30-Fostering formal education by online education

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Abstract

Recently, education has transversed the unknown terrain of a quarantine imposed by the COVID-19 (popularly known as coronavirus), which has left over 850 million students around the world studying at home according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2020. This situation has stopped the formal education system and brought distance education and online education to the agenda. The objective of this study is to address the situation the education is in. A qualitative and descriptive study was conducted for in-depth and further probing and questioning of respondents based on their responses to the versus formal education halting due to Corona Virus, where researcher also tries to understand the problem and highlighting solutions in case of stopping education. From the results of the study, to achieve the ideal learning objectives, it is also necessary to have a sufficiently trained teaching staff in the methodological plane of online teaching, including the use of technical resources. At his point, using virtual online systems in education makes it necessary for both students and teachers to take new positions and acquire new roles in education. In the study, it is pointed out that teachers and students should fully plan lessons with integrated technological resources to support the digital transformation process by adopting predominantly technology-based teaching models and systems. By the new virtual classrooms, teachers create an environment where students can freely interact with one another and their education will continue without disruption.

Keywords: COVID-19, online education, formal education

Çevrim içi eğitimle örgün eğitimi destekleme

Öz

Son aylarda, COVID-19 (Corona Virüs) sebebiyle UNESCO(2020)'nun belirtiğine göre 850 milyondan fazla örgün eğitimde öğrenciyi etkilemiştir. Bu salgın sadece şu anki eğitimi değil aynı zamanda toplumun pek çok kesimini de etkilemiştir. Bu durum örgün eğitim sistemini durdurmuş, uzaktan eğitim ve çevrimiçi eğitimi gündeme getirmiştir. Bu çalışmanın amacı eğitimin içinde bulunduğu durumu ele almaktır. Eğitimde ve özellikle dil eğitiminde çözüm aramak eğitim camiasına dijital dönüşümde faydalı çözümleri vurgulamak ve bu virüs (COVID-19) sebebiyle durmuş olan örgün eğitim çevrim içi eğitimle nasıl ve hangi programlar la destekleneceği ele alınacaktır. Çevrimiçi eğitim ve dijital dönüşüm örgün eğitime önemli destek sağlayacağı çalışmada belirtilmiştir. Bu bağlamda uzaktan eğitim, sanal sınıflar vb. konular ele alınmıştır. Araştırmacılar sorunu anlamaya çalıştığı ve Corona Virüs nedeniyle örgün eğitimin eksikliğini doldurmada neler yapılabileceği konusu derinlemesine ve daha fazla araştırılması için nitel ve tanımlayıcı bir çalışma yürütülmüştür. Çalışma için, çevrimiçi ortamda sistematik bilgi ve uygulamaların toplanması için

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gözlem süreci kullanılmıştır. Çalışmanın sonuçlarından, ideal öğrenme hedeflerine ulaşmak için, teknik kaynakların kullanımı da dahil olmak üzere çevrimiçi öğretimin metodolojik düzleminde yeterince eğitimli bir öğretim kadrosuna sahip olmak da gereklidir. Bu süreçte, eğitimde sanal çevrimiçi sistemleri kullanmak, hem öğrencilerin hem de öğretmenlerin eğitimde yeni pozisyonlar almasını ve yeni roller almasını gerekli kılıyor. Çalışmada, ağırlıklı olarak teknolojiye bağlı öğretim modellerini ve sistemlerini benimseyerek dijital dönüşüm sürecini desteklemek, öğretmenlerin ve öğrencilerin entegre teknolojik kaynaklarla dersleri tamamen planlaması gerektiği işaret edilmektedir. Yeni sanal sınıflar ile öğretmenler, öğrencilerin birbirleriyle özgürce etkileşime girdiklerinde eğitimleri kesintisiz devam edecek ve yeni durumlarda eğitimin aksaması ortadan kaldırılmış olacaktır.

Anahtar kelimeler: COVID-19, çevrim içi eğitim, örgün eğitim

Introduction

Recently, education has transversed the unknown terrain of a quarantine imposed by the COVID-19 (popularly known as coronavirus), which has left over 850 million students around the world studying at home according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO, 2020). This pandemic crisis has completely disrupted society, not only because of what it means for education, but because it is necessary to think about the measures and changes needed afterwards. The quarantine suffered by schools shows the deficiencies of the traditional educational system, despite the large amount of available resources and the goodwill of teachers and students (Han, 2020). Thus, "school systems' decision to suspend classes and teach students online because of the coronavirus pandemic will accelerate the e-learning revolution around the world, which was already under way" (Oppenheimer, 2020, p. 1). Therefore, the following lines will discuss how, because of the COVID-19 crisis, traditional education could change forever through technology towards digital and online platforms, and whether this implies something negative or positive in the learning process.

1. Distance education

The objectives of distance language learning are realized through a range of highly diverse contexts and systems that stem from different underlying philosophies of distance education and language instruction. The majority of language learning contexts have been conducted through independent learning situations, generally with the use of print, audio, video and broadcast media. Other contexts of language learning are group-based, and frequently use satellite transmission for audio and video conferencing. Some emerging contexts of language learning offer the possibility of a new model that allows for communication, interaction, and collaboration among participants. Two key dimensions where distance language learning opportunities vary are place and time. These dimensions exist as group verses individual opportunities, and as synchronous verses asynchronous opportunities, respectively. There are numerous dimensions of distance education in existence, and altogether they reflect the varying structural considerations that can be found in different forms of distance language learning. As we have seen the important shifts in distance language learning options and opportunities over the last two decades have been increasing from the points of teaching elements and media that are available to course organizers. Technologies give and support the opportunities.

Distance education is defined as the other concepts such as open learning, open teaching, distance learning, distance teaching, correspondence education, independent study, home study, wallness

education, non-traditional education, external study, external learning, flexible education, flexible learning, life-long education, individualized learning, resource-based learning, self-access learning, self-study, supported self-study or continuous education by different authors.

Distance education is described in detail in the Keegan's book (1990:28-29) *The Foundations of Distance Education*. Keegan states that 'distance education' is a generic term that includes the range of teaching/learning strategies. It is referred to as independent study at higher educational in the United States; as distance teaching or teaching at a distance in the United Kingdom; as external studies in Australia; Fernstudium/Fernunterricht in German; as Teleenseignement in France. At its most basic level, distance education is defined as training activities that are delivered via any electronic media. It takes place when a teacher and learners are separated by physical distance, technology, often it concerns with face-to-face communication is used to form a bridge across the instructional gab. The most important points of distance education are the separation of teacher and learner in space and /or time (Perraton, 1988), and unconnected communication between student and teacher, mediated by print and some form of technology. Garrison and Shale (1987) offered three criteria they regarded as essential for characterizing the distance education process. They are as follows:

1. Distance education shows that the majority of educational communication between teacher and student(s) appears non-contiguous.

2. Distance education must occur as two-way communication between teacher and student(s) for the purpose of aiding and supporting the educational process.

3. Distance education utilizes technology to associate the necessary two-way communication process.

2. A brief history of distance education in the world

In the early 1990s, especially 1970s, distance education was employed instruction via radio. In the late 1970s, the trend changed and produced television series introduced students. The major difficulty of radio and broadcast television for training distance learning was the absence of a two-way communication between teacher and student. Technological developments particularly computers and internet in the late 1990s, opened the doors for new ways of training and instruction in distance learning. Distance learning with its various modes of applications has existed for many years. It started 1800s and early 1900s with corresponded courses. Radio and film were the most important applications to deliver distance learning. When learners could not join traditional classes, distance education was started in the late 19th century to enable learners to receive instruction. It is known as correspondence courses developed by Isaac Pitman. Pennsylvania State University was one of the first universities to employ distance learning by network in 1886.

Distance education, though has gained ground recently, is not a new concept. It is widely used in all over the world today, in countries such as The United States, Canada, Australia, Russia, India, most of African countries and in Europe. Baylor University in Texas opened a correspondence program in 1897 at about the same time as the state normal school at Willimantic, Connecticut, began a correspondence operation. University Correspondence College in Cambridge, 1887, established by Dr. W. Briggs Woolsey Hall College in Oxford, 1894 and Metropolitan college in London, 1910 which are provided correspondence tuition to the enrolled students. In other countries like Germany, Scandinavia, France and USA correspondence courses started in industrialized cities to help private students. In Wisconsin,

seven other universities founded correspondence programs between 1906 and 1910. The University of California at Berkeley opened a correspondence education program in 1913. This number steadily increased up to 1950. The University of London creates its External Program in 1958. It was the first university in the world to offer distance learning degrees – more than a century before the open universities were founded – through its External System established in 1858. Another pioneering institution was the University of South Africa, which has been offering Correspondence Education courses since 1946. The largest distance education university in the United Kingdom is the Open University founded 1969. In Germany the Fern Universidad in Hagen was founded 1974. Between 1883-1891; academic degrees were authorized by the State of New York through the Chautauqua School of Liberal Arts to students who completed the curriculum of the required summer school and correspondence courses. Correspondence education at the university level was soon established. On the European continent, the offering of courses through the mail was an established practice by 1856. Sherry (1996) indicated that correspondence courses in Europe were the accepted norm until middle of the century, when instructional radio and television became popular. Currently, the most popular media are computer-based communication including electronic mail (E-mail), internet, and telephone- based audio conferencing; videoconferencing with 1- or 2- way video and 2-way audio via broadcast, cable, telephone, fiber optics, satellite, microwave, closed-circuit or low power television. World Wide Web has become popular all over the world recently.

3. Online education – challenges and transition

The suspension of face-to-face classes in public and private schools, universities, and educational centers as a preventive measure against coronavirus leaves these institutions, teachers, and students facing an enormous challenge. The way that theCOVID-19 pandemic has hit hundreds of countries scared millions of parents and students alike (Han, 2020). Different governments saw with concern that if students continued to attend college or university, families would undertake a huge risk. Even so, the situation has left several openings to the educational system regarding virtual education.Now, when teachers sit in front of their students, they do it not in their usual classroom, but in front of a computer (Han, 2020). For them, as for the rest of the millions of students whose classes were abruptly interrupted in recent weeks due to COVID-19, education now depends on a digital environment that many had to get used to in a matter of days. But what technological tools and resources are available for teachers, students and families?

The transition level of experience form formal education towards online platforms of some educational institutions certainly facilitated their rapid adaptation. However, in general terms, this transition is not as simple as sitting down and making a videoconference, and the degree of preparation for an extraordinary situation as the one lived today due to COVID-19 and social distancing depends on many different factors (Seale, 2020). For example, how can a laboratory experiment be carried out, or how can manufacturing machinesbe used remotely (Shadat *et al.*, 2017). The main challenge is figuring out how to translate all of this into digital education, keeping in mind students without resources, with functional diversity, residing in geographic areas without coverage: it must be inclusive (Seale, 2020).

Even so, there are many technological tools -that leverage the internet and connectivity- that can help bridge these gaps, so that each person has the necessary tools to continue receiving quality education (Martin, 2020). Beyond the specific knowledge of the usual tools in digital education, there are two fundamental points: having the appropriate infrastructure, both in apps and platforms (Jitsi, Microsoft Teams, among others) and at a technical level (having powerful servers to endure the online

workload that is coming now; having the necessary bandwidth to connect) (Martin, 2020). Nevertheless, to achieve the ideallearning objectives, it is also necessary to have a sufficiently trained teaching staff in the methodological plane of online teaching, including the use of technical resources.

In order to develop a digital teaching, the first thing that is needed is a platform or virtual campus like Moodle, something that educational institutions normally already possess. The next thing is that teachers and professors know how it works and are in a position to use it. If they don't have it, any teacher can download Moodle to their computer for free and offer it to their students, as it is intuitive and the learning curve is very short; these type of resources can be assimilated in just one week (Rodriguez-Rodriguez *et al.,* 2019). If in doubt, the teacher can also turn to online communities for more answers. These resources serve not only to hold classes by videoconference (through tools such as MS Teams or Zoom), but also to organize classes and share many other materials such as videos, slides, activities, or presentations; interact live through chats or discussion forums; form working groups, and receive information about what the evaluation process will be like (Han, 2020). Classes can be saved and shared through Streams, for example, but the teacher can also record himself explaining a Power Point, so that the students can consult it afterwards.

4. Teaching language by digital transformation

One of the biggest challenges that arise in the COVID-19 crisis is keeping many students, until now oblivious to this type of teaching, not only attentive but also hooked on their own virtual learning process, while maintaining healthy routines at both academic as well as personal levels(Hamaniuk *et al.*, 2020). With a digital methodology, the objectives of the activities are more easily attained, and there is a better management of time of the student (Hockly, 2015). Likewise, with an internet connection, a foreign language class can be made in any part of the world, regardless of external situations such as the pandemic. Active e-learning methodologies are the most effective, because they give prominence to the student, who is doing things to be able to process the language contents (Jabeen and Thomas, 2015).

Aside from the online platforms previously mentioned, such as Zoom, Microsoft Teams, and Jitsi, another alternative for language learning can be apps such as Duolingo. Duolingo is a free language teaching platform that has become one of the most important platforms when it comes to learning a language (Munday, 2016). Its app has organically become the most popular form of online learning (it teaches English, German, French, and many more languages), and currently has millions of users (Munday, 2016). Foreign language education has had an important methodological evolution, which has evolved the learning and teaching mechanisms as well as the tools used for it.

5. Importance of digital transformation in education and technological opportunities

There has always been a need to take education from formal to digital, where virtual training would offer a great opportunity for development. COVID-19, then, served as a starting point. The speed of change required a quick response and to rethink how the system is guaranteed to ensure the quality of education. Therefore, all the institutions have responded with all their capacity to various needs in real time. If not, the pandemic will only deepen inequalities in students and their learning curve (Seale, 2020).

Well directed, digital education can be an improvement from traditional face-to-face learning(Hamaniuk *et al.*, 2020). Online platforms, the interaction through a microphone and a camera, and the responsibility of the student to do autonomous work in a way that they are not used to are a very valuable preparation for those who, in the near future, will work online, in the eWorking system that is increasingly taking place in many professional sectors of the world (Hamaniuk *et al.*, 2020). The possibilities that open up with digital transformation are many: not only can a teacher work with students on a live case study, approaching the solution together; it also allows all sessions to be recorded and available to the student, as long as it remains on the university's or school's servers(Hamaniuk *et al.*, 2020). Another of its advantages is the ability of these tools to integrate with each other.

Although traditional teacher-student lesson teaching has been functional so far, it is important to note that the technological revolution has set a precedent for new teaching practices (Hechinger and Lorin, 2020). The inclusion of 3D printing has been satisfactory in the educational sector, since in addition to encouraging students' capacity for innovation and creativity, it allows the creation of interactive teaching mechanisms (Fraumann *et al.*, 2015). The possibility of creating objects from a model built on a computer, makes the student awaken their creative spirit and begin to materialize scalable ideas, which can then become potential monetizable ideas, making education increasingly dynamic. The 3D printer is a powerful tool that is reinventing learning environments by motivating students to learn. This tool is capable of building basic parts, greatly reducing investment costs and creation time, giving way to a new revolution in teaching and industry (Fraumann *et al.*, 2015).

The IoT (Internet of Things) refers to the integration of everyday objects, such as a coffee maker, a car, or even buildings, to a system connected to the Internet that allows the automation of processes through information collected by sensors (Pervez *et al.*, 2018). Although the IoT will have many applications in the near future, the education transformation will be immense, allowing better adoption of knowledge by the largest number of people and giving institutions more tools to manage it. Thanks to the IoT and adaptive learning, student administration will be an automated process that will make it possible to know students better, reducing administrative costs, and organize resources. Similarly, forecasts indicate that Blockchain technology will directly affect the management of many internal processes, allowing in an easy way an automated management of grades and exams, in addition to avoiding any type of fraud, such as plagiarism or changing grades (Chen *et al.*, 2018).

6. Virtual classrooms

The following are some of the tools that can be counted on to flexibilize the transformation from traditional to online education that is taking place around the world, in the wake of the coronavirus pandemic (Hamaniuk *et al.*, 2020). The teaching options to be found in the virtual world are very wide, and there also are other free and paid options to improve learning environments. These online platforms have many possibilities for foreign language learning, as the can be leveraged anytime and anywhere in the planet, needing only an internet connection, despite the current COVID-19 pandemic or any other crisis situation that may arise in the future (Hamaniuk *et al.*, 2020).

Google Classroom

Google Classroom is a free educational blended learning platform. It is anchored to the Google Apps for Education Suite, which allows working with Google Docs, Gmail, and Google Calendar (Osman,

2017). Its access helps students and teachers organize homework, foster collaboration, aid better communication, and create virtual classrooms.

Microsoft Teams

The option of a collaborative tool that focuses on written communication and sharing files or documents can be found through Microsoft Teams software. Its free version allows up to 300 users, unlimited searching of old messages, and 10 Gb of storage for files and documents (Davidson *et al.*, 2018). Teams also allows creating several chat rooms with different themes, but with participation in a single option by students.

Jitsi

This is a video conferencing and instant messaging application, which works as a free multiplatform. Its access is simple and can be done through the website, allowing to create an online meeting without limit of participants (Andujar and Rodriguez, 2020). To connect other users with the created videoconference, its URL can be shared to add participants. Likewise, Jitsi has full screen sharing functions, an application window, and a tab of the browser itself. It also offers a text chat and an option to organize the interventions of the participants, mediated by "Raise/ Lower hand" commands, as an option to request to intervene.

Zoom

It is a recognized tool in the field of webinars, that is, a platform for videoconferences, audioconferences, and web conferences that allows it to be used by users with internet access, and enables sessions guided by the user who creates or directs them (Shadat *et al.*, 2017). This option allows teachers to schedule meetings, set reminders, record class sessions, share screen, and show a virtual board that allows to write or draw. In addition, Zoom has a chat box, that makes it possible for students to ask questions (whether public or private), and enables the management of participants. The free version of this tool allows group meetings of up to 100 participants for 40 minutes, and 1 to 1 meetings with unlimited time.

7. Conclusion

Although traditional teacher-student lesson teaching has been functional so far, it is important to note that the technological revolution has set a precedent for new teaching practices (Hechinger and Lorin, 2020). Nevertheless, to achieve the ideal learning objectives, it is also necessary to have a sufficiently trained teaching staff in the methodological plane of online teaching, including the use of technical resources. From the data and research analyzed, suspension of face-to-face classes in public and private schools, universities, and educational centers as a preventive measure against coronavirus left these institutions, teachers, and students facing an enormous challenge. It is important to search for solutions in education and especially language education and to highlight practical solutions in digital transformation to the education community. In all this process of digital transition, as well as in the medium and long term future, the biggest obstacles will be of human nature. During the weeks of quarantine, there will be students who will do the bare minimum, and others who will take advantage of the learning opportunity. It could be said that no one was one hundred percent prepared to take on this pedagogical challenge brought by the coronavirus; still, uncertainty about the future due to this situation, more than a threat, offers an educational transformation opportunity. The world situation in

front of COVID-19 has marked a before and after in education, since the use of technology to learn and teach remotely will be more and more incorporated into human life. These resources serve not only to hold language classes by videoconference (through tools such as MS Teams or Zoom), but also to organize classes and share many other materials such as videos, slides, activities, or presentations; interact live through chats or discussion forums; form working groups, and receive information about what the evaluation process will be like (Han, 2020).

Online education allows interaction between learners and teachers in order to offer understandable input and output. It helps in the development of thinking skills by making teaching more learner-centered. In addition to this, technological apps encourage learners' autonomy. The use of modern technological tools in the learning process improved the level of students' interactions with their teachers (Merç, 2015). Thus, a learner is able to feel more dependent. Overall, it results in learners feeling more motivated towards learning a foreign learning.

Language teaching and advanced technology have been collaborating for a long time to guide language classes. Nevertheless, teachers seem to shy away from the use of digital technologies in the teaching process. It is mainly because of certain insecurity and gaps in using those technologies. Global interaction has been possible because of the Internet to contribute to language teaching. Effective use of such technologies can develop suitable language skills easily. Thus, there is a need for offering training to the teachers to make them proficient in using different technologies. There is a huge potential for digital technologies and devices to make foreign language learning and teaching more effective. The tecnological opportunities such as the inclusion of 3D printing, the IoT (Internet of Things), Blockchain technology for digital transformation and virtual classrooms.These digital software and other virtual classrooms will significantly contribute to the education today as well as removing the disruption in education. These resources serve not only to hold language classes by videoconference (through tools such as MS Teams or Zoom), but also to organize classes and share many other materials such as videos, slides, activities, or presentation. All these technological advances will boost education exponentially, being linked to each other. Teachers also use technology to make the learning process more interesting and productive (Altun, 2015). Now is, without a doubt, the ideal time for every person to be motivated and impulse change, be it the teacher who has never dared to teach in any other way, who has never experimented with methodologies such as the virtual class, or the student that has never tried any of the many educational apps that exist. The first step for transformation(including foreign language learning) is, in short, that everyone opens their minds and explore the digital and technological possibilities, to analyze all the options offered by the virtual and, in the near future, to change the methodology of traditional classroom teaching. With this, human beings and the society would gain flexibility and much more capacity to react to unexpected situations. In all this process of digital transition, as well as in the medium and long term future, the biggest obstacles will be of human nature. During the weeks of quarantine, there will be students who will do the bare minimum, and others who will take advantage of the learning opportunity. It could be said that no one was one hundred percent prepared to take on this pedagogical challenge brought by the coronavirus; nevertheless, uncertainty about the future due to this situation, more than a threat, offers an educational transformation opportunity. The world situation in front of COVID-19 has marked a before and after in education, since the use of technology to learn and teach remotely will be more and more incorporated into human life. All these technological advances will boost education exponentially, being linked to each other. Now is, without a doubt, the ideal time for every person to be motivated and impulse change, be it the teacher who has never dared to teach in any other way, who has never experimented with methodologies such as the virtual class, or the student that has never tried any of the many educational apps that exist. The first step for transformation (including foreign

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8. Recommendations

Future research on online education in a foreign language should use one sample group with several institutions, students, and teachers. To establish appropriate strategies for online education in foreign language learning, future research should also focus on understanding the role of technology in creating a conducive learning environment for students.

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