Examining Learners' Online Learning Experiences in Vocational Education and Training

Mesleki Eğitim ve Öğretimde Öğrenenlerin Çevrim İçi Öğrenme Deneyimlerinin İncelenmesi

Okay ÇAMOĞLU[1] iD , **Yasemin KARAL[2]** iD , **Rabia ÖZDEMİR SARIALİOĞLU[3]** iD

Öz: Türkiye'de korona salgını sürecinde eğitim öğretim faaliyetlerini çevrim içi ortama taşıyan birçok kurum olmuştur. Bu süreçte, çalışanlarının mesleki yeterliliklerini geliştirmek için çevrim içi eğitimi tercih eden bir kurumun eğitim öğretim faaliyetlerini katılımcıların görüşleri bağlamında incelemek bu çalışmanın hedefidir. Araştırmanın katılımcıları Türkiye ve dünyanın birçok ülkesinde faaliyet gösteren bir teknoloji şirketinin yetkili servis organizasyonunda çalışan teknisyen ve müşteri temsilcilerinden, kurum tarafından sunulan çevrim içi eğitimi tamamlamış olan 122 çalışandır. Çalışma, tarama modeline göre tasarlanmış; veriler, açık uçlu sorulardan oluşan bir çevrim içi anket formu ile toplanmıştır. Elde edilen veriler, içerik analizi yoluyla incelenmiştir. Analizler, mesleki eğitim ve öğretimin uygulamalı doğasına rağmen, çevrim içi eğitimin yerini bu alanda sağlamlaştırmaya başladığını göstermiştir. Öğretmen, öğrenci, altyapı ve içerik olarak iyi yapılandırılmış bir çevrim içi mesleki eğitim öğretim etkinliğinin başarılı olacağı üzerinde hemfikir olunabilmektedir.

Anahtar Kelimeler: Çevrim İçi Öğrenme, Mesleki Eğitim ve Öğretim, Öğrenme Deneyimleri

Abstract: During the corona epidemic in Turkey, there have been many institutions that have moved their education activities online. In this process, the examining the education and training activities of a institution that prefers online education to improve the professional competence of its employees of the opinions of the participants is the aim of this study. The participants of the research were comprised of 122 technicians and customer representatives' employee in Turkey affiliated to the local authorized service organizations of a global technological company. The participants were selected among candidates who completed the online training offered by the main company, which operates in Turkey as well as many other countries. The study was carried out in survey model, and the data were collected with an online questionnaire consisting of open-ended questions. Collected data were analyzed through content analysis. It was found out that despite the applied nature of vocational education online education is consolidating its place in this area. There seems to exist consensus that an online vocational education activity designed properly in terms of teacher, student, infrastructure and instructional materials is most likely to be successful.

Keywords: Online Learning, Vocational Education and Training, Learning Experiences

[1] Okay Çamoğlu, Trabzon Üniversitesi, Bilgisayar ve Öğretim Teknolojileri Eğitimi, okay_camoglu21@trabzon.edu.tr, 0000-0002-4174-7819

[2] Sorumlu Yazar: Dr. Öğr. Üyesi Yasemin Karal, Trabzon Üniversitesi, Bilgisayar ve Öğretim Teknolojileri Eğitimi, yaseminkaral@trabzon.edu.tr, 0000-0003-4744-4541

[3] Rabia Özdemir Sarıalioğlu, Trabzon Üniversitesi, Bilgisayar ve Öğretim Teknolojileri Eğitimi, 7zdmr61@gmail.com, 0000-0001-6989-3685

1. INTRODUCTION

With the advancements in information and communication technologies, online learning has gained popularity as an alternative mode of education. In parallel, the number of world-renowned online learning platforms is increasing. Similarly, educational institutions add a new one to programs and courses they offer with open, hybrid or blended methods every passing day. Online learning provides space and time-independent access to learning content, and offers flexible collaboration and communication opportunities with peers and instructors (Dhawan 2020). Allowing learners to progress at their own pace with contents as texts, pictures, and videos, these environments are powered by up-to-date technologies such as augmented reality, virtual reality, artificial intelligence, machine learning and deep learning (Ng et al. 2021; Şenocak 2020).

Under the pressure of the Covid-19 outbreak, educational institutions globally have seen online learning as a way out. Billions of learners from all over the world continued receiving education and instruction with the aid of online learning applications (Bozkurt 2020). It must be noted that online learning is mainly engaged in college and post-college education. As for the K-12 level, online learning is known to be a narrow yet growing field (Arnesen et al. 2019). The same almost applies to vocational education and training (Ng et al. 2021; Paton, Fluck, and Scanlan 2018). Referring to the applied nature of vocational education and training, Ng et al. (2021) stated that activities simulated with the current technologies are suitable for training at the concept and theory level, but they do not include the force exerted to open screws, special equipment, or other things. In other words, they pointed out that online learning is not ideal for real applications.

Uçar and Özerbaş (2013) define vocational and technical education as "the process of improving the individual in a balanced way with mental, emotional, social, economic and personal aspects by cultivating the knowledge, skills, attitudes and professional habits required by a specific profession". According to Arifin et al. (2020), vocational education is education for the business world, and it is important for educators and students to use the resources available through information and communication technologies to achieve their learning goals. In vocational education and training, which aims to equip individuals with up-to-date skills or competencies required by the profession, online environments can be an effective way to increase the quality of learning and teaching (Belaya 2018). Quesada-Pallarès et al. (2019) suggest that online learning environments are not only tools to support learning, but also flexible, attractive and interactive dynamic environments that promote lifelong learning in any professional field; thus, it introduces new routes to vocational education and training students. Xu et al. (2021) consider online learning for vocational education and training as an important way of renewing the mode of existing teaching resources and improving teaching quality. In parallel, the literature on the scope and nature, potential and future of vocational education and training in the online environment is gradually expanding.

Rabiman, Nurtanto, and Kholifah (2020) worked on an online learning system to serve a Mechanical Engineering Education course. They revealed that the system developed for vocational education and training could meet the media and material needs and that the students had positive and stable views regarding the system. Likewise, Edy (2020) explored positive effects of project-based learning in the online learning environment on vocational education and underlined the facilitating role of the teacher. Syauqi, Munadi, and Triyono (2020) looked into student perceptions concerning online learning in the context of Mechanical Engineering Education during the Covid-19 pandemic and found out that teacher practices and student expectations were incompatible with each other. In their study, the students did not get enough benefit from online learning as a means of improved experience and productivity in mastering the respective competencies. Bahadır (2020) examined the distance education experiences of Vocational School students in comparison with their experiences of formal education. The students had a higher opinion of their self-learning abilities and motivation for online learning compared to their peers (Bahadır 2020).

According to Belaya (2018), online learning begins to be fruitful for vocational education and training only when the social, organizational and individual needs of teachers and learners are met. Cox and Prestridge (2020) think that unique tensions can arise when vocational teachers have to teach online. Researchers conducted a study with full-time online vocational teachers in Australia. The teachers placed more weight to teacher-centered practices while thinking of the pedagogy of online education as student-centered. In addition, factors such as teacher workload, undersized and oversized classes, competency-based curriculum, number of students per teacher, and the subject of teaching hindered the best practices. Sergeieva et al. (2021) reported some problems faced in the transfer of vocational education to the online environment in the context of Ukraine. They emphasized the need for more active creation and implementation of electronic education resources, increasing the competence levels of teachers and seeking ways to provide quality education for students. Omar et al. (2022) pointed out that online learning in vocational education and training remains too lax in practice although there is great potential for more beneficial results. They also suggested that stakeholders should work in cooperation for a common agenda to incorporate online learning into vocational education and training. According to Cox and Prestridge (2020), it is worth investigating how online education in vocational education and training should be expanded and what the scope of effective student-centered practices should be. Syauqi, Munadi, and Triyono (2020) stressed the importance of a meticulous preparation process and cyclical evaluation of development for both teachers and institutions. The present study was inspired by this point of view. Therefore, this study aimed to find out the opinions of the employees about the online education and training they were given within a hybrid learning model in order to improve their professional competencies after the employer company switched to the online environment for maintaining education and training activities during the Covid-19 pandemic period in Turkey. The following research questions were addressed in this study:

1. What are the participants' views about the education and training process in the online environment?

2. What are the participants' views about the instructional materials presented in the online environment?

3. What are the participants' views about the interaction process in the online environment?

4. What are the participants' views about the efficiency of the education and training given in the online environment?

5. What are the participants' recommendations for quality vocational education and training in the online environment?

2. METHOD

2.1. Research Model

The study was carried out as a survey. "Survey is a type of research conducted to determine the views or characteristics of a large number of participants. The purpose is to make a description by taking a picture of the current situation related to the research topic" (Büyüköztürk et al. 2016). The current study was intended to reveal whether the learners are satisfied with the online vocational education and training offered by their company, what opinions they have in general, and what problems or complaints they have in this regard. Survey was preferred as the optimum model that would allow to describe the situation from the eyes of the learners.

2.2. Participants

The participants of the study were 122 technicians and customer representatives working for the authorized service organizations supporting a technological company operating in Turkey and many other countries of the world. The participants were selected among such employees who had completed the online training offered by the company. The vocational training course covered diverse fields including

White Goods Installation, Air Conditioner Installation, Air Conditioner Failure, Display and Sound Systems Installation, Display and Sound Systems Failure, Cooler Failure, Cooker Failure, Washer Failure, and Customer Representative Specialization. While 80 of the participants had not received any online training previously, 42 had experienced it. Of the participants, 103 were male and 19 were female. The participants were selected from 45 different provinces across all 7 geographical regions of Turkey. The distribution of the participants is shown in Table 1 according to their professions.

Table 1.

Numbers of participants and professions

Professions	Participant
White Goods Installation	23
Air Conditioner Installation	16
Air Conditioner Failure	7
Display and Sound Systems Installation	22
Display and Sound Systems Failure	12
Cooler Failure	20
Cooker Failure	3
Washer Failure	23
Customer Representative Specialization	24

2.3. Data Collection Tool

A questionnaire consisting of open-ended questions was prepared by the researchers. The questionnaire items were based on the literature review (Bülbül et al. 2016; Geçer and Topal 2015; Gülbahar 2012; Huei-Chuan and Chien 2020; Yurdugül and Sırakaya 2013). Then they were revised as advised by an expert of online training at undergraduate and graduate levels. The final draft was e-mailed to the participants for collecting data. Some sample items are as follows: "Did you receive any training on the use of the learning platform (Perculus) before participating in the online training? Please explain", "How was the online course process? Please explain", "What was the role of the educator in the online lessons? Please explain", "What kind of materials (video, presentation, animation, etc.) were used in the online courses? Please explain", "Were you using tools, equipment and products for your profession in online courses? How?", "How was your interaction with the instructor in the online lessons? What are your thoughts?".

2.4. Data Analysis

Content analysis was applied to the data obtained from the questionnaires. The responses on the forms were read through and the common phrases, words and expressions were elicited to describe the content as thoroughly as possible. These expressions were used to open the categories to cluster similar or related data under certain groups (Allan 2020). The results were summarized in tables exhibiting the themes, codes and frequencies (Yıldırım and Şimşek 2013). Reliability was ensured by means of coding and extraction of frequencies independently by the two researchers. As a requirement of the reliability check, the assessors' themes, codes and frequencies were compared. The reliability formula of Miles and Huberman (1994) was applied to the results, and the inter-coder agreement was found to be 87%. It means that the results were reliable. Then, the researchers re-examined the themes, codes and frequencies of both analyzes. Discussions were held to reach the final result on points of disagreement. The themes, codes and frequencies that emerged as a result of the discussions were reflected in the findings.

2.5. The Procedure

The company's training was structured in the hybrid model. The educational activities carried out in the online environment were wound up with a face-to-face complementary training. The participants were

selected by the company among employees with a minimum experience of 6 months in the local authorized service centers. The product groups they work with, their service periods and the suggestions of authorized service owners have been effective in determining the candidates who will attend the education and training. Selected technicians were informed about the acceptance two weeks before the training was initiated. Before the start of the training sessions, an acquaintance meeting was held online with the participants and the educators. Then, the participants were appointed to groups of 16 on average, and their educators were appointed. The platform to be used for online education was demonstrated. The course was scheduled to be from 09:00 till 13:00 on weekdays for 13 days in total. The main company notified the authorized service owners that they needed to prepare a workshop environment dedicated to this task and to make audio and video communication infrastructure available to the classes. During the lessons, video and audio via were made online by the educators on the determined platform, and the participants were expected to be interacted. The participants were allowed to be active via video and audio to share their experiences. The lessons were started after the educators made sure that all participants were ready to attend actively unless they had excuses. In order to ensure active attendance of the participants and to direct their attention to the class, spontaneous questions were asked by the educators from often. The participants were given points for their answers to be counted in the final success grade besides. Also, active participation in classes was included in the calculation of the grade. Upon the process of the online course, the participants were given assignments which they were supposed to perform. The final success score of each participant was reached by taking all these components into account.

2.6. Ethical consent of the research

In this study, all the rules specified to be followed within the scope of "Higher Education Institutions Scientific Research and Publication Ethics Directive" were complied with. None of the actions specified under the title of "Actions Contrary to Scientific Research and Publication Ethics", which is the second part of the directive, were not carried out.

Ethics committee permission information

Name of the committee that made the ethical evaluation: T. C. Trabzon Unıversıty Social And Humanities Scientific Research And Publıcatıons Ethics Committee

Date of ethical evaluation decision: 13.05.2022

Ethics assessment document issue number: 2022-5/1.133.

FINDINGS

The findings are organized and presented in the order of the research questions.

1. Participants' Views about the Education and Training

In search of answer to this question, the participants' responses regarding the online training process were analyzed. 107 of the participants had a positive impression about the training given online. They expressed their views to this end by using phrases like "successful", "good", "very efficient", and "educative and entertaining". In addition to this, the participants' views about the content of the course are presented in Table 2 demonstrating the codes (i.e., lecturing, question and answer, idea sharing, application) and corresponding frequencies under the theme the training process. 15 responses such as "I don't know", "No", "Online", and "45 minutes' lesson, 15 minutes' break" were coded as off-topic answers.

In the scope of the training process, the educators' roles and responsibilities in the lessons were exposed from the participants' perspective. 117 participants thought that the educators fulfilled their roles successfully, while 2 participants reported the opposite. As an example, the participant renamed as K14 wrote, "As it should be, they were sincere and friendly, but a few teachers were not proficient to answer

our questions." The rest of the 3 participants had no opinion on this matter. 55 participants expressed their views by pointing to some of the roles and responsibilities of the educators. It was seen that reference was heavily made to the educators' role of lecturing as it was mentioned by 30 participants. For example, K39 stated, "Good lecturing was performed, fluently." Likewise, K65 wrote, "The critical points were explained very well." 9 participants emphasized that the educators addressed questions to the participants and answered the questions addressed by them. K69 wrote, "The educators' instant questions made the participants constantly focus on the lesson." K107 also explained the situation as follows: "The role of the educator was very big. S/he was very knowledgeable on the subject. S/he was able to answer satisfactorily every question we asked."

Some participants highlighted the facilitating role of the educators. In this connection, K28 wrote the following statement: "Our instructor was both an educator and a moderator." K32 stated, "Our educators took care of each participant in the lessons." K55 stated, "As s/he also gave us the right to speak, it was easy for us to adapt to the lessons." Similarly, K90 expressed the following view: "There was a very friendly and tolerant environment. Particular emphasis was placed on parts we did not understand or were somewhat confusing."

Secondly, the scope of the roles and responsibilities of the participants was examined to represent their own point of view. While 45 students stated that they did not have any roles or responsibilities, 77 participants implied some of their roles and responsibilities in the training process. Some of them explained their roles and responsibilities. K1 described it with these words: "There were roles and responsibilities that the educator gave to some participants." K119's statement was, "Of course, we would have responsibilities. We were supposed to answer a question about our education before the lesson started and a question at the end of the lesson. We did our assignment given during and after the lessons and handed in them to our educators." Some participants elaborated the roles in their answers. The distribution of the participants' answers under the theme of roles and responsibilities is shown in Table 2 below.

Table 2.
Roles and responsibilities

	Educator		Participant	
	Code	Frequency	Code	Frequency
Roles and responsibilities	Lecturing	30	Assignment	31
	Facilitating	16	Answering questions	20
	Asking/answering questions	9	Facilitating	4
			Exams	2
			Written communication	2

3 participants emphasized their facilitating role and efforts to create the classroom climate. For example, K16 wrote, "I had a lot of responsibilities. As a facilitator, I watched these trainings together with many of my friends and I made extra efforts to make them successful." K55 wrote, "I was the class president and had duty such as opening a WhatsApp group." Lastly, K83 explained his role as "I was trying to increase efficiency by checking the classmates for a better education overall."

20 participants reported answering the questions asked in the lessons as their most frequently repeated responsibility. K1's statement was as follows: "Even if I wasn't sure about the questions asked by the educator in the lesson, I thought that I should attend." K52 wrote, "In a momentary loss of attention, it was like impossible to answer the instant question correctly." K107 expressed their views as "I had to answer the questions asked after the lecture and this was definitely the kind of situation that should have happened. In this way, the educator better helped us with the topics we did not understand." 2 participants

described their responsibility as taking exams. K108 wrote their opinion on this matter as follows: ""In during online course, I created a failure in the device and demonstrated in practice how to solve it."

31 of the participants stated that they did assignments. They mentioned different types of assignments including giving lectures, demonstrating in practice or acting out during the lessons. K76 implied that they lectured by saying, "Our instructor asked me to give information about the device in matters that required lecturing about the device." K24 wrote, "Sometimes we performed an application ourselves by sharing screens." Some participants pointed out that role-playing or acting out were performed as assignments by the participants. In this respect, K22 wrote, "Those appointed by the educator took part in trainings such as how to talk to customers". K37 expressed their views as "I acted as a customer representative." There were participants who referred to the assignments set after the lessons. For instance, K120 wrote as following: "We delivered to our educators the assignments we did after the lessons." Similarly, K1 wrote, "The assignments were given and these assignments were video-recorded and presented to the educator." Again, K2 exemplified as following: "The educator gave 1 task for each of the 5 lessons taught in all process, and we had to video-record and send these tasks on the condition that our friends who had previously received specialization training observed us." As the last code under this theme, 2 participants implied the responsibility of performing written communication. K120 wrote, "We had to inform our educator, both in writing and verbally, that we attended the lesson at the beginning of each lesson." K52 also wrote as following: "It was necessary to directly participate in the topic from the chat section."

2. Participants' Views about the Instructional Materials

The participants' responses were analyzed to reveal the scope of the equipment, instruments and materials used in the online lessons. The results were summarized in themes, codes and frequencies in Table 3. As it can be seen in the table below, the participants pointed out that the training was realized by using presentations/slides, animations, videos, images, documents and equipment depending on the type of the vocational training. In this regard, K42 wrote, "Anything that could help us to learn was used."

Table 3.
Instructional materials used by educators

Theme	Code	Frequency
	Equipment	101
	Videos	83
Instructional materials	Presentations	62
	Animations	40
	Images	18
	Documents	4

When Table 3 is examined, it is seen that videos and presentations were frequently used as instructional materials in the lessons. In this regard, K23 wrote, "Presentations were present in every training. We also watched videos depending on the subject." Also, animations were utilized in the classes as stated by K41: "Videos, presentations and animations were used." K3 pointed out that images were used besides occasional use of documents during the lessons by saying, "There were documents such as tables and notes on faults." As another example, K2 wrote, "Images from the bulletins and images from the field were shown. Images taken from the field would be often used to show erroneous operations." 101 participants pointed out that equipment from their professions were used in the online course. K1's view in this context was as follows: "Equipment related to our profession were shown and information were given on which areas and how these objects should be used." K120's statement was as follows: "We had all the instruments and equipment related to our profession in our lessons. During the lecture, our instructors showed us using

them. We also practiced with the tools in our hands." Among 101 participants, 3 people said that although equipment were used in the lessons, it was not at an adequate level. Of these participants, K3 stated, "Avometer and similar devices were described, but they were not really sufficient." Likewise, K99 gave their opinion as "It is not used very effectively." Of the remaining 21 participants, some said that their occupation does not require the use of equipment or real objects/ materials for training. For example, K24 stated the situation by writing, "As there is not much need for equipment for customer representation, the lessons are taught on the computer."

3. Participants' Views about the Interaction Process

The views of the participants about their interactions with the educators and peers in and out of the classroom were examined, and the findings were shown in themes, codes and frequencies in Table 4. Of the respondents, 112 reported effective interaction with their educators throughout the training process. K43's view on the educator-participant interaction was as follows: "We were had the opportunity to ask questions while the educator was lecturing. Our communication was easy, as if we were getting one-on-one training." As another example, K73 explained that conversations were the dominant communication technique in the classes. Also, K114 wrote, "We would take the floor actively. S/he (The educator) would also reply to our messages." Another 4 participants compared the interaction to face-to-face training and found it partially sufficient. K97's opinion on this subject was as follows: "It was good, but there is a bit of distance because it takes place behind the screen." On the other hand, 1 participant noted that they did not interact much, and 1 wrote, "I was shy because I was nervous." When it comes to peer interactions, 98 participants experienced interactions with their peers throughout the course. In this regard, K115 reported as following: "A solid virtual friendship was formed. Information and ideas can be shared easily. These friendships continue after the training." K29 expressed a similar view by writing, "We were in contact via the chat screen and the WhatsApp group." Apart from these, 12 participants stated that they experienced partial interaction with their peers. K1 wrote his opinion as follows: "There was not much interaction. When necessary, communication is made in writing." Similarly, K28 wrote, "Communication or mutual conversations would be made only with the guidance of the educator." 10 participants reported insufficient interaction. One of these participants, K22, wrote, "We didn't have an interaction." Also, K85 stated the following: "We couldn't have much contact with the other participants. We could only see them from the (web) camera."

Table 4.

Educator-Participant and Participant-Participant Interactions

Theme	Code	Frequency
Participant-Educator Interaction in Class	Effective	112
	Partially Effective	4
	Ineffective	2
Participant - Participant Interaction in Class	Effective	98
	Partially Effective	12
	Ineffective	10
Participant -Educator Interaction Outside Class	Effective	98
	Partially Effective	4
	Ineffective	20
Participant - Participant Interaction Outside Class	Effective	93
	Partially Effective	5
	Ineffective	21

On the whole, 98 respondents were found to experience favorable interaction with the educators outside the classroom and 93 were found to experience the same with other participants. K120 said the following on this topic: "WhatsApp groups were opened at the beginning of each training under the leadership of our educators. We made both written and verbal communication. The (WhatsApp) groups are still there. We continue to exchange help with failures and problems." Moreover, some participants stated that they communicated or exchanged information via e-mail, whereas some stated that communication was occasional or even rare. Some others reported that there was no communication or interaction at all.

4. Participants' Views about the Efficiency of the Education and Training

The opinions of the participants were also analyzed about the efficiency of the online training provided in the online environment. It was found that 118 participants were satisfied with the training. For instance, K81 wrote, "It couldn't have been better." K120 expressed their opinion as follows: "It is more beneficial and more economical than face-to-face training. It saves time and work day for employees. After 5-6 hours of training per day, we can do other work that we are responsible for in our workplace. It was so beautiful and perfect." Only 4 participants found the training unproductive. Of the 118 participants, 23 rated the process as an "effective education and training" with some reservations. Some others said that they would prefer face-to-face education and training. K77 wrote, "It was successful, albeit not as effective as face-to-face training." Lastly, some participants thought that efficiency of the training could be increased with changes in scheduling and refining of the training scope or procedure.

Under this research problem, the participants were asked to evaluate the impact of their interactions with the educators, the content of the training, and other participants on their learning in the online environment. It was found that 117 people made positive evaluations. Certain components were particularly implied to influence learning by 42 respondents. The themes, codes and frequencies concerning the influential components were listed in Table 5.

Table 5.
Components that influence participants' learning in the online environment

Theme	Code	Frequency
	Lecturing	9
	Idea exchange	19
Learning	Instructional materials	5
	Questions	6
	Application	3

To start with, lecturing was found to be an important factor affecting learning from the participants' perspective. It was exemplified by K1 as following: "The topics that our educators lectured were basic and helped us to learn the truth of many wrong information that we knew to be true." Secondly, the participants made particular emphasis on the exchange of experiences and knowledge among participants due to its influence on learning. For example, K38 wrote, "Our training was not limited to just lecture. We had very experienced friends in the participant. It proved to be an effective and comprehensible training as it was shared and discussed with everyone." Moreover, it was stated by the participants that the instructional materials used by the educators were illuminating. In this regard, K23 wrote, "Learning was easier with the presentations and videos." Fourthly, some participants reported better learning thanks to the questions asked by the educators and participants as well as the answers given by both. One of them, K22, stated, "The questions we didn't know were asked to others, it was good." Also, K76 expressed their opinion as "We kept asking questions every time we could not understand, it was explained over and over." Finally, some respondents implied the effect of the applications made with real materials/ equipment on learning. K24 wrote their opinion as follows: "After the lecture is given, it becomes permanent because it is shown

in practice with screen sharing." K39 referred to the positive impact of practical applications on their learning by saying, "We would practise after the lesson."

As the last point of concern under this research question, the responses were analyzed to find out the tendency regarding the face-to-face complementary training following the online sessions. It was seen that 68 participants found this part of the training unnecessary. These individuals believed that the main vocational training helped them acquire the qualifications needed to perform their jobs, making the complementary training redundant. K16's opinion on this subject was as following: "We had already remedied all our deficiencies during the online classes." K23 wrote, "In the schedule given to us, it was said that the exams would be held in Manisa (province) after the distance education. The exams could also have been given remotely via live chat." K115 expressed their opinion by stating, "Actually, there was no need for it, everything had already been explained and implemented." It was seen that 6 participants were neutral on this issue. K100 thought as follows: "Actually, it was not necessary, but I can say that the complementary training was reinforcing." On the other hand, 41 participants regarded that constituent necessary. One of the participants, K38, held the following opinion: "Online education is like playing football on paper, knowing all the rules is not playing good football. Of course, I believe that reinforcing this knowledge with face-to-face training became more effective."

Apart from the foregoing, 69 of the participants claimed that the face-to-face complementary training could have been held online. Contrarily, 39 stated that the complementary training should have been realized face to face as it is not suitable for running online. 10 participants were seen to be neutral in this regard. They suggested that it could have been moved to the online environment, yet face-to-face training bears richer potentials for more benefits.

5. Participants' Recommendations for Quality Vocational Education and Training

In the questionnaire, the respondents were asked to write down their suggestions for improving the online education they received. 62 people found the training satisfactory pointing out that there was nothing to modify or improve. 12 stated that they had no opinion, while 48 shared a variety of recommendations to raise the quality of online education. All recommendations brought by the participants were analyzed and abridged around themes, codes and frequencies as seen in Table 6.

Table 6.

Participants' recommendations for increasing the quality of online education

Theme	Frequency	Code	Frequency
Infrastructure	4	Access	4
Instructional materials	6	Instructional materials	2
		Equipment	4
Educator	2	Educator	2
Interaction	3	Interaction with participants	3
Planning	33	Timing	4
		Periodical (education and training)	11
		Duration	4
		Number of course	2
		Number of participant	3
		Scope of education and training	6
		Assignment	3

As a result of the analysis, infrastructure problems were pointed out by 4 participants arguing that these problems should be eliminated for more comfortable access to online education. In this scope, 4 participants referred to problems faced in access to the Internet and computer technologies as a prerequisite for online training. In this regard, K14, explained their opinion as follows: "System disconnection, electric cut-outs, and Internet disconnection, known as the biggest shortcoming of distance education, should be overcome." K62 also touched on the same by saying, "Some of the participants had problems with the camera and microphone. For this reason, the same people often answered the questions." Under the theme of infrastructure, 3 participants stated that the physical environment of the training could be improved. In this regard, K48 expressed their view as following: "The education environment could be better."

Another theme identified is about the content of the training. 6 participants suggested enriching the instructional materials used in the training process. In addition to those recommending more frequent use of animations and presentations, some participants emphasized that the number of equipment in the training environment should be increased. As an example, K122 wrote, "Lessons should be supported more with animations." K38 had the following opinion: "It would be more effective if every participant had the same material about the education subject. For example, it may be more beneficial for everyone to have the main board or feed card that is being talked about." As another theme, the performance of the educators was criticized by 2 participants. For example, K37 wrote, "The teachers can be more dynamic and livelier." Also, interaction appeared as a theme. Under this theme, 3 participants gave priority to the need to increase interaction with participants. One of them, K73, wrote the following: "It would be more efficient if the participants attended the training with more images and sounds."

The last theme elicited from the analysis is about the planning of the event held online. 4 participants made suggestions about timing of the lessons since they found it challenging to attend the lessons during working hours. One of the participants, K73 wrote, "It would be better if it were not during work. Work and class at one time were tough." K83 expressed a similar opinion as "I think it might be better at the weekend or in the evening." As a new sub-idea, it was demanded to continue or replicate the training or run it more often by 11 participants. For instance, the training could be made more efficient if it were "frequent", "continuous", or "replicated" from the point of view of the participants K59, K84, and K98, respectively. 4 other participants addressed the duration of lessons. 2 participants proposed shortening the lessons, and 2 others suggested extending the duration of the training. 2 participants also suggested increasing the number of lessons. K55's opinion on this issue is as follows: "I think it can be done by shortening the duration of lessons and adding more lessons because there is a distraction after a while. We can't fully concentrate because we get bored at the computer."

3 participants had suggestions about the number of participants in the classes. For example, K120 wrote, "If the number of participants does not exceed 10, our educator will follow the participants and see whether they have mastered the subjects or not with more ease." Apart from that, 5 participants referred to the scope of the training. K90 expressed their wish for more persistent use of question-answer technique for every subject by stating, "There may be 5-10 instead of 1 question and answer at the end of each subject." 5 other participants thought that more space should be allocated to applied training. Lastly, 3 participants recommended giving of an applied assignment after each subject or course for better quality of training. K52 wrote, "Applied homework would be more lasting in memory if it were done right after the relevant lesson."

4. DISCUSSION

This study examined the judgment of participants about a vocational training activity structured and implemented with the hybrid learning model. It can be said that overall findings revealed positive views of the participants on the matter in question. The majority of the respondents think that the training activity is efficient. Xu et al. (2021) argue that even though there are currently some flaws and deficiencies in the

creation of high-quality open online courses in the context of vocational education, new modes of teaching such as hybrid teaching will be established as the new normal in future education. In a similar vein, Belaya (2018) suggests that the hybrid model, which incorporates online and face-to-face training, can be used to minimize the risks involved in using e-learning in vocational training. She adds that a combination of the two distinct learning modes can reduce the disadvantages, allowing the best possible use of the existing potentials and opportunities of both. However, the findings of this study imply that well-planned online vocational training, as well as the hybrid learning model, can yield desirable results. While the majority of the participants believe that face-to-face education can be replaced by the online setting, a significant proportion of them believe that face-to-face education is indispensable.

In relation with the roles of the educators and participants in the online course, almost all of the participants think that the educators assumed the role of instructor competently in online lessons. Particular attention was drawn to certain acts of the educators like lecturing, facilitating and asking/answering questions. As regards the participants' roles and responsibilities, the list contained the items of assignment, answering questions, facilitating, exams, and written communication. The respondents talked about in-class tasks such as giving lectures, demonstrating in practice or acting out during the lessons. Based on the findings, the roles and responsibilities of the instructors and the students seem similar in this study. It can be inferred that the role of the instructor can be undertaken by the student in the online environment. This finding is consistent with the literature. In a study by DeNoyelles, Mannheimer Zydney, and Chen (2014), the students stated that they could participate more easily when interactions in the online environment were managed by an equal member of the class rather than the instructor perceived as an authority. Mbati and Minnaar (2015), in their study drawing attention to the importance of facilitators' planning activities and interactions taking into account pedagogy in the online environment, acknowledged that this also means a shift in the facilitator-student ratio. According to Yeh (2010), facilitators fulfill responsibilities such as giving suggestions on creating quality work, assigning tasks to group members and asking for opinions, and scheduling discussions. It is worth noting that the participants made particular reference to educator and peer facilitation techniques. More specifically, peers' facilitating role of active participation and ensuring access to positive learning outcomes was hinted. Thomas and Thorpe (2019) listed the benefits of peer facilitation such as active participation, supporting the role of active knowledge producer, encouraging thinking and questioning, creating a more meaningful and qualified discussion environment, and increased motivation.

It was found that instructional materials such as equipment, videos, presentations, animations, images and documents were used in the online training. Among others, equipment constituted the most frequently pronounced resource. Mbati and Minnaar (2015) stressed the importance of educators' planning real-life problems in the online environment. Wannapiroon et al. (2022) listed design and management of online learning resources such as educational media and videos among other competences required of vocational educators in online teaching.

In the online learning environment in this study, the participants generally communicated effectively with the educators and other participants. It is clear that those interactions did not end in or outside the online classes. In addition to the interactions carried out through the learning management system used by the controlling company, groups were formed on other platforms. Also, virtual groups were created by the educators for the effective management of the learning process besides purposes such as asking questions and receiving and lending support. According to Abou-Khalil et al. (2021), student-teacher interaction encourages or maintains students' interest in the content, motivation to learn, and self-management, whereas student-student interaction is preferable for cognitive purposes and motivational support. Throughout online learning processes, students can be motivated by extending support in social contexts by means of channels such as discussion forums, blogs and wikis to facilitate learning (Mbati and Minnaar 2015). Moore (1989) mentioned three types of interactions in the online learning environment: learner-content interaction, learner-educator interaction and learner-learner interaction. Bernard et al. (2009) state that deep and meaningful learning will be supported while offering the other two at a minimal level or

eliminating them without compromising the educational experience as long as one of the three forms of interaction is at a high level. The participants in this study appreciate the effect of the interaction with the educator, instructional materials, and other participants on their learning in the online environment. Particularly, they recognized the exchange of ideas around the subject that was taught at any time. Jiang (2017) posits that promoting student-student interaction in the online environment will be beneficial. By the same token, Covelli (2017) emphasizes the necessity of collaborative and student-centered interaction in the online learning environment if it is aimed to promote learning.

For the ultimate aim of making the training more efficient, the participants proposed fixing infrastructure or access problems, providing instructional material or equipment support, boosting online interaction. They also brought recommendations concerning the planning stage of the training event. It is noticeable that these recommendations reflect the individual preferences of the respective respondents. Therefore, it can be said that increasing flexibility in planning online vocational training activities is likely to lead to good results. Quesada-Pallarès et al. (2019) defend that practitioners should understand the characteristics of their students and the strategies that ensure their participation throughout the course at the onset of a vocational training program.

5. CONCLUSION

The analysis of learners' opinions on vocational education and training in the online environment in Turkey shows that despite the applied nature of vocational education and training, online education has started to consolidate its position as in all other types and levels of educational activities. The present study strengthens the previous research reporting the impact of online education on vocational education and training. Despite all these findings, it is still being contended that online education is not applicable to vocational education and training since vocational training basically relates to hands-on activities. Furthermore, past research states that online education activities should be supported with face-to-face education, and it is recommended to employ the hybrid model. Nevertheless, it seems that well-structured online education activities can move vocational education and training activities to the online setting. To sum up, there is consensus that an online vocational education and training event structured successfully in terms of teacher, student, infrastructure and instructional materials is likely to be successful.

According to this study, planning is the major aspect of online training for higher-quality vocational education and training. It was observed that the participants preferred alternative scheduling of the training around their individual preferences. Hence, it can be concluded that flexibility should be ignored in planning of educational activities. These findings are limited to the views of a study group that carried out vocational education and training activities in the online learning environment within the framework of the hybrid model during the pandemic period; thus, they cannot be generalized to other contexts. Further research is needed on the subject. In particular, it is recommended to conduct qualitative studies that examine in depth the obstacles before the transfer of vocational education and training activities to the online environment along with solution proposals.

References

Abou-Khalil, V., S. Helou, E. Khalifé, M. A. Chen, R. Majumdar, and H. Ogata. (2021). Emergency Online Learning in Low-Resource Settings: Effective Student Engagement Strategies. *Education Sciences, 11* (1): 24. https://doi.org/10.3390/educsci11010024

Allan, G. (2020). *Qualitative Research in Handbook for Research Students in the Social Sciences,* Abingdon: Routledge.

Arifin, Z., M. Nurtanto, A. Priatna, N. Kholifah, and M. Fawaid. (2020). Technology Andragogy Work Content Knowledge Model as a New Framework in Vocational Education: Revised Technology Pedagogy Content Knowledge Model. *Online Submission, 9* (2): 786-791.

Arnesen, K. T., J. Hveem, C. R. Short, R. E. West, and M. K. Barbour. (2019). K-12 Online Learning Journal Articles: Trends from Two Decades of Scholarship. *Distance Education, 40* (1): 32-53. https://doi.org/10.1080/01587919.2018.1553566

Bahadır, F. (2020). Raylı Sistemler Programı Öğrencilerinin e-Öğrenmeye Hazırbulunuşluklarının İncelenmesi: Refahiye Meslek Yüksekokulu Örneği. *Yükseköğretim ve Bilim Dergisi, 2*, 310-317.

Belaya, V. (2018). The Use of e-Learning in Vocational Education and Training (VET): Systematization of Existing Theoretical Approaches. *Journal of Education and Learning, 7* (5): 92-101.

Bernard, R.M., P. C. Abrami, E. Borokhovski, C. A. Wade, R. M. Tamim, M. A. Surkes, and E. C. A. Bethel. (2009). Meta-Analysis of Three Types of Interaction Treatments in Distance Education. *Rev. Educ. Res., 79* (3): 1243–1289. https://doi.org/10.3102/00346543093333844

Bozkurt, A. (2020). Images and Perceptions of Primary School Students towards Distance Education During Coronavirus (Covid-19) Pandemic: A Metaphor Analysis. *Uşak Üniversitesi Eğitim Araştırmaları Dergisi, 6* (2): 1-23. https://doi.org/10.29065/usakead.777652

Bülbül, A. H., U. Tuğtekin, U. İliç, A. Kuzu, and F. Odabaşı. (2016). Çevrimiçi Ortamlarda Araştırma Toplulukları: Öğretim Üyeleri İçin Bir Yol Haritası. *Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi, 17* (2): 171-190.

Büyüköztürk, Ş., E. Kılıç-Çakmak, Ö. Akgün, Ş. Karadeniz, and F. Demirel. (2016). *Bilimsel Araştırma Yöntemleri. Ankara*: Pegem Akademi.

Covelli, B. J. (2017). Online Discussion Boards: The Practice of Building Community for Adult Learners. *The Journal of Continuing Higher Education, 65* (2): 139-145. https://doi.org/10.1080/07377363.2017.1274616

Cox, D., and S. Prestridge. (2020). Understanding Fully Online Teaching in Vocational Education. *Research and Practice in Technology Enhanced Learning, 15* (1): 1-22. https://doi.org/10.1186/s41039-020-00138-4

DeNoyelles, A., J. Mannheimer Zydney, and B. Chen. (2014). Strategies for Creating A Community of Inquiry Through Online Asynchronous Discussions. *Journal of Online Learning & Teaching, 10* (1): 153-165.

Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems, 49* (1): 5–22. https://doi.org/10.1177/0047239520934018.

Edy, D. L. (2020). Revisiting the impact of project-based learning on online learning in vocational education: analysis of learning in pandemic Covid-19. *In 2020 4th International Conference on Vocational Education and Training*, Malang, September 378-381. https://doi.org/10.1109/ICOVET50258.2020.9230137

Geçer, A. K., and A. D. Topal. (2015). "Development of Satısfactıon Scale for e-Course: Reliability and Validity Study/ e-Derslere Yönelik Memnuniyet Ölçeğinin Geliştirilmesi: Geçerlik ve Güvenirlik Çalışması. *Eğitimde Kuram ve Uygulama, 11* (4): 1272-1287.

Gülbahar, Y. (2012). Study of Developing Scales for Assessment of the Levels of Readiness and Satisfaction of Participants in e-Learning Environments. *Ankara University Journal of Faculty of Educational Sciences (JFES), 45* (2): 119-138. https://doi.org/10.1501/Egifak_0000001256

Huei-Chuan, W., and C. Chien. (2020). Online Learning Performance and Satisfaction: Do Perceptions and Readiness Matter? *Distance Education, 41* (1): 48-69, https://doi.org/10.1080/01587919.2020.1724768

Jiang, W. (2017). Interdependence of Roles, Role Rotation, and Sense of Community in An Online Course. *Distance Education, 38* (1): 84-105. https://doi.org/10.1080/01587919.2017.1299564

Mbati, L., and A. Minnaar. (2015). Guidelines Towards the Facilitation of Interactive Online Learning Programmes in Higher Education. *International Review of Research in Open and Distributed Learning, 16* (2): 272-287.

Miles, M. B., and A. M. Huberman. (1994). Qualitative Data Analysis: An Expanded Sourcebook. Sage.

Moore, M. G. (1989). *Three Types of Interaction.* Taylor & Francis: Oxfordshire, UK.

Ng, R. Y. K., K. K. Ng, R. Y. S. Lam, and L. K. Lee. (2021). A Study of Vocational and Professional Education and Training (VPET) Students' Online Learning Experience during the Outbreak of Pandemic. *In 2021 International Symposium on Educational Technology (ISET)*, Tokai, Nagoya, August, 89-95. https://doi.org/10.1109/ISET52350.2021.00028

Omar, M. K., D. M. Jie, M. H. M. Puad, and N. Ismail. (2022). Critical Competency Attributes of Technical and Vocational Education and Training (TVET) Postgraduate Students in Online Learning Environment. *International Journal of Academic Research in Progressive Education and Development, 11* (1): 428-447. https://doi.org/10.6007/IJARPED/v11-i1/12124

Paton, R. M., A. E. Fluck, and J. D. Scanlan. (2018). Engagement and retention in vet moocs and online courses: a systematic review of literature from 2013 to 2017. *Computers & Education, 125*, 191-201. https://doi.org/10.1016/j.compedu.2018.06.013

Quesada-Pallarès, C., A. Sánchez-Martí, A. Ciraso-Calí, and P. Pineda-Herrero. (2019). Online vs. classroom learning: examining motivational and self-regulated learning strategies among vocational education and training students. *Frontiers in Psychology, 10*, 2795.

Rabiman, R., M. Nurtanto, and N. Kholifah. (2020). Design and development e-learning system by learning management system (lms) in vocational education. *Online Submission, 9* (1): 1059-1063.

Sergeieva, L. M., T. I. Stoichyk, O. V. Tarasova, T. S. Sulyma, and I. V. Tarasiuk. (2021). Development of the modern educational environment of the ınstitution of professional (vocational-technical) education in the digital space. *Linguistics and Culture Review, 5* (3): 459-475. https://doi.org/10.37028/lingcure.v5nS3.1554

Syauqi, K., S. Munadi, and M. B. Triyono. (2020). Students' perceptions toward vocational education on online learning during the covıd-19 pandemic. *International Journal of Evaluation and Research in Education, 9* (4): 881-886. https://doi.org/10.11591/ijere.v9i4.20766

Şenocak, D. (2020). Açık ve uzaktan öğrenme ortamlarında yapay zekâ: sunduğu fırsatlar ve yarattığı endişeler. *AUAd, 6* (3): 56-78.

Thomas, G., and S. Thorpe. (2019). Enhancing the Facilitation of Online Groups in Higher Education: A Review of the Literature on Face-To-Face and Online Group-Facilitation. *Interactive Learning Environments, 27* (1): 62-71. https://doi.org/10.1080/10494820.2018.1451897

Uçar, C., and M. A. Özerbaş. 2013. Mesleki ve teknik eğitimin Dünyadaki ve Türkiye'deki konumu. *Eğitim ve Öğretim Araştırmaları Dergisi, 2* (2): 242-253.

Wannapiroon, P., P. Nilsook, J. Jitsupa, and S. Chaiyarak. (2022). Digital competences of vocational ınstructors with synchronous online learning in next normal education. *International Journal of Instruction, 15* (1): 293-310. https://doi.org/10.29333/iji.2022.15117a

Xu, W., X. Cui, P. Hu, and T. Cheng. (2021). Practice and research on the construction of online open high-quality medical laboratory courses in higher vocational colleges. *Education Reform and Development, 3* (1): 29-33. https://doi.org/10.26689/erd.v3i1.2617

Yıldırım, A. & Şimşek, H. (2013). *Sosyal bilimlerde nitel araştırma yöntemleri.* (9. Baskı). Ankara: SeçkinYayıncılık.

Yurdugül, H., and D. A. Sırakaya. (2013). Çevrimiçi öğrenme hazır bulunuşluluk ölçeği: geçerlik ve güvenirlik çalışması. *Eğitim ve Bilim, 38* (169): 391-406.

Yeh, Y. C. (2010). Analyzing online behaviors, roles, and learning communities via online discussions. *Educational Technology & Society, 13* (1): 140–151.

GENİŞLETİLMİŞ ÖZET

1. GİRİŞ

Bilgi ve iletişim teknolojilerindeki gelişim ile çevrimiçi öğrenme alternatif bir eğitim modeli olarak popüler olmuştur. Dünyaca ünlü çevrimiçi öğrenme platformlarının sayısı giderek artmaktadır. Eğitim kurumları, açık, hibrid ya da harmanlanmış metotlar ile sundukları program ve kursların sayısına her geçen gün bir yenisini daha eklemektedir. Çevrimiçi öğrenme ağırlıklı olarak üniversite ve sonrası eğitimle meşguldür. K-12 düzeyinde, çevrimiçi öğrenmenin dar ama büyüyen bir alan olduğu bilinmektedir (Arnesen, Hveem, Short, West ve Barbour, 2019). Mesleki eğitim ve öğretim için de durum benzerdir (Paton, Fluck ve Scanlan, 2018; Ng, Ng, Lam ve Lee, 2021). Mesleki eğitim ve öğretimin uygulamalı doğasına işaret eden Ng ve arkadaşları (2021), güncel teknolojilerle simüle edilmiş etkinliklerin kavram ve teori düzeyinde eğitim için uygun olduğunu ancak vidaları, özel ekipmanı ve diğer şeyleri açmak için kuvvet kullanmaya gerek olmadığını yani gerçek uygulamalar için çevrimiçi öğrenmenin ideal olmadığının düşünüldüğünü bildirmiştir. Omar, Jie, Puad ve Ismail (2022), mesleki eğitim ve öğretimde çevrimiçi öğrenme için büyük bir potansiyel olmasına rağmen, uygulamada büyük bir gevşeklik olduğunu bildirmiş, paydaşların bir araya gelerek çevrimiçi öğrenmeyi mesleki eğitim ve öğretime dâhil etmek için ortak bir gündem için çalışılması gerektiğinin altını çizmiştir.

Cox ve Prestridge (2020)' ya göre mesleki eğitim ve öğretimde çevrimiçi eğitimin nasıl genişleyeceği ve etkili öğrenci merkezli uygulamaların kapsamının nasıl olması gerektiği konusu araştırılmaya değerdir. Syauqi, Munadi, Triyono, (2020), hem öğretmenler hem de kurumlar için dikkatli bir hazırlık süreci ve gelişimin döngüsel olarak değerlendirilmesinin önemini vurgulanmaktadır. Bu çalışma, buradan hareketle yapılandırılmıştır. Türkiye'de korona salgını sürecinde eğitim öğretim faaliyetleri çevrimiçi ortama taşıyan bir kurumun çalışanlarının, mesleki yeterliliklerini geliştirmek için hibrit öğrenme modeline göre çevrimiçi ortamda aldıkları eğitim öğretim faaliyetlerini nasıl değerlendirdiklerini ortaya koymak hedeflenmiştir. Bu kapsamda ele alınan araştırma soruları şöyledir:

1. Çevrimiçi ortamdaki öğretim süreci hakkındaki katılımcı görüşleri nasıldır?
2. Çevrimiçi ortamda sunulan öğretim materyalleri hakkındaki katılımcı görüşleri nasıldır?
3. Çevrimiçi ortamdaki etkileşim süreci hakkındaki katılımcı görüşleri nasıldır?
4. Çevrimiçi ortamda sunulan eğitimin verimliliği hakkındaki katılımcı görüşleri nasıldır?
5. Çevrimiçi ortamda nitelikli mesleki eğitim ve öğretim için katılımcıların önerileri nelerdir?

YÖNTEM

Çalışma, tarama modeline göre tasarlanmıştır. "Tarama araştırması, çok sayıda katılımcının görüşlerinin ya da özelliklerinin belirlenmeye çalışıldığı araştırmalardır. Amaç, araştırma konusu ile ilgili var olan durumun fotoğrafını çekerek bir betimleme yapmaktır" (Büyüköztürk, Kılıç Çakmak, Akgün, Karadeniz & Demirel, 2020). Araştırmanın katılımcıları Türkiye ve Dünyanın birçok ülkesinde faaliyet gösteren bir teknoloji şirketinin yetkili servis organizasyonunda çalışan teknisyen ve müşteri temsilcilerinden, kurum tarafından sunulan çevrimiçi eğitimi tamamlamış olan 122 çalışandır. Katılımcılardan 80 kişi daha önce herhangi bir çevrimiçi eğitim almamışken 42 kişi çevrimiçi eğitim deneyimine sahiptir. 103'ü erkek ve 19'u kadındır.

Araştırmacılar tarafından açık uçlu sorulardan oluşan bir anket formu hazırlanmıştır. Sorular alan yazın incelemeleri gerçekleştirilerek ortaya konulmuştur (Gülbahar, 2012; Yurdugül ve Sırakaya, 2013; Geçer ve Topal, 2015; Bülbül, Tuğtekin, Ulaş, Kuzu ve Odabaşı, 2016; Huei-Chuan Wei ve Chien Chou, 2020). Çevrimiçi öğrenme konusunda lisans ve lisansüstü düzeyde eğitimler veren bir alan uzmanının görüşleri doğrultusunda son şekli verilmiştir. Araç, çevrimiçi ortamda katılımcıların görüşüne sunulmuştur. Edilen veriler, içerik analizi yoluyla incelenmiştir. Veriler okunmuş ve içeriğin tüm yönlerini açıklamak için "ortak tabirler, kelimeler ve ifadeler" çıkarılmıştır. Daha sonra kategoriler oluşturulmuş, benzer veya ilgili veriler

bir araya getirilmiş ve belirli bir gruba ait olarak sınıflandırılmıştır (Allan, 2020). Güvenilirlik, iki farklı araştırmacı tarafından kodlama ve frekansların çıkarılması yoluyla elde edilmiştir.

3. BULGULAR, TARTIŞMA ve SONUÇ

Bu çalışmada, mesleki eğitime yönelik hibrit öğrenme modeline dayalı planlanan bir eğitim etkinliğinin öğrenenler tarafından nasıl değerlendirildiği üzerine bir inceleme yapılmıştır. Katılımcıların görüşleri üzerine kurgulanan çalışmada elde edilen bulgular olumlu sonuçlara işaret etmiştir. Katılımcıların ağırlıklı bir oranı çevrimiçi eğitimin verimli olduğunu ve yüz yüze gerçekleştirilen eğitim etkinliklerinin çevrimiçi ortama taşınabileceğine inanırken önemli bir oranı da yüz yüze eğitimin olmazsa olmaz olduğuna inanmaktadır.

Çevrimiçi derslerde eğitmen ve katılımcı rollerine ilişkin katılımcıların görüşleri incelenmiştir. Katılımcıların tamamına yakını çevrimiçi derslerde eğitimci rolünü uygun şekilde yerine getirdiğini düşünmektedir. Özellikle eğitimcilerin konu anlatımı, kolaylaştırma ve soru sorma/yanıtlama rolüne dikkat çekilmiştir. Katılımcıların üstlendikleri rol ve sorumluluklar ise ödev, soru cevaplama, kolaylaştırma, sınav ve yazılı iletişim olarak ifade edilmiştir. Katılımcılar, ders esnasında konu anlatma, uygulama ya da canlandırma yapma gibi ödevlerden bahsetmiştir. Bulgular eğitmen ve öğrenci rol ve sorumluluklarının benzerlik gösterdiğini ortaya koymaktadır. Çevrimiçi ortamda eğitmen rolünün öğrenci rolüne dönüşebileceğini göstermektedir. Bu bulgu alan yazın ile uyumludur. DeNoyelles, Mannheimer Zydney, & Chen, (2014)'e göre, çevrimiçi ortamdaki etkileşimler otorite olarak algılanan eğitmen yerine sınıfın eşit bir üyesi tarafından yönetildiğinde öğrenciler daha rahat katılabileceklerini bildirmiştir. Çevrimiçi ortamda kolaylaştırıcıların, pedagojiyi dikkate alan etkinlikler ve etkileşimler planlamalarının önemine dikkat çeken Mbati & Minnaar, (2015), bunun aynı zamanda kolaylaştırıcı-öğrenci oranında bir kayma anlamına geldiğinin de altını çizmiştir.

Çevrimiçi derslerde gerçek araç-gereç, video, sunu, animasyon, görsel ve doküman gibi kaynakların kullanıldığı belirlenmiştir. Gerçek materyallerin kullanıldığı ve katılımcılar tarafından en sık tekrarlanan kaynak olduğu görülmektedir. Mbati & Minnaar, (2015), çevrimiçi ortamda eğitimcilerin gerçek yaşam sorunları planlamalarının önemine dikkat çekmiştir. Wannapiroon, Nilsook, Jitsupa, & Chaiyarak, (2022), eğitici medya ve videolar gibi çevrimiçi öğrenme kaynaklarının geliştirilmesini ve yönetimini meslek eğitimcilerinin çevrimiçi öğretimde gerekli yetkinlikleri arasında sıralamıştır.

Çevrimiçi öğrenme ortamında katılımcılar diğer katılımcı ve eğitmenleriyle genel olarak etkili iletişim kurduklarını bildirmişlerdir. Çevrimiçi derslerde ve ders dışında bu etkileşimlerin sürdüğü görülmektedir. Kurum tarafından kullanılan öğrenme yönetim sistemi üzerinden gerçekleştirilen etkileşimlerin yanı sıra farklı platformlar üzerinden gruplar oluşturulduğu görülmektedir. Soru sorma, destek alma ya da sağlama gibi amaçların yanında eğitimci tarafından öğrenme sürecinin etkili yönetilmesi için sanal grupların oluşturulduğu görülmüştür. Abou-Khalil, Helou, Khalifé, Chen, Majumdar & Ogata (2021)' e göre, öğrenci-öğrenci etkileşimi, bilişsel amaçlar ve motivasyon desteği için arzu edilirken öğrenci-öğretmen etkileşimi, öğrencilerin içeriğe, öğrenme motivasyonuna ve öz-yönetime olan ilgisini teşvik etmeyi veya sürdürmeyi amaçlar. Çevrimiçi öğrenme süreçleri boyunca, öğrenmeyi kolaylaştırmak için tartışma forumlarını, blogları ve wiki gibi araçlarla öğrencilerin sosyal bağlamlarda destek alarak süreç boyunca motive edilmeleri sağlanabilir (Mbati & Minnaar, 2015).

Eğitimin verimliliğinin artırılmasına yönelik katılımcılar, altyapı ya da erişim sorunlarının iyileştirilmesi, içerik ya da ekipman desteğinin sağlanması, çevrimiçi etkileşimin artırılması gibi öneriler sunmuşlardır. Bunun yanında eğitim etkinliğinin planlama sürecine yönelik öneriler sunulmuştur ve genel olarak bu öneriler katılımcıların bireysel tercihlerini yansıtmaktadır. Dolayısıyla çevrimiçi mesleki eğitim etkinlikleri planlanırken esnekliğin artırılmasının olumlu sonuçları destekleyeceği söylenebilir. Quesada-Pallarès, Sánchez-Martí, Ciraso-Calí, ve Pineda-Herrero, (2019), uygulayıcıların mesleki eğitim programlarına

başlarken öğrencilerinin özelliklerini ve kurs boyunca katılımlarını sağlayan stratejileri iyi anlamaları gerektiğini ifade etmiştir.

Tüm bu bulgular, pandemi döneminde mesleki eğitim ve öğretim faaliyetlerini çevrimiçi öğrenme ortamında, hibrit modele dayalı olarak yürütmüş bir katılımcı grubun görüşleri ile sınırlıdır ve diğer bağlamlara genellenemez. Konuyla ilgili daha fazla araştırmaya ihtiyaç vardır. Özelikle mesleki eğitim ve öğretim faaliyetlerinin çevrimiçi ortama taşınmasının önünde duran engelleri ve çözüm önerilerini derinlemesine irdeleyen nitel çalışmaların yapılması önerilir.

ETHICAL PERMISSION TO RESEARCH

In this study, all rules stated to be followed within the scope of the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were observed. None of the actions specified under the title of "Actions Violating Scientific Research and Publication Ethics," which is the second part of the directive, have not been carried out.

Ethics Committee Approval Information Ethical committee: Trabzon University ethic committee

Data of ethical approval: 13.05.2022

Number of ethical approvals: 2022-5/1.133

CONTRIBUTION OF RESEARCHERS

Author 1: Research design, data analysis, validity and reliability studies, reporting. The contribution rate is 40%.

Author 2: Research design, implementation, reporting. The contribution rate is 30%.

Author 3: Data analysis, validity and reliability studies. The contribution rate is 30%.

CONFLICT OF INTEREST

No potential conflict of interest was reported by the author(s). No funding support was received in this study.