmacıların kendilerine bir yandan yol gösterirken bir yandan da araştırmada uygulama yapmaları için alan açıp fırsat yaratarak gelişimlerini desteklediklerini belirtmektedir. Ö-12, özellikle küçük gruptaki bu etkileşimin herkesin küçük grup çalışmasındaki rollerini belirginleştirdiğine ve çalışmaların hep bu rollerle tutarlı bir şekilde devam ettiğine işaret etmektedir. Ö-14 ise bu şekilde bir araştırmacı öğretmen iş birliğini olumlu bulmasının ötesinde mesleki gelişim programlarında alışılagelmiş bir yapı olmadığı için, uygulamada bu tarz bir örnekle karşılaşmaktan duyduğu memnuniyeti ifade etmiştir. İkinci odak grup görüşmesinde de bir öğretmen araştırmacıların ne yapılacağını kelime kelime söylemeden sorularla "bir şekilde öğretmenleri hedeflenen yere ulaştırdıklarını" belirtmiştir. Bu bulgular programın oluşturulması sırasında dikkate alınan ilkelerin programda yansıtılabildiğinin ve etkin bir mesleki gelişim programı oluştururken alanda karşılaşılan sınırlılıkların aşılması yönünde başarılı bir başlangıç yapılabildiğinin göstergesi sayılabilir.

Araştırmacılarla yapılan görüşmelerde de öğrenme ortamının özellikle katılımcı rolleriyle ilgili boyutunda öğretmenlerin belirttiklerine paralel görüşler ön plana çıkmıştır. Araştırmacılar da öğretmenlerin programdaki küçük grup çalışmaları esnasında, özellikle çalışmalar ilerledikçe daha fazla sorumluluk alarak araştırmacıların yönlendirmeleri çerçevesinde uygulamalarda söz sahibi olmaya başladıklarını ve programın bu yöndeki hedeflerine doğru, her ne kadar gerçekleştirmesi zor olsa da ilerleme kaydedildiğini belirtmektedir. A-4 cümleleriyle öğretmenlerin programda hedeflenen şekilde bir rol dağılımına uyum sağladığına işaret ederken, A-2 de bunun programın gerçekleştirmesi zor olabilecek bir hedefi olmasına rağmen uygulamada başarıya ulaştığını ifade etmiştir.

Araştırmacıları her şeyi bilen bir kişi gibi konumlandırmaktansa, daha fazla deneyimi olan, tabii ki uzmanlığı da daha fazla olan ama beraber tartışabilecekleri bir kişi olarak...ama kendilerinin inisiyatif almaları, belli kararları araştırıp, öğrenip, belli kararları verip sonra gelip tartışmaları gerektiğini...Yani bu sorumluluğu, ek sorumluluğu hissettiler bence...Bu aktif katılımı, bu beklentinin omuzlarında olduğunun sorumluluğun hissetmiş gibilerdi. (A-4)

Benim çalıştığım konu özelinde böyle bir noktaya gelebileceğimizi düşünmüyordum. Benim için de şeydi...Ben yavaş yavaş geri çekilen o danışman rolüne girdim, en baştan sona doğru diyebilirim. (A-2)

Böylece sadece akademisyen-öğretmen etkileşiminin değil, programın yapısının ve bu sayede oluşturulan öğrenme ortamının da öğretmenlerin birer araştırmacı gibi çalışabilmesine katkısı olduğuna dair bulgular elde edilmiştir. Programdaki çalışmaların yanı sıra öğretmenler programın sonundaki konferansta araştırmaların sunumunun yapılmasının ve öğretmenlerin bir akademik konferansta bulunmalarının da araştırmacıların çalışmalarının önemli bir parçası olan konferans deneyimini yaşamalarını sağlayarak onların araştırmacı rolünü benimsemelerini desteklediğine dair görüşler paylaşılmıştır. Örneğin öğretmenlerle yapılan son odak grup görüşmesinde paylaşılan aşağıdaki alıntıdaki cümlelerde özellikle öğretmenlerin o konferansta hazırlıklı ve donanımlı olarak bulunduklarını hissettikleri vurgusu programın bu yöndeki etkisini göstermesi açısından önemlidir.

Bir panelde konuşma yapabilmek ya da onunla ilgili büyük bir araştırma yapabilmek çok keyifliydi...Hem sadece konuşmak değil orada bulunmak, dinlemek, izlemek, birçok şeye hâkim olmak belki öncesinden biliyor olmak...bence bize çok şey kattı. (Ö-15, OG-3)

Programdaki öğrenme ortamına dair öğretmenlerin ve akademisyenlerin vurgu yaptığı bir konu da öğretmenlerin grup içindeki birlikte çalışma dinamikleri ve bundan kaynaklanan katılımcı rolleridir. Özellikle küçük gruplarda haftalık çalışmaların başlamasından sonra yapılan ilk odak grup görüşmesinde öğretmenler araştırmacıların rehberliğinde kendilerinin uyumlu bir iş birliği içerisinde tüm öğretmenlerin inisiyatif alıp hazırlık yapıp birbirlerinin öğrenmesine de katkı yaptıklarını ifade etmişlerdir. Öğretmenlerin hem mesleki gelişim programlarının hedeflerinin belirlenmesinde, hem de programdaki çalışmalarının odağının ve tasarısının seçilmesinde aktif rol almaları sağlanarak; öğretmen öğrenme ortamının bir parçası olmaları ve öğretmenler için bu ortamların verimliliğinin artırılması hedeflenmiştir. Bu görüşmede, Ö-4, öğretmenlerin iş birliği ve uyum içerisindeki çalışma ortamını araştırma içindeki sorumlulukların ve rollerin de giderek belirginleşeceği doğrultuda şekillendirdiklerini belirtmiştir. Ö-3 de gruplardaki çalışma şeklinin öğretmenlerin birbirlerinden de öğreneceği bir ortam oluşturduğuna vurgu yapmıştır.

Kendi grubumuza girdiğimizde de mesela aynı şekilde de içinde roller çıkmaya başladığını hissediyorsun. Yani sizin rolünüz zaten belli rehber tamam ama biz de sanki o gruplarda bazıları birileri bir şeyleri ilerletecek, bazıları başka şekilde şey yapacak, kimisi atıyorum o araştırmanın bir ayağını yürütürken diğeri başka ayağını yürütecek ve o araştırma o şekil kolektif bir çalışmanın sonucu olarak yukarıya çıkacak. (Ö-4, OG-1)

Rehber öğrenci ilişkisi gibi bizlerin arasında da gruplarda tartışırken sanki daha çok akran eğitimi gibi oluyor. Hepimizin konuya belki farklı katkıları, farklı bir yerden araştırması oluyor. Geçen hafta makaleler araştırmıştık, onlarla ilgili tartışırken, aaa, böyle bir şey varmış ya da işte benim okumadığımı arkadaşım okuyor, onun okumadığını ben okuyorum. (Ö-3, OG-1)

Benzer gözlemler çalışmanın sonunda akademisyenlerle yapılan odak grup görüşmesinde de dile getirilmiştir:

Öğretmenlerin birbirleriyle paylaşımlarının da profesyonel bir yaklaşımla artması önemliydi. Yani işte "hocam ben soruları hazırlıyorum işte siz de şurayı yapın" gibi değil de, bir hoca soruları hazırlarken diğeri de ona dahil olup "bu işte aslında şöyle olabilir" gibi fikirler verebilmesi, onlarla onunla paylaşımlarda bulunabilmesi önemliydi. (A-5)

Öğretmenler gelip, pasif durup sadece dinleyici olmadıkları aktif olarak katıldıkları ve hatta çok küçük gruplarda yani her birimizin 5-6 kişi ile birebir ilgilendiği uzun sürelerce bir eğitim süreci oldu ve çok daha etkili olmuştur diye düşünüyorum. Kendi öğrencilik deneyimlerimden de yola çıkarak, bunun daha etkili bir öğrenme yöntemi olduğunu düşünüyorum. (A-2)

A-5 özellikle öğretmenlerin kolektif uyum içerisindeki etkileşimine odaklanırken, A-2 bu tarz bir çalışma ortamının öğretmenlerin mesleki gelişim programındaki öğrenme süreçlerini olumlu yönde etkilediğinden bahsetmektedir. Bu bulgular da mesleki gelişim programındaki öğrenme ortamının öğretmenlerin birlikte uyumlu, tamamlayıcı ve öğrenme açısından etkili çalışmalar yapacakları yönde şekillendiğini destekler niteliktedir.

Programın Gelişime Açık Yönleri

Odak grup görüşmelerinde öne çıkan üçüncü tema katılımcıların bu mesleki gelişim programının tekrar uygulanması durumunda dikkat edilmesi ve farklı şekilde uygulanması yönünde yaptıkları önerilerden oluşmaktadır. Hem öğretmenlerin hem de akademisyenlerin programa dair üzerinde düşünülmesini önerdikleri nokta programdaki ilerlemenin ne yönde olacağına dair katılımcılar üzerinde yarattığı belirsizliktir. Birçok öğretmen ilk odak grup görüşmesinden itibaren bu belirsizlik ile karşı karşıya kalmalarını programın en çok zorlandıkları yanı olarak tasvir etmiştir.

Bizim için belirsiz gibi görünen kısım aslında asıl yapacağımız işe hazırlıktı ama biz bu işin içindeyken bunun farkında değildik. Belki hani belirlemeye çalıştığımız problemin üzerinden gideceğimizi düşündüğümüz için biraz evet böyle bir problem belirleyeceğim ama sonrasında devamını getirebilecek miyim ya da bunu nasıl ölçülebilir hale getireceğim hani bu sorular gerçekten önemliydi ama biz asıl amacımızın akademinin sonuna kadar o problem durumuyla devam edeceğimizi düşündüğümüz için kafamızda hep bir belirsizlik vardı. (Ö-12, OG-3)

Birinci kısımda evet belki biraz daha belirsizlik hissettim, ne yapacağını bilmeme durumu biraz tabii rahatsız edici ama ikinci kısım biraz daha planlanmış bir hani oluşturulmuş bir plan ya da beraber oluşturduğumuz bir plan eşliğinde gidildiği için biraz daha rahatlatıcı oldu benim açımdan en azından. (Ö-12, OG-3)

Bilmiyorum planlanmış bir şekilde mi geldik bu yere onu da merak ediyorum açıkçası çünkü en başta yok problem kurduk ölçme ve değerlendirme ile ilgili sorunlarımızı yazdık problem, bağımlı değişken, bağımsız değişkenden. Bir anda aslında hepimizin gireceği konular belliymiş gibi bir şey oldu. Hepimiz bir gruplarda dağıldık, yapacağımız konular falan farklı bir boyutta geldi. Planlıydı muhtemelen. (Ö-1, OG-1)

Öğretmenler özellikle programın küçük grup çalışmalarına başlanmadan önceki ilk bölümünde programda nasıl bir ilerleme yaşanacağına dair hissettikleri belirsizliğin ve ne yapmaları gerektiğine dair net bir fikirlerinin olmamasının programın verimini düşüren bir faktör olduğunu belirtmektedir. Ö-12 programın başında yaşanan bu belirsizliğe dikkat çekerken, bu durumun motivasyon düşürücü yönünden ve katılımcıların programı tamamlayabileceklerine yönelik inançlarını zedeleyen etkisinden bahsetmiştir. Aynı öğretmen programın başında bu belirsizliğin rahatsız edici bir etkisi olduğuna dikkat çekmiş ancak özellikle küçük grup çalışmalarıyla beraber kendileri de planlamanın bir parçası oldukları için bu belirsizliğin üstesinden gelebildiklerinden bahsetmiştir.

Ö-12'nin bu yorumu öğretmenlerin belirsizlik ile ilgili algılarının programın daha pasif oldukları ilk bölümlerinde yıpratıcı bir şekilde hissedildiğini ortaya koymaktadır. Öğretmenler odak grup görüşmelerinde özellikle yoğun bilgi aktarımının olduğu bir haftada yaşadıkları zorluğa da dikkat çekmiştir.

En çok zorlandığım kısım şu, herhalde bütün arkadaşlar da bana katılacaktır, böyle çok fazla bir bilgi akışına tutulduğumuz bir araştırma yani sizin bir sunumunuz vardı. Orada gerçekten ben onları içselleştirmekte çok zorlandım. (Ö-8, OG-2)

Genel olarak ben bu süreçten aslında ilk başta böyle kendi sorunlarımızdan bahsediyoruz vs. sonra bir anlatım oluyor süreç bu şekilde ilerledi sonra bir anda akademik dil geldi orada bir kopma oldu hani anlayamadım tam ne olduğunu. Sorunlardan bahsediyorduk, bir şeyleri ifade ediyorduk. Bir andan da nasıl bu kadar hani böyle mi gidecek derken akademik dil girdi devreye o giriş biraz hızlı oldu ama zaten öğrenme aslında tam olarak o noktada gerçekleşiyor ya önce bir şaşırmak gerekiyor hani önce bir kafa karışıklığı yaratılması gerekiyor ki ben hep böyle olduğunu düşünüyorum. (Ö-11, OG-2)

Ö-8 özellikle bu haftadaki yoğun bilgi içeriğinin sunumu sonrasında öğrenmenin ne kadar verimli olacağına dair umutsuzluğa kapıldığını belirtirken, Ö-11 tüm zorluğuna rağmen yoğun bilgi içeriği karşısında zorlandığı haftada öğrenmenin bu şekilde zorlanıp kafa karışıklığı yaşadıktan sonra gerçekleştiğini düşünerek kendisini çabalamaya ikna ettiğini belirtmiştir. Her ne kadar Ö-11 yaşadığı zorluğun endişe yaratmasına izin vermese de bu konunun birçok öğretmen için bir sorun teşkil etmiş olabileceği düşünülmüştür. Özellikle Ö-12'nin ifadelerinde görüldüğü gibi, öğretmenlerin aktif olarak planlamanın parçası olduklarında belirsizlik veya plansızlık durumlarıyla daha

kolay başa çıkabildiklerine dair görüşler, öğretmenlerin aktif katılımının birçok açıdan olduğu gibi planlamayı bizzat yaparak belirsizlikle baş etmede de etkili olabildiğine isaret etmektedir.

İlk bölümle ilgili öğretmenlerin dile getirdiği programın hedeflerine yönelik belirsizlik, araştırmacılarla yapılan odak grup görüşmesinde de öne çıkan noktalardan biridir. A-3 bu durumun programın katılımcıların seviye ve ihtiyaçlarına göre şekillenmesi arzusuyla oluştuğunu belirtirken, A-2 ilerleyen uygulamalarda belirsizlik korunsa bile, programın bu esnek yapısının paylaşılmasının programı olumlu yönde etkileyeceğine dikkat çekmektedir.

Yani çünkü öyle başladık ama ölçme terminolojisinde de aynı noktaya gelelim diye bir planımız var mıydı, açıkçası ben çok hatırlamıyorum. Ama zaman içerisinde buna çok ihtiyaç oldu. Öğretmenler de belki zaten bununla ilgili taleplerle geldiler. Biz de daha somut artık proje yapmaya başlayacağımız aşamalarda özellikle, buna ihtiyaç duyduk (A-3)

O başta, benim için de öyleydi ne yapacağız, nasıl yapacağız, ne zaman projeye başlayacağız falan o bazı şeylerin tam planlı olmaması. Belki daha daha daha da verimli olabilirdi belki, daha planlı ve programlı gitseydik. Ama bilmiyorum. Belki de bu süreçte bu da bu şekilde evrildi. Planlasaydık daha farklı da olabilirdi yani (A-2)

Bunun yanı sıra araştırmacılar yapılan küçük grup çalışmalarının sonrasında öğretmenlerin bir araştırma yürüttüklerini ama özellikle o araştırmada kullandıkları ölçme ve değerlendirme içerik bilgilerine dair edindikleri bilgi ve becerilerin ne ölçüde tekrar kullanılabilecek şekilde içselleştirildiğinden tereddüt ettiklerini bildirmişlerdir. Bu bağlamda A-3 tarafından, programda öğretmenlerin bu bilgi eksiğini gidermek de aşılması gereken bir engel olarak vurgulanmaktadır. Bununla beraber öğretmenlerin kazanımlarının nicel olarak da daha net ortaya koyulabilmesi için öğretmenlerin programdaki temel araştırma prensiplerine dair gelişiminin ölçümünün daha dikkatlice yapılıp belgelenmesi gerektiği de belirtilmiştir.

...mesela diyelim ki değişen madde fonksiyonu (DIF) yaptı diyelim ki grupta. Yani bunu artık ne kadar içselleştirdi öğretmen?.çok büyük bir uçurum var yani şey olarak bilgi seviyesi olarak. Yani yapmaya çalıştığımız şey ile yani öğretmen arasındaki o uçurum bence o nasıl kapatılır, ama bence olumsuzluk yaratıyor. (A-3)

Araştırmacı 3 de şey diyor ya hani; bunu devam ettirebilecekler mi? Yani ben mesela aynen o pratikleri birebir devam ettirmelerini beklemiyorum, ama bütün bu proje süresince aldıkları temel prensipleri devam ettirmelerini bekliyorum. (A-1)

Tüm bunlarla beraber programın sürdürülebilirliği de araştırmacılar tarafından programın ilerleyen uygulamalarında dikkat edilmesi gereken bir husus olarak belirtilmektedir. Programda edinilen bilgilerin ileride öğretmenlerce kullanılabilmesi

kadar, edinilen bilgileri meslektaşlarına aktarmaları da programda hedeflenmesi gereken bir kazanım olarak dile getirilmiştir.

Sonuç ve Tartışma

2020-2021 akademik yılında 5-12. sınıf seviyesinde çalışan matematik ve fen bilimleri alan öğretmenlerinin katılımıyla yedi aya yayılan bir mesleki gelişim programı gerçekleştirilmiştir. Bu programın geliştirilmesinde, öğretmenlerin sınıf içi uygulamaları ile örtüşen konular üzerine bilimsel bilgiye dayalı söylemlerle tartıştıkları, bu konular üzerine özerk karar alarak çalışabildikleri ve farklı branşlardaki öğretmenlerin birbirlerinin uzmanlıklarından faydalanabildikleri bir öğretmen öğrenme topluluğu (Borko, 2004; Grossman vd., 2001; Little vd., 2003) oluşturulması prensibi benimsenmiştir. Oluşturulan öğrenme gruplarıyla öğretmenlerin kendi ihtiyaçlarına göre ölçme ve değerlendirme bilgi ve becerilerini artırmaları hedeflenmiştir. Geliştirilen mesleki gelişim programının, katılımcı öğretmenlerin ve araştırmacıların bakış açısından değerlendirmeleri incelenmiş ve veri analiziyle ortaya çıkan üç ana tema, programın kazanımları, programda oluşan öğrenme ortamı ve iyileştirmeye açık yönler sunulmuştur.

Öğretmenlerin ölçme ve değerlendirme bilgi ve becerilerinin arttığı hem öğretmenler hem de programı uygulayan araştırmacılar tarafından raporlanmıştır. Programda hedeflendiği gibi öğretmenler bu pedagojik bilgileri araştırmacı rolüyle edinmişler ve bilimsel araştırma yöntem basamaklarını benimsemişlerdir. Hatta bazı öğretmenler programda benimsenen bu yaklaşımı kendi sınıflarında eğitim yöntemi olarak kullanmak istediklerini de belirtmiştir. Bazı öğretmenlerin program öncesinde ölçme ve değerlendirme etkinliklerine sadece not verme amacıyla kullanırken, bu programla ölçme ve değerlendirme prensiplerinin farkına vardıkları ve öğretmenlerin bu kazanımlarını sınıf ortamına taşıma niyetleri görülmüştür. Tüm bu bulgular öğretmenlerin programın hem içeriğinden hem de yönteminden kazanımlar elde ettiğini öne çıkarmaktadır.

Bu kazanımların yanı sıra araştırmacılar tarafından belirtilen bir başka öğretmen kazanımı da ölçme ve değerlendirme alanına ait dil ve jargonun kullanılmaya başlanmasıdır. Öğretmenler zaman içinde doğru terminolojileri kullanarak diyaloglarını gerçekleştirmişlerdir. Alanyazında öğretmenlerin kullandıkları ölçme ve değerlendirme kavramları ile araştırmacıların kullandığı ölçme ve değerlendirme kavramlarının birbiri ile tutarsız olduğuna dair bulgulara rastlanmaktadır (Kilmen & Beyhan, 2011). Bu çalışmanın sonuçlarına göre bu tutarsızlığın büyük bir bölümü öğretmenlerin bu alana ait dile hâkim olmamasından kaynaklandığı söylenebilir. Uzun süreye yayılan bu mesleki gelişim programında ise öğretmenlerin bu konuda kendilerini geliştirdiklerine dair bulgular elde edilmiştir.

Öğretmenlerin ölçme ve değerlendirme bilgi ve becerileri kazanmaları için geliştirilen bu mesleki gelişim programında öğrenme topluluğu oluşturma yaklaşımı kullanılmıştır. Uluslararası alanyazına göre etkili bir mesleki gelişim programında

öğrenme topluluğu oluşturmak için gereken en önemli özellikler: ortak ve net amaçların olması, katılımcının düşünme ve öğrenme sürecine odaklanılması (Borko, 2004; Desimone, 2009; Garet vd., 2001), iş birliği ve aktif katılımın sağlanması (Desimone, 2009; Little, 2012; Little vd., 2003; van Driel vd., 2012), yapılandırılmış ve rehberli etkinliklere yer verilmesi (Desimone, 2009; Garet vd., 2001), öğrenme topluluğunun oluşturulma süresi ve idame ettirilmesi (Desimone, 2009; van Driel vd., 2012; Grossman vd., 2001), meslektaş desteğinin ve katılımcıların motivasyonunun üst seviyede tutulmasıdır (Borko, 2004; Prenger vd., 2017). Öğrenme topluluğu oluşturarak tasarlanan bir mesleki gelişim programının incelendiği bu çalışmada bu özelliklerin öne çıktığı ve hem öğretmenlerin hem de araştırmacıların programa dair görüşlerini şekillendirmede etkili olduğu görülmüştür.

Alanyazında, kesin olarak bir süre bildirilmese de, etkili mesleki gelişim programlarının 20 saatten fazla temas süresi olduğu belirtilmiş, ayrıca bu sürenin öğretmenlerin uygulamalarına dönütler alabileceği ve dönütler üzerine tartısabileceği sekilde genis bir sürece yayılması gerektiğine değinilmistir (Desimone, 2009; Garet vd., 2001; Tekkumru-Kısa vd., 2017; van Driel vd., 2012). Nitekim çalışmadaki program ülkede uygulanan birçok mesleki gelişim programından farklı olarak yedi aylık uzun bir süreye yayılmış ve öğretmenlerle iki haftada bir buluşularak uygulanmıştır. Programa devam öğretmenlerin gönüllü katılımıyla gerçekleşmiştir ve program çevrimiçi ortamda uygulandığı için, üniversiteye çok uzak mesafede oturan öğretmenler çok rahatlıkla programı takip edebilmişlerdir. Uzun ve emek isteyen sürece rağmen öğretmenlerin büyük bir çoğunluğunun bu programı tamamlamış olmaları programda topluluk fikrinin sürdürülebildiğinin ve öğretmen motivasyonunun sağlandığının bir işareti de sayılabilir. Öğretmenler özellikle küçük grupların oluşturulmasından sonra ve konferansa yönelik hazırlıkların yapıldığı bölümlerde iş birliğinin ve diğer katılımcıların desteğinin motivasyonlarını olumlu yönde etkilediğini belirtmiştir. Öğrenme özelliklerine dair elde edilen bulgular, öğrenme topluluklarının alanyazında öne çıkan belirleyici özelliklerinin bu çalışmada yürütülen programda katılımı ve öğrenmeyi olumlu yönde etkileyecek şekilde algılandığını göstermektedir. Programın uzun vadeye yayılmasının bir diğer kazancı da öğretmenlerin kullandığı dilin, programın başından sonuna doğru değişime uğraması ve sonunda daha bilimsel bir hal alması olmuştur.

Bulgular zamanla öğretmenler arasında olumlu iş birliğinin oluştuğunu göstermektedir. Öğretmenler uzmanlıklarındaki farklılıkları ortak bir amaç için iş birliği yapmakta kullandıklarını ve öğrenme topluluğundaki diğer öğretmenleri bilgilendirdiklerini belirtmektedir. Ayrıca bu iş birliğinin programda aktif katılımlarını da desteklediklerini belirtmişlerdir. Tüm bu bulgular, alanyazında öğrenme topluluğu oluşturmanın ilkeleri ile paralellik göstermiştir (Borko, 2004; Grossman vd., 2001; Little, 2012; Putnam & Borko, 2000). Ayrıca öğretmenler aralarındaki iş birliği ve uzmanlık paylaşımını destekleyen en önemli unsurlardan birinin alanyazında da vurgulandığı gibi araştırmacıların süreç boyunca kendilerine yol göstermeleri ve kendi katılımlarını destekleyecek şekilde rehberlik yapmaları olduğunun altını çizmiştir. Bu da öğrenme topluluğu oluşturmaya yönelik alanyazındaki öneriler hayata geçtiğinde (örneğin araştırmacıların rehberlik etmesi ve katılımcıların iş birliği içerisinde ve aktıf katılımı), bu çalışmadaki programın uygulamasında olduğu gibi birbirini destekleyecek

şekilde olumlu bir etki yaratabileceğini göstermiştir. Öğrenme topluluğu oluşturulurken dikkate alınması gereken özellikler, her biri ek efor veya zorluk getirmekten öte, bu özelliklerin birbirini besleyerek mesleki gelişim programlarında beraberce işe koşulması daha da kolay olabilmektedir (Bolam vd., 2005; Prenger vd., 2017; Stoll vd., 2006).

Bu çalışmanın bulgularında, öğretmenlerin aktif katılımının sağlanması uygulanan programın bir diğer güçlü yanı olarak ortaya çıkmıştır. Özellikle küçük gruplar oluşturulduktan sonra, her topluluğun ortak bir hedefi olmuştur. Bu hedefe ulaşmak için birbirini tanımayan, farklı okullardan ve fen ve matematik alanlarından öğretmenler birbirleriyle iş birliği içerisinde kendi araştırmalarını gerçekleştirmişlerdir. Öğretmenler, küçük gruplarında inisiyatif alarak kendi planlamalarını yaptıkları ve kendi araştırma süreçleri üzerinde düşünme fırsatı buldukları bu evrede hedeflerine yönelik belirsizlikle daha kolay başa çıkabildiklerini de belirtmiştir.

Programın geliştirilmesi yönünde en çok görüş bildirilen özelliği içerik yapılandırmasındaki ve hedeflerdeki belirsizliğin zaman zaman başa çıkılması zor seviyelerde olmasıdır. Program içeriğinin öğretmenlerin ihtiyaçlarını karşılayacak şekilde oluşturulması hedeflendiği için, her buluşmadan alınan geri bildirimlerle bir sonraki haftanın konusu şekillenmiştir. Bu nedenle öğretmenlere programın içeriği hakkında çok sınırlı bilgi verilmiştir. Bu durum öğretmenlerde bir belirsizlik hissi oluşturmuştur. Benzer şekilde küçük grupların projelerinin konusu eğitim takviminin yarısında belirlendiği için öğretmenler ayrıca bir belirsizlik yaşamışlardır. Bu belirsizlikler öğretmenlere uygun eğitim içeriği oluşturma ve araştırma konusunu öğretmenlerin kendi yaşadıkları okul problemlerinden kendilerinin oluşturmasını istendiği için ortaya çıkmıştır. Programda oluşan bu belirsizlik ilerleyen uygulamalarda, hem hedeflerin daha açık olarak ortaya koyulması, hem de öğretmenlerin programın erken evrelerinde de aktif bir role büründürülmesiyle programın verimini arttıracak şekilde ortadan kaldırılabilir.

Öğretmenlerin mesleki gelişimini desteklemek ve öğretimin kalitesini arttırmak için son yıllarda dünya genelinde ciddi yatırımlar yapılmaktadır (Gore vd., 2017). Benzer şekilde 2019 yılında T.C. Millî Eğitim Bakanlığı'nın stratejik planında öğretmen ve okul yöneticilerinin mesleki gelişimi için yaklaşık 57 milyar TL (2019 kuruna göre 10 milyar Dolar) bütçe öngörülmüştür (T.C. Millî Eğitim Bakanlığı, 2019). Öğretmenlerin mesleki gelişimine yapılacak bu yatırımlarla, ilk etapta öğretmenlerin bu tarz programlara katılması sağlanabilir. Sonrasında da katıldıkları programlarla desteklenen mesleki gelisimlerinin etkilerinin sürdürülebilir olması için öğretmenlerin is yüklerinin mesleki gelişimlerine de zaman ve emek harcayabilecekleri şekilde ayarlanması gerekir. Bu durum, bu calısmadaki programın gelistirilmesi gereken bir olarak özellikle akademisyenlerin dile getirdiği mesleki gelişimin sürdürülebilirliğinin de sağlanmasına katkı yapacaktır.

Bu çalışmanın sonuçları, bir mesleki gelişim programının süreçlerini anlama konusunda fikir vermesine rağmen, bu durum çalışmasının sınırlılıklarını belirlemek önemlidir. Çalışmanın en büyük sınırlılığı veri kaynaklarıdır. Veriler öğretmen ve araştırmacı odak grup görüşmelerinden toplanmıştır. Böyle bir çalışmanın verileri

araştırmacı günlüğü, öğretmen günlüğü gibi niteliksel veri toplama yöntemleriyle geliştirilebilir. Diğer bir sınırlılığı ise öğretmenlerin ölçme ve değerlendirme bilgilerindeki değişim ön-test-son test gibi objektif yöntemlerle değerlendirilememiştir. Bu programda öğretmenler çalıştıkları ölçme ve değerlendirme konularını programın ilerleyen haftalarında belirlediler ve grupların her biri farklı ölçme ve değerlendirme konularına odaklandılar. Dolayısıyla küçük grupların her biri program kazanımlarında farklılaştığından nicel veri toplanarak bir değerlendirme yapılamamıştır.

Kapsamı ve sınırlılıklarına bakıldığında bu çalışmanın kuramsal ve uygulamada kullanılabilecek sonuçları kısaca özetlemek gerekirse: Bu çalışma mesleki gelişim yöntemi olarak öğretmenlerin genelde pasif dinleyici oldukları düz anlatıma dayalı mesleki gelişim programlarına alternatif güncel bir yaklaşım olan öğrenme topluluğu modeline somut bir örnek oluşturmuştur. Programın oluşturulmasında ölçme ve değerlendirme içerikleri bilimsel araştırma bakış açısını yansıtmaya yönelik bir izlence çerçevesinde sunulurken aynı zamanda akademisyenlerle öğretmenlerin birlikte çalıştıkları projeleri hedefleyen bir bağlamda ele alınmıştır. Bu çalışmadan alınan verim durumlu öğrenme yoluyla bilginin sosyal inşasını esas alan kuramsal yaklaşımın problem odaklı tasarımlar yoluyla öğretmen eğitiminde gerek içerik hazırlığında gerekse yöntem sırasında sağlam bir çerçeve oluşturabileceğini göstermiştir. Pratikte ise etkin akademisyen öğretmen iş birliklerinin sağlam kuramsal çerçeveye dayalı tasarımlarından sonra en önemli özelliğinin iş birliğinin neredeyse bir öğretim dönemine karşılık gelen uzun bir etkileşim sürecini içeren katılımcı bir atmosfer içerisinde gerçekleşmesi olduğu anlaşılmıştır.

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EK-1: Öğretmen Odak Grup Görüşme Soruları

I. Odak Grup

- 1) Bu programda ölçme ve değerlendirmeye dair ne gibi kazanımlarınız oluyor?
- 2) Programın size katkılarını açıklar mısınız?
- 3) Programın başından bu yana akademisyenler ve öğretmenlerin rollerine dair görüşlerinizden bahseder mişiniz?
- 4) Programdaki çalışma tarzımızda sizce en verimli olan ve sizi en çok zorlayan yönler nelerdir? Programa dair söylemek istediğiniz önemli başka bir konu?

Bir soru üzerinde tartışırken ve bir sonraki soruya geçmeden önce katılımcıların görüşlerini daha açık şekilde almak veya eksik kalan noktalar varsa yakalamak için kullanılabilecek ifadeler:

- a. Bu konu ile ilgili olarak daha fazla bilgi verebilir misiniz?
- b. Bu konu ile ilgili daha ne söyleyebiliriz?
- c. Bunu biraz açabilir misiniz?
- d. Bu ilginç bir nokta ama konumuz ile nasıl bağlantı kurabiliriz?

II. Odak Grup

- 1) Bu programda ölçme ve değerlendirmeye dair ne gibi kazanımlarınız oluyor?
- 2) Programın size katkılarını açıklar mısınız? Bu çalışmanın size ölçme ve değerlendirme bilgi ve becerisi dışında nasıl bir katkısı oldu? (Ek soru: Bu eğitim sürecinde, burada kazandığınız becerileri eğitim uygulamalarınızda kullandığınız bir duruma örnek verebilir misiniz?)
- 3) Programın başından bu yana akademisyenler ve öğretmenlerin rollerine dair görüşlerinizden bahseder misiniz? Gruplarda çalışmanıza başladıktan sonra rollerde bir değişim oldu mu? (Daha açık ve anlaşılır sorabilmek için: Bu programı geleneksel hizmetiçi eğitim programlarından ayıran yönleri nelerdir?)
- 4) Programdaki **çalışma tarzımızda** sizce en verimli olan ve sizi en çok zorlayan yönler nelerdir?

Programa dair söylemek istediğiniz önemli başka bir konu?

III. Odak Grup

- 1) Bu programda ölçme ve değerlendirmeye dair ne gibi kazanımlarınız oldu?
- 2) Programın size katkılarını açıklar mısınız? Bu çalışmanın size ölçme ve değerlendirme bilgi ve becerisi dışında nasıl bir katkısı oldu? (Ek soru: Bu eğitim sürecinde, burada kazandığınız becerileri eğitim uygulamalarınızda kullandığınız bir duruma örnek verebilir misiniz?)
- 3) Programın başından itibaren akademisyenler ve öğretmenlerin rollerine dair görüşlerinizden bahseder misiniz? Gruplarda çalışmanıza başladıktan sonra rollerde bir değişim oldu mu? (Ek soru: Bu programı geleneksel hizmetiçi eğitim programlarından ayıran yönleri nelerdir?)
- 4) Programın sonunda çalışmanızı bir kongrede sunmanın bu hizmetiçi eğitime ne gibi katkıları oldu sizce?
- 5) Programdaki çalışma tarzımızda sizce en verimli olan ve sizi en çok zorlayan yönler nelerdir?

EK-2: Akademisyen Odak Grup Görüşme Soruları

- 1) Bu programda öğretmenlerin ölçme ve değerlendirmeye dair ne gibi kazanımları oldu? (Planlananlarla da karşılaştırarak)
- 2) Programın güçlü ve zayıf yönleri? (Programın öğretmenlere katkılarını açıklar mısınız?; içeriğin aktarımında başarılı olabildik mi?)
- 3) Programın başından itibaren akademisyenler ve öğretmenlerin rollerine dair görüşlerinizden bahseder misiniz? Gruplarda çalışmanıza başladıktan sonra rollerde bir değişim oldu mu? (Daha açık ve anlaşılır sorabilmek için: Bu programı geleneksel hizmetiçi eğitim programlarından ayıran yönleri nelerdir?)
- 4) Programdaki çalışma tarzımızda sizce en verimli olan ve sizi en çok zorlayan yönler nelerdir?
- 5) Değinmek istediğiniz diğer önemli konular?

The Learning Community Approach in Professional Development: A Measurement and Evaluation Program for Science and Mathematics Teachers

Abstract

This article presents the opportunities encountered in a professional development program designed to enhance the measurement and evaluation knowledge and skills of mathematics and science teachers and challenges and barriers encountered in the implementation of the program from the perspective of the teachers and researchers. The program, designed using a learning community approach, aims to enable teachers to assume the role of researchers and find solutions to measurement and evaluation-related problems in their own classrooms. The processes of the program were analyzed using a qualitative case study method. Data were collected through three different focus group interviews at the beginning, middle, and end of the program with teachers selected by the program pricipants, and a single focus group interview at the end of the implementation with the researchers who carried out the program. According to the results, this professional development program has been a concrete example of quality professional development programs that prioritize features such as cooperation, common goals, and content that is compatible with classroom practices, and supports teachers' pedagogical knowledge. The strong and development-oriented aspects of the program are discussed in the article.

Keywords: Measurement and evaluation, professional development program, learning community, science and mathematics teachers

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