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Narratives on Online Education

Editors:

Mustafa KURT • Fahriye ALTINAY



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NARRATIVES ON ONLINE EDUCATION

e-ISBN 978-625-7676-07-6

DOI 10.14527/9786257676076

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1st Edition: January 2021, Ankara

Publication-Project: Şehriban Türölüdür
Typesetter-Graphic Designer: Müge Çetin
Cover Design: Pegem Akademi

Printed by: Sonçağ Yayıncılık Matbaacılık Reklam San Tic. Ltd. Şti.
İstanbul Cad. İstanbul Çarşısı 48/48 İskitler - Ankara
Tel: (0312) 341 36 67

Publishing House Certificate Number: 36306
Printing House Certificate Number: 47865

Contact

Karanfil 2 Street Nu: 45 Kızılay/ANKARA
Publishing House: 0312 430 67 50 - 430 67 51
Distribution: 0312 434 54 24 - 434 54 08
Preparatory Courses: 0312 419 05 60
Internet: www.pegem.net
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PREFACE

The main theme of this book is to share experiences and reflections regarding digitally enhanced teaching and learning. Stories as narratives from various countries and educational institutions were presented and detailed in order to display the whole picture of the outcomes of Covid-19 online education. Societies are to transform as a consequence of the constant changes regarding life conditions. In this respect, several educational practices were developed or adapted to be effectively used in digitally enhanced teaching and learning during the Covid-19 pandemic. This book sheds light on the narratives of digitally enhanced learning and shares personal and professional stories, gained experiences and skills.

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CHAPTER 1

AUGMENTED REALITY APPROACH FOR DISTANCE EDUCATION AND ADAPTED TO DISABLED STUDENTS IN THE COVID-19 PANDEMIC PROCESS

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1. Introduction

The new type of coronavirus epidemic (Covid-19) has completely changed life in all countries of the world. The human deaths and the dimensions of the trauma left behind by the Covid-19 disease caused by the epidemic are undoubtedly incredible. In the face of this situation, the World Health Organization declared a pandemic on March 11, 2020. One of the measures taken during the pandemic process in our country, as in the whole world, was the transition to distance education in education and training. Many digital infrastructure studies for distance education have carried out both in public and private schools under the Ministry of National Education and in Higher Education Institutions. Video conferencing, synchronous and asynchronous education technologies are some of them. Augmented Reality technology enables adaptation of the virtual environment on the real physical environment. With this technology, a more dynamic and interac-

tive education environment is provided. Especially, the implementation of applied trainings with the use of augmented reality technology will positively increase the level of success and education.

With the transition to distance education, the educational status of disabled students has become very important. In Turkey, 47751 disabled students are present in higher education system with the 2019 data (YOK, 2020), whereas there are 398812 students in formal education in private educational institutions (including mainstreaming education). It is very important to develop a number of solutions so that these students can participate in the distance education process without any problems.

In this study, some solution suggestions were aimed to be offered for the use of augmented reality technology in the distance education process for students with disabilities to introduce a more effective and efficient education method.

2. The Purpose and Importance of the Experience Gained

The virus outbreak, which is known as the COVID-19 pandemic or coronavirus pandemic, occurred on December 1, 2019 in Wuhan, the capital of the Hubei region of China. The rapid spread of the virus epidemic has adversely affected many industries in all countries of the world. One of these sectors has been the education and training sector. All education units and students from pre-school education to higher education were negatively affected by this pandemic process and had difficulties in adapting to education. The pandemic process has led us to the search for new solutions and digital transformation. It accelerated the adaptation process to developing technology and contributed to their effective use. Distance education has been carried out by using a number of materials within the Ministry of National Education and Higher Education institutions for many years. Although current education and training methods are beneficial, many useful methods are being explored day by day to improve education and training. As a result, changes in our education and training methods have become inevitable. The development of technology offers a great opportunity to catch the change in the education and learning process and to provide an interesting environment (Kirkley & Kirkley, 2014)

Rapid advances in science and technology affect and change in our daily lives in many ways. Education sector has been one of the sectors most affected by this change and transformation. If we examine the materials used in the field of education from the past to the present, a digital transformation from blackboard and chalk to artificial intelligence supported smart technologies is drawing attention.

The increase in technological materials that can be used in educational environments imposes important responsibilities on educators to recognize and use these technologies effectively. Therefore, educators should follow technological developments carefully and make an effort to use the most appropriate tools for their specialization areas.

Augmented reality is a technology that allows us to feel and experience computer-generated sound, video, graphics and 3D models in real time on a real-world physical environment. The use of augmented reality technologies in the field of education is increasing day by day and the use of these technologies is simplified. It is thought that this technology will make positive contributions to the learning process with its aspects of experience and practice. Especially in distance education, giving practical lessons with augmented reality technologies plays a great role in increasing students' experience and skills. Therefore, it is of great importance that the augmented reality materials are recognized and put into practice by the educators who will be conducting the courses.

Distance education offers students an equal opportunity and allows everyone to access equal resources. It also eliminates the negativities that students with disabilities may encounter in physical environments. In recent years, wearable technologies have been produced with artificial intelligence in order to increase the experiential learning skills of disabled students. One of them is augmented reality smart glasses.

The aim of this study is to create a perspective on how augmented reality applications can be used in educational environments. In this study, some information on the use of augmented reality technologies in distance education has been given, and the studies on the use of this technology in distance education have been examined and recommendations have been made.

3. Story Benefits and Challenges

Augmented reality technology is different from virtual reality. Virtual reality expects to live in the world prepared in a virtual computer environment. Augmented reality is a technology created by placing graphical objects designed on real objects. In other words, augmented reality is a technology that constantly connects real and virtual life (Chang, Morreale & Medicherla, 2010). Augmented reality technology is widely used in many fields such as medicine, industry, automotive, education and manufacturing, and its importance is increasing day by day.

Augmented reality technology dates back to the 1960s. The first developed system infrastructure was used for both augmented reality and virtual reality (Sutherland, 1968). Today, augmented reality is the technology that allows virtual images created in the computer environment to be placed and used in the real world. Augmented reality technology is widely used in many fields such as automotive, industry, medicine, robotics, construction and education.

We can divide the augmented reality applications into two groups according to their usage areas, namely signed and unsigned based. Marked based tracking is achieved by physically adding markers to the object to be tracked. Markers should have a suitable design according to the area to be used. The markers positioned on real objects have been previously introduced to the system. The unmarked method realizes object recognition without the need of an additional placement or mark on the medium. This method performs the object recognition process by inferring from the set of points that represent models created by the computer-aided design method or an existing 3D object.

Tablets, smartphones and computers are needed to use augmented reality applications. The number of applications developed for mobile devices is increasing day by day with the innovation diffusion of these applications.

Augmented reality technology creates an environment for digital data to be added to the real world environment and to be interacted with. Marked-based platforms (eg Vuforia, ARToolkit, ARTag) are used to record and monitor digital data, and to deal with the existing media content. Over the past 15 years, augmented reality technology has gone through a transition from marked-based transactions to the unmarked world. Today, there are many augmented reality browsers (e.g. Wikitube, Junaio, and Layar) to dynamize content on mobile devices and enable users to develop their own augmented reality worlds.

The process of positioning the graphical objects according to the actions of the users according to the most appropriate location is very important for augmented reality applications. Today, these applications can be divided into two groups according to their usage areas. These are respectively marked-based technology and unmarked-based technology.

Marked-based tracking is achieved by physically adding markers to the object to be tracked. Markers should have a suitable design according to the area to be used. Markers positioned on real objects have been previously introduced to the system. In order for the markers to be detected quickly and easily, their location on real objects should be determined in advance. Markers with a proper insertion angle can be easily detected by the camera. In this way, the Pointer-Based tracking

process depends on the visibility of the pointer. The pointer-based tracking system is sometimes unavailable. In the industrial environment, there may be many objects (machines, devices) that will affect the traceability of the marker system (Palmarini, Erkoyuncu, Roy & Torabmostaedi, 2018). This situation causes tracking problems in the augmented reality system.

The unmarked-based method performs object recognition on the environment without the need for an additional placement or pointer. Object recognition process is performed by inferring from a set of models or points representing a 3D object (Lima, Roberto, Simões, Almeida, Figueiredo, Teixeira & Teichrieb, 2017). The unmarked-based recognition process ensures minimal process preparation for users. The unmarked-based object recognition process requires more complex operations than the marker-based object recognition method. This method has not been proven to be better than the marker-based method (Khandelwal, Swarnalatha, Bisht & Prabu, 2015).

Distance education, which is carried out completely independent of time and place, is an educational system where the lessons can be taught by students and teachers in a virtual environment in which live lessons are done, and also video and audio sharing happens interactively. Recently, virtual reality and augmented reality technologies have started to be adapted to the system in order to make distance education more effective. In this way, a medical student receiving applied training can increase their experience by making applications with three-dimensional images as if they were in a real surgery.

One of the areas that attracted attention with the pandemic process has been virtual reality and augmented reality based communication applications. By using these virtual reality service applications available on the market, people can come together in virtual environments and communicate with each other by interacting in real time. Educational materials are also transforming with virtual reality and augmented reality technologies and are becoming more and more common in many areas ranging from distance education content. Virtual reality simulation applications have been used for a long time in technical and practical training. Virtual reality trainings are successfully carried out in many different fields from anatomy and complex surgical operations for medical education to motor maintenance and repair. One of the most important advantages offered by virtual reality trainings to students is that an environment created virtually can give the student the feeling of experiencing the educational scenario one-to-one. For example, a medical student using virtual reality technologies can see himself stitching a patient in a surgical operation or a machine student producing the product he wants on virtual machine tools.

By using augmented reality technologies, we can see the three-dimensional form of the educational material in the real physical space we are in and make examinations on its details. Objects (text, pictures, video, sound, animation, etc.) prepared to be used in the curriculum are transferred to the real world image, giving the students the feeling of being educated in a virtual classroom environment.

A mobile augmented reality application and a marker-based documentation system are needed to adapt the augmented reality technologies to the lessons taught in distance education. In the sections of each course that will be presented with augmented reality technology, a marker-based system should be defined as shown in Figure 1. This sign-based system can also be specified on the presentation in distance education.

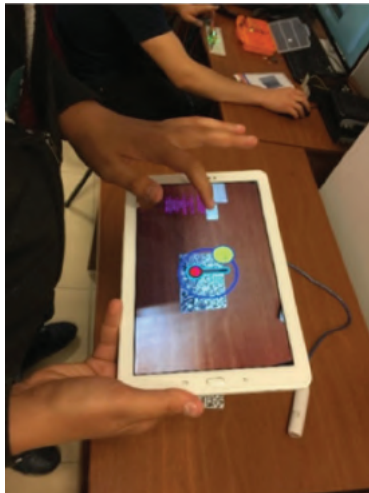


Figure 1. Marker-based mobile augmented reality application

In addition, wearable technologies can be used to use augmented reality applications more effectively in distance education. By using glasses or screens produced for augmented reality, it is ensured that students with disabilities can benefit from augmented reality applications more effectively. Some of these technologies also have a voice control feature. In addition, these applications are easily used by processing images with the help of deep learning and artificial intelligence supported glasses developed for the visually impaired.

4. Results

With this study, it was concluded that the use of augmented reality application in education is beneficial by supporting the educational activities of disabled

individuals. It sheds light on the idea that augmented reality applications can be used throughout the education life of disabled individuals and can be useful in other areas. The fact that augmented reality is independent from the environment has enabled individuals with disabilities to easily receive interactive education anywhere. As a result of the achievements we have gained with this study, it has been observed that research and development can be carried out in many areas for disabled individuals in the future. Learning skills and competencies are supported by enriching objects used in real life with virtual objects. By making the teaching materials used in education more interesting and enjoyable, students are enabled to learn by having fun. Learning materials can be adapted according to the learning situation of the students by using the augmented reality method. With this method, student-material interaction and individual learning skills are supported. It also makes a very important contribution to increasing the permanence in learning. By reviewing the teaching materials used in education, it is possible to support virtual and three-dimensional objects to make them more instructive and interactive. Since the augmented reality technologies support the formation of active learning, students will be able to access the distance course materials enriched with virtual environments and objects and perform their learning in interaction.

5. Future Suggestions

In general, although augmented reality technologies have been used in all sectors in recent years, the pandemic period has accelerated this adaptation process much more. With the necessity of social isolation in our daily lives, augmented reality and virtual reality-based applications have brought many different examples from online meetings to educational materials. Perhaps in the post-pandemic life, people will continue to operate within the framework of virtual reality. Augmented reality applications and documentation should be disseminated in order to improve technology in distance education and to use technology more effectively in the learning-teaching process. Specialists are needed for the preparation of applications using this technology. Virtualizing educational materials takes a lot of time and dedication. In addition, a standard should be determined for these technologies and legal regulations should be made in order to spread them.

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CHAPTER 2

BEING A PUBLIC PRIMARY SCHOOL TEACHER IN TRNC

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I was one of Tuesday's on-duty teachers on our school's on-duty teacher list. The Corona Virus, which we have been watching and following in social media posts since December, has knocked on the door of our country. It turns out that we were ending the year with our students without even knowing that we were ending the year with our last National Anthem on March 10, 2020. Days chased weeks, weeks chased months. Everyone was closed to their houses, mainly due to government decisions regarding the curfew. Our social life was as virtual as the internet brought us closer to the screens. Education had almost stopped and our Ministry of Education was obviously not prepared for this process at all. In short, with the closure of schools in March 2020, the TRNC Ministry of National Education and Culture was involved in an unprepared process.

Considering our current country conditions, while education activities in public primary schools in the education system implemented in the north of the island are in service between 8 am and 12.40 in the morning for teachers, who are at the primary education level, neither education practitioners nor students were ready for digital education. Virtual classrooms over the Internet became more prominent during the time when schools were closed due to the Corona Virus, which we were not prepared for neither as an infrastructure nor as awareness of course follow-up and attendance.

While education systems in every country of the world are changing day by day depending on human needs, many countries have managed to survive in education. Countries which are not suitable for contemporary innovations and developments in education may fall behind in the world competition in economic terms. So, how can we evaluate the Turkish Republic of Northern Cyprus in terms of modern education practices? Or, as the implementers of the education system

in the Turkish Republic of Northern Cyprus, how much have teachers and educators been able to develop themselves, especially in terms of technology, in order to compete with the world?

Education in the north of the island of Cyprus was tried to be provided by BRT (Bayrak Radio and Television Corporation), one of our local television channels, in the form of asynchronous education with the support of commissions formed in primary schools from March 2020 to June 2020. However, this training was not sufficient to meet the needs of students and families regarding service procurement. As there is no internet in most of the homes, it was a big problem that many students could not have the necessary equipment such as tablets, computers or phones as teaching materials in the distance education process. Students who had internet or technological infrastructure in their homes were also experiencing dissatisfaction with the quality of the internet available from time to time. In addition to this problem, it can be considered as a factor in the fact that families whose socio-economic power is at the middle level and below the middle level in the country are too many to underestimate, unfortunately, the families who are unemployed due to the pandemic neglect the educational needs of their children.

At the end of this process, our students, who were studying in public primary schools, completed the year by evaluating the face-to-face education process in schools until March. Until the end of this process, teachers and students seemed to be left to their own fate due to the lack of awareness and infrastructure about digital approaches in education for distance education or digital transformation in education.

Although the process of combating epidemic diseases in our country was taken as a model for the countries that were living the process without considering the predictions and possible problems, education was almost stopped for children at the primary education level with the closure of schools. While the classroom teachers were trying to close the gaps in education through WhatsApp groups they formed with their parents in line with their own means, they were shooting videos about the lessons, recording their voices, trying to provide classroom environments in their homes and trying to continue the curriculum from where they left off. However, during this process, families were sending the homework of their children they had or the posts about the child. They were a parent to the teachers at unlimited times. Unfortunately, teachers were able to consent to this abnormal situation, where there was no time limit at the expense of reaching students, with altruistic and tolerant attitudes that exist at the basis of the teaching profession. I did not dare to enter these processes because of the knowledge and awareness in the books I read by spending a long time in those months. Thanks to

different in-service training courses and those books, I was aware and aware of the negative consequences of educators in different countries in the negative effects of the digital world on business life in developed countries. For this reason, I believe I am too conscious to dare to take such a path in education without any form of institutional framework.

Days passed, weeks and months passed, and 6 months passed. Our Ministry of National Education and Culture has organized many online training programs on the professional development of teachers and digital education. We were learning a variety of programs for days in front of the screen for 5 hours a day, and we were doing them with the thought of how we could provide the most efficiency to our students with what we learned by sacrificing our families and especially our children. However, this was very difficult for us. Many teachers had responsibilities such as taking care of the offspring they were obliged to look after, or those who were sick during the pandemic process. During the day, we were subjected to an in-service training program that was too intense to spare time for ourselves, even when it came to cooking, laundry, children, as well as the routine work in home life. When there were negative comments about this, there were many teachers who came across the statement that participation in them is not compulsory.

Obviously, the Education Common Services Department under the Ministry of National Education and Culture of the Turkish Republic of Northern Cyprus, which is in charge of meeting the professional development needs, was also facing the inexperience of a number of unknowns. If this situation needs to be explained further; if you are asked to do a research outside your subject area, you can enter the process of taking many books in that topic to search for that information. If you have some research skills, you can create a resource according to your needs as a result of your research. However, do not forget that this resource you will create will reflect your field expertise and your past skills, as well as your research skills. Therefore, those who have been placed in senior management positions representing the state should have superior qualities over the masses they will influence on their work experience and background. We see that Corona Virus has an effect on all work and social life in the world. However, although we are not always prepared for negative situations in our lives, we should not ignore the power of our defense mechanism to protect us.

North Cyprus Turkish Republic Ministry of Education and Culture of the Ministry of Education Shared Services Department this confusion in its internal troubles of solutions to relevant planning on the other hand, while the EBA in Turkey (Education Information Network) was being announced over would par-

ticipate in the education of teachers. During these processes, many courses overlapped within their internal local courses. In addition to these problems, although all trainings about productivity were provided in online classroom environments, the Ministry of National Education and Culture was in need of the infrastructure of the universities where the professors who gave the courses were working in order to provide online training courses due to the inadequacies in its own infrastructure. In other words, although the Ministry of National Education and Culture tried to convey information to teachers about technological design, digital approaches, and new teaching methods in order to produce innovations in education, they felt that they had problems in terms of professionalism. Teachers could remain silent in order to do more beneficial work for our children, who will be the future of this country, against these problems, all the planning that runs their own time without planning. Because they also saw that the ministry had some effort and effort, albeit inexperienced. It is very sad that in none of the plans made, there was no realistic assessment of whether realistic information about the problems or situations that encountered in schools for students in terms of digital education quality and digital education access for all schools.

As we attended the courses, on the other hand, as teachers who are keen on the process of applying the distance education process simultaneously (synchronous) and asynchronously (asynchronous) within the framework of digital education within the framework of the new education and training year that started in September, the contribution of the in-service trainings we receive and still continues as students at the university. We were able to participate into the preliminary preparations that could add some things to our schools with the contribution of the practices in the doctoral teaching process we were at. However, many teachers were not even aware of the many digital education and digital teaching resources and tools in addition to the in-service training we mentioned above. We thought that we could conduct our lessons with our students through Moodle and we could also conduct our live lessons in this environment, but in the first week of September, the schools were closed again due to the increase of contamination in local cases due to the continuation of unquarantined entries in our country. However, this time I was in a different situation. Those of us who did not have any experience but experienced a lot during the March period were able to reach the opportunity to develop and renew ourselves with our desire to learn in the past 6 months.

Under the current circumstances, I knew the situation regarding the economy and infrastructure of our Ministry of National Education and Culture. I think that the trainings we received and the experience of our professors in the online educa-

tion process and the online conference processes we attended gave me a great encouragement. On Monday, the first week of the schools, I received the student lists of all my students in which classes I was attending from the school secretary and told my school principal that I would create a WhatsApp group with my families. Our Ministry of National Education and Culture was already mentioning such an article in the guide that prepared for the pandemic process. However, in our school, when our teachers stated that they were communicating with the families through Messenger groups rather than WhatsApp, I recorded the phone numbers of the parents of 78 children one by one in my directory. I was able to guess that this process could be a stressful process when it was unclear whether to record the phone numbers of nearly 200 people and which of these numbers were available or not. I told my principal that I would start doing my classes on Zoom on the day the school was closed and that I would create my classes on Google Classroom, and our principal did not react negatively to this.

I created my student classes on both WhatsApp and Google Classroom. So, what kind of road maps could I have drawn as a teacher in this process? I started to prepare the families for the process by stating that whichever parent would be interested in the student, it would be sufficient for only that parent to be active in the group while talking about 1st grade music, 2nd grade music, 3rd grade music. In this process, I first conducted a needs analysis. When we look at the forms filled out by families for my students via Google form, 71 of 78 families were able to provide feedback to me electronically as Serdarlı Primary School Music Lesson Teacher. Considering that families may be sociologically involved in working life on this questionnaire, I was aware that in line with the answers I asked them about the training program, we could reach our students if we conducted our classes at 6 and 7 o'clock in the afternoon. Our students were children between the ages of 6 and 10 and had not yet acquired the self-efficacy skills.

While the only online meeting program that we can use for free is the Zoom program, in line with the information we obtained through social media; Google Meet or Google Hangout did not offer us the feature to register for free online lessons. In this context, during the creation of virtual classrooms, I would be able to enable each family or student to open a gmail account and to follow up our course content, subjects and assignments through Google Classroom through these accounts.

Our families did not know what the Zoom program was, or what Google Classroom was, by which we were going to conduct our live lessons. In this context, I was helping all families through WhatsApp. This process required you to

spend a lot of time and to have patience and high motivation in your teaching in order to encourage families as patience. Knowing that many of our students would attend classes with their parents' phones, we started this process with the support of the mothers. When we look at the demographic structure of the school where I work, we were serving a population of Serdarlı Village, a Turkish village before 1974, and village school students in this region. The biggest advantage of the Serdarlı Primary School students as a public school was the settled population structure and the fact that the children were raised in families with family loyalties, both for them and for us. Our disadvantage was that many of these children had both their mother and father's working life and the children were in their grandparents or caregivers except for their parents during the daytime.

Our first lesson was held in the form of a meeting with families, before the lessons started live. Although not only all families, but we also held meetings with the students before the lesson, with the families who were interested and available on time. In this process, I asked the families why I made such a decision, that the course hours and some decisions were made due to the results in the questionnaires, their responsibilities in this process, how they could reach me, they should not encounter any problems such as hesitation or embarrassment, me like them and even many teacher also stated for the first time that we were subject to such an application. On the one hand, years ago, I could feel that the student coaching and family counseling courses of my long-term in-service training program gave me a lot of strength in this process. Although some families stated that all teachers were sending their homework and lessons to students with WhatsApp, and it would be easier for them to send videos to children via WhatsApp, I did not give up the determination that our lessons were an application-based lesson and that we would use WhatsApp for communication purposes.

When our live lessons started, the children were amazed and excited when they saw me and their friends on the screen. In addition to these, digital education, which is one of the basic needs of "Generation Z" children, who are called digital natives in the digital access age, was created in an environment suitable for their skills and wishes, so I could feel their happiness from the lessons. We continued our 40-minute lessons, increasing in number every day. I was trying to provide an opportunity for all children to progress at the same level by doing extra make-up lessons on weekends for the children of mothers who had problems in their work and business life from time to time. In addition to these, I also shared with families how to upload a video or photo on Google Classroom, how they can send the high-memory videos to my gmail account via WeTransfer, and many other technological innovations in the content of parent education. Thanks to Google

Classroom, when students did their homework, when they did not do their homework, and what they did during their assignments, it was in the form of a file and it also reduced the time loss that would cause me to give feedback to families one by one on WhatsApp.

I was able to use many educational computer programs related to the preparation of the lessons. Apart from the power point, I also enabled the students to see different technological applications. We were able to benefit from programs related to Canva, Qiver, Toontastic, Kahoot, Plikers, Google Forms, Zoom, Google Classroom, and many more computer technologies.

This process can be described as a great success on behalf of our school, as all teachers of our school also used the Zoom Program for lessons in the 4th week. Although our Ministry cannot offer us any opportunities, we, as teachers, have actually gained our entrepreneurial power from our mothers.

In this context, I would like to thank all our mothers and fathers, working or not working, who supported us. This success was achieved through processes by which they dedicated their time. In addition to internet problems, I kiss the hands of all our mothers under the conditions of TRNC, whose technical infrastructure is makeshift.

As a result, being a teacher in TRNC conditions, especially being a primary school teacher made it necessary to have all the qualities in the nature of the teaching profession in your qualifications. If it were not for the families and school administrators who courageously supported the teachers who were not willing to surrender of their students and the future of this country to their fate during the whole educational period when the schools were closed after the pandemic process, the process of distance education today could continue to stay where we were in March. Although the in-service trainings prepared within the scope of the Ministry of National Education and Culture Department of Education Joint Services' teacher training and development plans contributed to provide guidance and guidance to teachers, the economic and financial aspects of education negatively affected distance education under current country conditions. Primary schools, especially all public schools, experienced the inadequacy of the budget allocated to education. In these processes, it has become a necessity for the services based on cooperation in new projects in cooperation with the TRNC universities and the Ministry of National Education and Culture to reach our schools. I would like to thank all my devoted mothers who believed in us on this path and did not leave their children with all their devotion, in short, to all my students' mothers. Their selfless attitude made me proud of being a Turkish Cypriot on behalf of my

country as a teacher. Although we sometimes take on negative or pessimistic ideas, I saw how much we as society that loves our country, thanks to the pandemic process, and our thinking that our children are the real owners of this country will come. Thanks to my families and students, I have experienced that cooperation, solidarity and cooperation are factors that facilitate difficult tasks in the online education process. Despite everything, we hope to continue working harder for a better future without losing our hope.

CHAPTER 3

STORY SHARING: SENSITIVITY TRAINING ONLINE EXPERIENCES

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1. Introduction

Sensitivity training is type of an activity with an interactive group designed to increase the awareness of everyone about the emotions of herself/himself and others. Additionally, it is a way to improve interpersonal relationships by investigating the behavior, needs and reactions of the individuals in a group. The aim of increasing awareness about us and others are by means of beliefs, feelings, values, culture, and communication (Eren, 2014).

In other words, the sensitivity training in this context can be called a kind of experience-based learning. Thus, the participants learn by analyzing their own experiences, including their feelings, reactions, perceptions, and behaviors, together with the small group they work with (Vaughn, 2007).

At the referred point, the concept is about getting to know the differences. It is concentrating on individuals being all different and unique. These differences can be about political belief, fashion style, weight, social environment, financial structure, family structure (Waxin & Panaccio, 2005). The important phenomena are that sensitivity is necessary for personal, team and organizational success.

In this respect first step is about how other people see you and discussion based on emotional aspect, values, and logic. The training thus includes after how others see you to how you see others focusing on diversity with perspectives like gender, disability, age (that is different generational perspectives), and culture. It starts with typical presentations about previous studies and for each perspective there are different activities like story ending, role play, giving examples of past experiences (Eren, 2014).

As will be also seen in the experiences and results of the story will be also focusing on generational differences as much as online face to face comparisons. For

generations what is meant is the baby boomer is people who were born between 1946-1964, generation X are people born between 1965-1980, and generation Y are people born between 1980-2000 (Clare, 2009).

The Purpose and Importance of the Experience Gained

The sensitivity training was conducted before the pandemic as face to face and the online experience provided chance to see the different reactions of the participants and comparison on generational bases for online training. These two comparison possibilities increase the importance of the experience gained from the activity.

To give some examples of the activities for the training, one of them possess the purpose of creating awareness. The experiences were asking about differences: “Regardless of who we are or where we come from, we are all different. Think of a time when you felt different from everyone else. Maybe you were the new kid in the friend group. Maybe you were the only woman in the environment where men work. (or vice versa if you are a man). How did you feel?”

Another discussion example in the training is about cultural luggage that we carry all along wherever we go. This activity and discussion were asking: “Was it a small village or town where you grew up? Was it the big city? Do you think growing up in a big city or town has affected your life today? If so, in what sense do you think?” The purpose of this activity is to discover your own culture and also to start understanding the reasons for some of your beliefs, values, or feelings.

The online trainees consisted of 47 people that took the training on different times according to their age groups. That is belonging to 30% Baby Boomer generation, 30% X generation 40% Y generation total of 47 people took the training.

3. Story Benefits and Challenges

The mentioned story provides benefit in two ways. The first of these ways is the opportunity to compare face to face and online education in general. The second benefit is that the story provides the opportunity to make this comparison in terms of generations.

As for the challenges for sensitivity online training, most of the times most participant cameras were closed, that caused sometimes discomfort for the trainer. In this respect, a proposal has been made by the trainer that at least to open the cameras while they are talking. Also written interaction was also offered and this was more successful in interaction in some groups as can be seen in the results part.

The challenges also have been faced differently according to different generations. This is explained more detailed in results part. The challenge about differences mainly seems to be technology usage and ways of communication of different age groups that is different generations.

4. Results

The results can be given with respect to the trainer's, my perception consisted differences and similarities of online training compared to face to face and also took different generational age groups into consideration.

As stated, the training was conducted before the pandemic as face to face and during pandemic online. Generally speaking for all generations on this basis, the participation was generally more interactive in face to face training. Of course, there were some personal differences as some group members were more active in discussions, there were some generational group differences in this respect.

Taking the generational perception into consideration, as for baby boomers although they had more difficulties with technology, they were more interactive with camera open talking. Their meetings time was the longest about 3 hours. They also wanted face to face training after COVID-19. As for the X generation, both camera and written interaction was in balance. They discussed more about at work difficulties. Their meeting was around 2 hours. Lastly for the Y generation, there were more written interaction and they wanted to be updated after training. Their meeting also lasted about 2 hours.

5. Future Suggestions

As for the future suggestions first the meeting timing can be changed according to age differences. Especially Baby Boomers tend to be more into group discussions in the training. The training modules can be adjusted. The training can be made with Z generation and differences could be observed. And gender differences could be another way for comparison of different groups. The usage of more visual aids could be beneficial. More subject related videos could be conversation opener. Some personal differences emerged in terms of some trainees participated and tended to talk more in discussions. A certain speaking time can be given in advance. This story can also be compared to other online experience stories so that differences and similarities could be determined, and challenges could be overcome.

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CHAPTER 4

DIGITALISATION IN TEACHING AND SUPERVISION IN NORTHERN CYPRUS AFTER THE GLOBAL PANDEMIC

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1. Introduction

Inspectors/Supervisors and teachers in Northern part of Cyprus were faced with an abrupt change in their roles due to the global pandemic and they were forced to attain new skills in order to carry out their duties effectively. This was not an easy period as nobody was ready for this dramatic transformation like in most parts of the world. Although I am a retired inspector I was a close witness of this transition because I quite often visit the Ministry either to give training to the new inspectors or to take part in some of the projects led by the Ministry. I also still have quite a number of contacts among the teachers due to my profession and working together in some projects. Below are the stories encountered by them.

2. Evolving Supervisory Roles

Despite moving towards a more mentoring role since 2006, supervisors were also responsible for assessing teachers' performance and conducting investigations on disciplinary issues which were two clashing roles. While doing their primary jobs, supervisors mostly used clinical supervision method to assess the performance of teachers, especially the novice ones, which included pre-observation, observation and post-observation meetings at schools. Feedback used to be given on the spot and supervisors do not have the custom of sending feedback reports to teachers. However, the global threat corona virus has changed all the paradigms in the world and education is no exception to this. Supervisors had to change the way they do things before and were forced to find effective ways of performing their jobs without being at their working places.

Not only supervisors and teachers but the policy makers were also not prepared for such a drastic change and as an initial precaution they closed all the schools and working places; but when it was later realised that the pandemic was not going to lose its effect in the near future, they had to come up with innovative decisions. After a period of uncertainty in order to manage the process and the crisis, The Ministry of Education as elsewhere in the world tried to find ways to minimise the educational loss of students and to ensure the continuity of education by putting into practice distance education applications. Soon it was realised that the education and supervision have evolved in an irreversible way and then this was the “New Normal” and they had to take bold steps in order to be able to meet the needs of teachers, learners and other stakeholders.

2.1. Supervisor Stories

Supervisors were expected to lead two major roles during this transition period. They were asked to form committees that will redesign the curriculum and to prepare online lesson materials for all levels. Initially they formed committees that included teachers and supervisors for each subject. It was a rigorous period as most of the supervisors and teachers lacked the necessary technological skills and some of them were reluctant to take part in these committees.

Their second duty was to find ways to observe teachers. With the urgent need for communication supervisors had to improve their digital skills in order to be able to correspond with teachers through online meetings and to arrange online observation sessions. The main drawback here was that although being very experienced in their fields most teachers and supervisors lacked the necessary digital skills which in a way “crippled” them by making them feel as novice teachers and supervisors. The global pandemic in a way forced supervisors and teachers to change their mode of transferring knowledge in the most dramatic and innovative way and while some of them showed sincere effort, the others chose to wait for others to do the work for them.

It was a rigorous and stressful period especially for senior supervisors as some of them lacked technological skills but most of them were able to adapt to this period by working hard and long hours. They not only supervised the preparation of materials but also made sure that they contained no irrelevant information

3. Teacher Stories

Like supervisors, teachers, who were used to delivering their lessons in their classrooms and being observed by supervisors in their working places, were perplexed and stressed. Most teachers like the supervisors lacked the necessary technological skills, so they were stressed because they were expected to deliver their lessons online while very few had the skill to do so. In the first place, the home and work lives were intertwined, and the lesson preparations that they had done without any difficulty in the past started to take days, even weeks. This has been a weary process, especially for teachers who become lonely during the pandemic period and have to develop new competencies. In addition, a group of teachers were not very enthusiastic about this, unlike the ones who developed their technological skills by turning this into an opportunity.

On the other hand cooperation and collaboration among colleagues have increased which in a way helped the ones who sincerely wanted to improve themselves in online education. The Ministry of Education provided dozens of online training sessions but some were not able to attend these courses. The reason behind this was that, sometimes the links sent by the Ministry did not work or they could not get help to be able join an online training. Besides this, some resisted to this drastic change and were reluctant to adapt themselves.

The main problems encountered by teachers besides the lack of technological skills during this period can be listed as follows:

- While the majority of the community thought that teachers were at home having “a holiday”, they worked meticulously for long hours, sacrificing their private lives in order to prepare online lessons and remote education materials.
- They had to learn how to conduct a lesson without being in their classrooms
- Some teachers felt that online or remote teaching is artificial as it lacked the basic elements of face to face teaching
- Because remote or online education is more self directed and self-skilled, it was very difficult to apply it in pre and early years of primary education
- Vocational school teachers find it hard to carry out practical lessons online as it required students to learn by doing and experiencing
- The fact that all students and teachers used the internet for online education at the same time caused the already inadequate database to col-

lapse from time to time and this situation has been very challenging for teachers, students and parents who were not used to distance or online education.

- The students living in rural areas mostly lacked the necessary technological devices such as smart phones and tablets in order to be able to follow the online lessons
- Not only teachers but also students and parents were not ready for such a drastic change in the education system
- Some students especially at high school started working during the pandemic and it was difficult for teachers to attract them to virtual classes
- Some teachers had to give their online lessons at night after the parents returned home to provide their children with a smartphone
- In order to increase the quality of the lesson transmission teachers mostly asked the students to switch off their cameras and microphones which prevented them from observing if the students were actually following the lesson or not
- It was sometimes annoying for teachers to see a parent sitting behind his child and giving instructions to him/her.
- Giving online assignments and feedback is still a problem for most teachers resulting in a deficiency of measuring the learning outcomes
- Some teachers felt lonely and confused especially at the beginning of the pandemic and as a result some senior teachers decided to resign being unable to adapt to the “New Normal”.

4. Opportunities Created By the Covid 19 Pandemic

Despite the hardships and challenges encountered during the global pandemic, it can also be seen as an opportunity to revise the educational philosophies and methods that have diverged from its basic philosophy and to transform the educational policies (Sari &Nayir, 2020).

- The pandemic helped the supervisors and teachers to improve their technological skills who otherwise wouldn't have bothered to do so. After the initial trial and error period both supervisors and teachers are now more confident with their use of technology
- Some teachers who had the necessary technological skills took the lead and started to prepare their own materials before the Ministry supplied

them with the video lessons thus gaining the appreciation of the school administrators and parents

- Despite not being in their job description most of the supervisors took a leading role and they went beyond their boundaries in designing video presentations, online course materials, using online platforms to hold meetings such as google meet, zoom, google teams, jitsee as well as doing online observations which enabled them to witness the problems arosed by online teaching and its effects on students
- Being aware of how challenging and necessary this transformation is in an environment where most of the teachers as well as the supervisors do not include technology in their professional lives, the Ministry of Education took a leading role during this transition period by offering inservice training to supervisors and teachers through forming collaborations with local universities and educational authorities in Turkey as well as TV channels. One of the TV channels was devoted to remote learning at certain hours and video lessons prepared by the committees as well as by EBA in Turkey were used to the service of the students.
- It gave the opportunity to all stakeholders to move from a more traditional to a hybrid educational method which blended face to face and online or remote teaching throughout the country
- Parents started to be more involved in their children's educational lives resulting in development of their technological skills as well.

5. Results

It can be concluded that no matter if the pandemic loses its effect or not in the near future, we must adapt to the "New Normal". It is of utmost importance to furnish both supervisors and teachers with the necessary skills in order to become digital citizens and to do their jobs more effectively.

It is obvious that the policy makers should think on reviewing the functions of schools, the new perception of education, redetermining the roles of supervisors, teachers, parents, media and government (Sari&Nayir 2020).

Due to the sudden start of the process and sudden transition to remote or online teaching and learning, it is important to identify the deficiencies in order to develop and improve the educational activities (Keskin & Kaya,2020).

6. Suggestions

Teacher training faculties must redesign their academic curriculum in order to be able to raise digital citizens who can address the needs of hybrid education.

Research should be carried out to find out the effects of distance education on school administrations, students and parents besides teachers and supervisors in order to eliminate the challenges and improve the system.

A more indepth research will be carried out by the researcher to find out the effects of digitalisation in supervision and teaching.

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CHAPTER 5

DISTANCE EDUCATION AND DISABLED STUDENTS IN COVID-19 PANDEMIC PROCESS: PROBLEMS AND SOLUTION PROPOSALS

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1. Introduction

The new corona virus disease (Covid-19), which emerged in China in December 2019, spread rapidly all over the world and was declared as a pandemic by the World Health Organization (WHO) on March 11, 2020 (Casella et al., 2020) . Many countries and regions around the world have been greatly affected by this pandemic (Jalali et al., 2020). The Covid-19 epidemic, which brought social and economic life to a standstill in our country as in the whole world, seriously changed our lifestyle, ways of doing business and our habits. With the measures taken, various restrictions and new applications were introduced, primarily in risky educational institutions and shopping malls, public transportation vehicles, public places, and the distance education in education and work from home model in business life were quickly introduced.

Perhaps one of the most important measures and implementations was the transition from formal education to distance education. The reason was that like many aspects of daily life, COVID-19 has had a serious impact on students (Adnan & Anwar, 2020). In a global sense, face-to-face education practices have almost ended and millions of students have started to use distance education applications (Can, 2020). Within the scope of the measures taken, education, academic exchange programs, social and cultural activities, sports competitions, etc., all international activities with academic or administrative staff or student participation have been canceled until the second announcement (from health, teaching, science and engineering programs) including internships, internships and practical trainings. Then, after March 23, 2020, distance education started in all universities. In this context, YÖK has launched the “YÖK Courses Platform” to support universities and students. With the additional arrangements made, the courses that cannot be done in the digital environment will be compensated in the summer school, homework and project methods can be used in the exams, students studying at associate, undergraduate and graduate levels can suspend their study in the spring semester of the 2019-2020 academic year, if they request; thesis defense and proficiency exams can be done with digital facilities such as video conferencing provided that they are auditable and “recorded”.

In this process, universities started to use different distance education platforms such as Zoom, Microsoft Teams, Google Meeting, Adobe Connect, Perculus and similar in accordance with their own infrastructure. The Information Network in Education (EBA), previously used by the Ministry of National Education, started to be used up to primary and secondary education levels.

After the 2019-2020 Academic Year was completed as distance education with the decision of the Ministry of National Education, there were some changes with the recommendations of the Scientific Committee. In this context, the opening of the 2020-2021 academic year in institutions and schools affiliated to the Ministry of National Education has been postponed to a further date firstly. Later, this situation changed and it was deemed appropriate to do the education gradually with a hybrid (distance education and face-to-face education together) model.

The new term in schools affiliated to the Ministry of National Education started using distance education techniques between 31st August-18th September 2020. In this context, an education model for the missing points and acquisitions for the second term of the 2019-2020 academic year has been adopted. In this process, it was focused on eliminating the learning deficiencies that could not be handled face to face in the 2019-2020 academic year and students did not have difficulty when they passed the next grade. Later, on September 21st, face-to-face

education started two days a week for pre-school education and distance education for the first graders of primary school. Distance education continued at all other levels. As of 12th October 2020, pre-school students, primary schools (1st, 2nd, 3rd and 4th grades), students started studying only in 8th grade of secondary schools, special education students, preparatory classes and 12th grade students in secondary schools started face-to-face education. On EBA TV (Education Information Network), lecture videos for special education students were broadcasted between 13.30-14.30 every weekday in primary and secondary schools. It has been deemed appropriate not to start support education services for special education students within the scope of inclusion and integration until a new decision is taken.

2. Number of Students with Disabilities in Education in Turkey

2.1. Students with Disabilities in Higher Education

In the higher education system in Turkey with the 2019 data, there are 47 751 students with disabilities (YÖK, 2020). The ratio of this in the total number of students approaching 8 million in our higher education system is approximately 0.6%. In 2019, 25.136 of the disabled students who continue their higher education are studying in associate degree, 22.289 in undergraduate, 290 in master's and 36 in doctoral programs (YÖK, 2019).

2.1. Students with Disabilities in Formal Education

There are 425,774 students who receive formal education (including inclusive education) in private education institutions (MEB, 2020). 63% of these students are male and 37% are female (Table 1).

Table 1: Number of Schools and Students in Private Education Institutions (2019/2020) Academic Year

	School / Institution	Number of Students			Teacher		
		Total	Male	Woman	Total	Male	Woman
Special Education Formal Education Total	1417	425774	269897	155877	15321	6703	8618
Special Education Preschool Total	71	4873	3120	1753	646	145	501

Source: MEB, National Education Statistics, Formal Education 2019 / '20, 2020

3. Problems Encountered by Different Disability Groups in Distance Education and Solution Proposals

3.1. Asperger Syndrome, Attention Deficit, Hyperactivity Disorder, Special Learning Disability, Autism

Asperger's syndrome: It was defined under psychological developmental disorders within the group of pervasive developmental disorders in the ICD-10 Classification of Mental and Behavioral Disorders (World Health Organization, 1993). Asperger syndrome, which has great similarities with childhood autism, differs from autism with children in that it does not cause delay in language and cognitive development (METU, 2013). Since there is no delay or retardation in cognitive development, individuals with Asperger syndrome generally have a normal range of intelligence, but they can be seen less competent than people with other normal intelligence range.

Attention Deficit and Hyperactivity Disorder (Hyperkinetic Disorder): Classification of Mental and Behavioral Disorders stated in ICD-10, "Hyperkinetic disorders can occur in the early developmental period (generally occur in the first 5 years of life). The most basic feature of hyperkinetic disorders is not being able to adapt to activities that need to be attended on a cognitive level, as well as the inability to complete one activity and even to turn towards another without com-

pleting any activity. Students affected by this situation may experience some difficulties. Especially;

- Difficulty in completing the task or assignment on time,
- Difficulty in obtaining information due to excessive mobility, inability to plan time, difficulty in concentrating,
- Difficulty in concentrating and being easily distracted, difficulties in waiting for the turn to come

Above listed characteristics can be shown among these experiences (METU, 2013). It is also possible to say that the hyperkinetic disorder is inherited. Because the same disorder may occur in approximately 57% of children with attention deficit and hyperactivity disorder in their parents (Kiriş & Binokay, 2010)

Special Learning Difficulty and Autism: The barriers in this group are considered to be of neurological origin. In this respect, special learning difficulties and autism restrict the acquisition, retention, organization and use of knowledge and skills. Special learning difficulties can be observed mostly in deficiencies in the following areas:

- Visual and auditory processing, speed of information processing, abstract and logical reasoning, memory (long-term memory, short-term memory, visual memory, auditory memory),
- Language skills in the scope of written and speaking, reading, comprehension and analyzing skills, skills in mathematical operations and word problems,
- Skills in the visual field, motor skills and executive functions (Organizing and problem solving).

Dyslexia, developmental coordination disorder, dyspraxia (planning difficulties) and dyscalculia (mathematical learning difficulties) are examples of special learning difficulties. Therefore, students with problems such as Asperger, special learning difficulties and autism should be supported within the scope of lessons and exams (Table 2).

Table 2: Asperger's Syndrome, Attention Deficit Hyperactivity Disorder, Special Learning Difficulty, Autism How to Support?

How to Support?	
<i>Lessons</i>	<i>exams</i>
Metaphoric words containing meaning to be avoided wherever possible. Try to use a plain language.	It is recommended that exams to be given as homework.
It would be good if you reinforce what is intended to be explained with additional explanations. There may be other sounds, music, etc. in the background that may prevent the individual from perceiving the sound. Make sure that it is not.	In cases where an online exam is mandatory, you need to make sure that the student can receive any updates about the exam. In addition, additional time requests from the student must be met.
You need to enrich the educational content with visual and audio materials. In other words, a teaching technique that appeals to more than one sense should be used.	Minimize distractions as much as possible.
It is also necessary to approach with care about jokes. Because the student may not be able to distinguish between truth and joke.	Do not use ambiguous language.
Diversify your tone of voice and speed of speech.	Break open questions into small parts.
Take care to make frequent eye contact.	Your directions should be supported by clear, directive and constructive feedback.
Do not forget to save the lesson so that the student can listen to the lesson again.	In multiple choice questions, make sure to keep the options short and reduce the number of options.
Due to their commitment to routines, the lesson plan should not be changed.	If possible, prepare exams with short answers instead of multiple-choice exams (tests) according to the needs of the student.
If necessary, contact the student's special educator and / or family member who are the supervisors.	

3.2. Visual Impairment

According to the World Health Organization, a person may have mild, moderate and severe visual impairment or be blind. What a person can do with their current level of vision may vary from person to person. In other words, these students will learn about mobility / mobility on campus, access to printed or other visual materials, access to written notes on slides or blackboards, taking notes, understanding lectures using visual aids such as figures, pictures and tables, reading, seeing distance or near. They may have difficulties with issues such as seeing in the dark or bright. For this reason, it is necessary to increase the quality of education

that students with visual impairment receive by supporting them within the scope of courses and exams (Table 3).

Table 3: How Visual Impairment Should Be Supported?

How to Support?	
<i>Lessons</i>	<i>exams</i>
Provide the student with a priority reading list in case there is an accessibility problem with the course materials.	It is recommended that exams to be given as homework.
Share the lecture notes with the student before or after the lesson.	Make sure the student is informed about the format, content and deadline of the assignment.
If you have not shared your lecture notes with the student before the lesson, please transmit the written or visual contents verbally.	During the exam, as the process of reading the materials may take a long time, so make sure that students with visual impairment are given additional time for their homework and exams.
Course schemes during the presentation, pictures, graphs can be described by identifying supply and shapes.	The student may need support for library research during the exam preparation process.
Visual elements can be described verbally in the videos. For example, the setting and place of the event can be described in a reading text.	Students may need support in organizing pages based on the assignment. For this reason, it is not appropriate to break notes due to the layout of the pages.
Use large font and contrast color in presentations for students with low vision. Make sure the graphics are depicted.	Check if the student's reader systems can be accessed in cases where an online exam is mandatory.
There may be other sounds, music, etc. in the background that may interfere with the individual's perception of sound. Make sure that it is not. Record the lecture so that students can listen.	Make sure the student can get any updates about the exam. In this context, you also need to make sure that the student can ask questions.

3.3. Hearing Impairment

The World Health Organization (World Health Organization, 2020) defines hearing impairment and deafness as follows: "Hearing impairment is an inability to hear as well as a person with normal hearing. People with hearing impairment may have difficulty in hearing or become deaf. If a person cannot hear completely, this condition is defined as deafness. "People who are deaf or have impaired hearing may use hearing aids but may not have functional hearing. Some deaf people

can hear under certain conditions using technological devices such as induction rings, some can use sign language, lip reading, and some can communicate verbally. Hence, people who are deaf or have impaired hearing vary in their current hearing levels and the communication method they use.

Students who are deaf or deaf cannot deal with more than one stimulus at the same time. To exemplify this situation, a student may have trouble at focusing on both the lecturer and the visual stimulus simultaneously. In addition, these students may have problems in recognizing who is in the turn of the word in group discussions. For this reason, hearing impairment should be supported within the scope of lessons and exams (Table 4).

Table 4: How Hearing Impairment Should Be Supported?

How to Support?	
<i>Lessons</i>	<i>exams</i>
First, give the student a reading list.	It is recommended that exams to be given as homework.
Available at a speed of, natural and clear way somehow take care to talk. (This is important for students who can read on the lips). Having your face well lit also allows this situation to be improved.	Make sure that the student knows about the assignment / exam content, format, and deadline or format. You must explain this information visually.
Give the words you will use newly at the beginning of the lesson and transfer the basic lines of the lesson to the student.	For students using hearing aids, you need to perform the exam by reducing background noise.
Share the lecture notes with the student before or after the lesson.	Give additional time. Take regular breaks.
Give the lectures with subtitles, if possible.	Make sure that the student can receive any updates regarding the exam as part of the exam. In this context, you also need to make sure that the student can ask questions.
You need to make sure that the student can see the materials clearly during the lesson.	

4. Conclusion

With the pandemic process, the concept of internet, which already covers a large part of our lives, has become even more important. For this reason, the negative effects that may be caused by digital separation will make themselves to be felt more deeply in this process. Therefore, since the distance education model is frequently used during the pandemic process, the measures, which have still been taken in order not to experience digital injustice for disabled individuals, should be implemented meticulously. Otherwise, it will be more difficult to solve the problems that different disability groups may experience. Even disabled students will be pushed out of the education system.

In conclusion, in this study, various solutions were offered to prevent digital segregation of various disability groups with the transition to distance education during the pandemic process. These solutions are general solutions and should be taken in different measures according to the situation of the student with special needs. The reason is that different disability groups have different needs, and a person can have more than one disability at the same time. Individual adaptations are absolutely necessary for such special situations. For this, their needs should be determined in close communication with the individual. Academic units should make the necessary preparations for the disabled students both for the pandemic period and for the distance education studies in the future. In this way, distance education platforms and course contents will be accessible and equal opportunities for disabled students will be provided. While making these arrangements, first of all, the different needs of different disability groups should be determined and regulations and guidelines that will provide convenience to the educator and the student should be prepared. In order for the lessons to be accessible, educators and students should be informed and an effective communication mechanism should be established. In addition, library services should be accessible in order to provide access to information resources that will support courses. Measurement and evaluation should likewise be adapted to people with special needs. Priority, the adapted announcements regarding the homework given and the exams to be made should be notified in advance, and the student's understanding should be questioned through communication. Factors such as giving additional time to the student in case of need, asking simplified and understandable homework and questions, and describing the graphics and visuals usage are very important.

5. Future Studies

Distance education has a very important place for disabled students. This importance has been better understood during the pandemic period. However, after the pandemic period, it will be even more critical to make arrangements and accessibility studies for individuals with disabilities, i.e. individuals with special needs, within the scope of distance education. In this direction, we can gather the studies that academic institutions should focus on the future in order to make distance education activities accessible under the following main headings:

- Efforts should be made to develop accessible distance education platforms and technologies.
- It is necessary to provide trainings on subjects such as preparing accessible course material for educators, communication with the disabled, using accessible measurement and evaluation tools.

- Efforts should be made for easy access to information in the libraries of academic units. Resources should be used more effectively by collaborating with institutions for the access of everyone.
- Providing orientation training for disabled students on the use of basic information technologies, access to distance education platforms, online homework preparation, exams, etc. will facilitate the process.

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CHAPTER 6

EXPERIENCES OF THE DISTANCE EDUCATION PROCESS DURING THE PANDEMIC PERIOD

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1. Introduction

With the covid 19 epidemic, which has recently affected the whole world and our country, has influenced the subjective and social lives of people and consequently, different measures have been taken. At the beginning of these measures, actions such as flight bans, quarantine, martial law, carried out by states or local governments, and regulations for the protection of social distance were increased. In order to slow down the pandemic, people living in certain masses are allowed to stay at home temporarily and to limit the movement as much as possible, by preventing the spread of the virus, it has become more dominant than the approach to increase the immune system and has become mandatory in all countries as a general practice. The measures taken during the pandemic period were social distance rules, and strict management whihc was also reflected in educational life. In the Spring term of the 2019-2020 academic year the result of the sudden increase of the epidemic, the Higher Education Council (YÖK) announced that education and training at universities were suspended for three weeks from 16th March 2020 to slow the virus's spread in Turkey and reducing victimization in education. Due to the uncertainty of the epidemic process, it was announced by YÖK on March 26th, 2020, that there will be no face-to-face education in the spring semester of

the 2019-2020 academic year. Thus, in Turkey and in Cyprus, distance education came into a question in all levels of education (YÖK, 2020b).

When we examine the literature, there are many definitions related to distance education. The most general definition of distance education is the realization of teaching between teachers and students remotely (Schlosser & Anderson, 1994). It provides equality of opportunity in access to educational resources for all who aim to learn as the flexibility of time and space (Bunker, 2003). According to Işman (2011), distance education is expressed as activities performed using communication technologies and e-learning services in educational activities where the learner and the teacher are in different environments.

However, according to Simonson, Smaldino, Albright, and Zvacek, there are four basic elements in the definition of distance education: 1. It is a formal education belonging to an educational institution. These institutions have institutional work such as accreditation, diploma, certificate, Education Quality Improvement, Organization of learning, educational theories, use of learning methods. It differs from Informal and spontaneous (traditional) education. 2. Teachers and learners are separate from each other in space or time, or in both time and space. 3. The operation of communication technologies can be synchronous (simultaneous) or asynchronous (non-simultaneous). Television, radio, the Internet, telephone, the letter can be used for communication. 4. Learning management systems, expressed as LMS (Learning Management System), effectively use instructional designs and educational theories among learners, educators, resources, and content (Simonson, Smaldino, Albright, and Zvacek, 2003).

The distance education program is the name given to the work performed by educational institutions with a curriculum that they prepare in a certain order to help students achieve education alone. After the number of students to be taught is determined and after the completion of each course, students are given homework topics related to the course prepared by a qualified teacher by means such as fax, mail, or e-mail, and exams are transmitted. Evaluations about these assignments and exams are made and returned to the student along with comments. This, in return, positively affects the student-teacher dialogue in the e-learning environment (Uşun, 2006:11). Concept of E-learning in our country during the covid-19 pandemic, this concept began to be adopted quickly. E-learning has been seen as a supporting element in the system of formal education. What cannot be done in the traditional classroom environment is carried out with e-learning, the education provided has been reinforced and expanded. In e-learning, more permanent training has been started by playing games using visual objects and simulations. E-learning is student-centered. Until the student learns the subject, they can work

on the subject. Time is limitless. Everyone can learn at their own pace (Duran and friends, 2006). According to Khan, e-learning is a new approach to a curriculum based on a well-designed, student-centered, and interactive multi-environment using the features and resources of the web for the learner in distance education (Khan, 2001). As a result of the development of this new approach, creating new educational environments in educational contexts, providing new teaching methods changes the traditional relationship between the educator and the student, which leads to an increase in the quality of Education. For this reason, academicians, teachers, and students from educational life have adopted a process-oriented distance learning approach in the e-learning environment. This approach has led to the introduction of e-learning environments in distance education in two ways and the application process in the education system.

When we look at the models of e-learning, it is realized as a synchronous or asynchronous model. Synchronous: organizing the event attended by everyone at the same time (chat sessions, screen sharing, and audio-visual conferences), if asynchronous: individuals do the activity whenever they want (web pages used permanently, discussion groups, e-mail facilities, and tests that can be scored automatically). These models used in distance education have some advantages and disadvantages (Midkiff & DaSilva, 2011; Taylor, 2002). Advantages of the synchronous model: It creates an online environment for simultaneous discussion and brainstorming. When any problem is encountered, immediate feedback is given. Since the student is in the group, it becomes less isolated. It removes the barriers related to the place. Disadvantages of the synchronous model: There are problems such as adjusting the lesson time, not matching the lesson time intervals to the student. The supervision problem occurs in exam evaluation. Technological tools needed in different group works cannot be provided. The student cannot participate in discussions whenever he/she wants and becomes the only listener in crowded lectures. Students who are not comfortable with technology remain passive. Advantages of Asynchronous Model: Space and time constraints are eliminated. Everyone has the opportunity to participate in education. Education takes on an international identity. The student can participate in the lectures and discussions as they wish. Participation of the shy student with poor communication skills increases. Disadvantages of the Asynchronous Model: Creates a virtual and dispersed learning community. It is not suitable for practical courses. Dependent on the outside in supervised exams. It can create an isolated effect on students. There is no immediate feedback.

In the pandemic process, students who first studied in educational institutions were used asynchronously according to the readiness levels of the students

in some education levels. Asynchronous; It was used as a form of distance education in which information is produced and stored passively in advance in a unidirectional environment of knowledge, and then the students can access it whenever and as many times as they want. However, using the system, especially in pre-school and primary education institutions, no permanent change in behavior has been encountered in students' learning as transition from asynchronous e-learning environment to synchronous e-learning environment. In addition, asynchronous and synchronous online e learning environments started to be scraped with the support of permanent traced behavior change materials for the learner in the transfer of knowledge and skills in teaching. However, with the adoption of synchronous and asynchronous e-learning environments, we faced difficulties in creating opportunities for the residential areas where working teachers, academicians, parents and students live, as there was no previous infrastructure preparation at all educational level.

Teachers and students working at all educational levels, within the distance education process implemented during the pandemic period, provided with new teaching methods, change the relationship between traditional educators and students, and in this situation we will do our best as both teachers and learners to their best to follow new approaches to increase the quality of education. Although we had various difficulties while trying to do all these, the students continued their education life as distance education.

2. The Purpose and Importance of the Experience Gained

- During the pandemic period, we did not stay behind both learning and instructive education with distance education.
- Our children did not fall behind in education during this period.
- A process-oriented approach was followed in education.
- With distance education, we got the impression of a student-centered approach in contemporary education by moving away from traditional education.
- We always had the opportunity to update our Expert Page.
- We constantly updated our emails.
- We took advantage of technology
- We have adopted new approaches.

- With the transition to distance education during the pandemic period, we had the opportunity to research scientific articles in quality time for academic work.
- The students had the opportunity to repeat the topics they did not understand and watch the videos uploaded to the expert page.
- As parents, we had the opportunity to retrospectively watch videos uploaded in the asynchronous e-learning environment on issues that our child had difficulty with. We helped our children by exchanging information on issues they did not understand.
- As parents, we spent quality time with our children.
- Thanks to the education implemented in the e-learning environment with distance education, our relationships between parents, teachers, and children have been strengthened.
- We entered into a solidarity process based on cooperation between the school, teacher, and parents.

3. Story Benefits and Challenges

During the pandemic period, among the advantages of distance education, equality of opportunity was achieved as a teacher and learner, regardless of time and place. We found time to research scientific articles. It was ensured that we closely follow the education of our children as parents. We spent quality time with our children and our spouse. We updated ourselves by following new approaches as teachers and learners. We noticed our shortcomings. We noticed the missing issues of our children.

During the pandemic period, we can gather the difficulties related to our experiences in the distance education process under 4 categories.

As a trainer (teacher) in the first category; Focus problem in the digital environment, Trouble in interaction, Trouble in information technologies, Problems on the internet according to the location, Difficulty in being able to enter the expert rank due to the Internet density, power outage, Material shortage, Problems in tracking students, Low participation and teachers' workload while applying e-learning models increased.

As the second category, the difficulties students experience; The workload of the learner increased with the problem of focusing in the digital environment, the difficulty in interaction, the problem in information technologies, the problem on

the Internet according to the location, the power outage, the shortage of materials and the continuation of a process-oriented approach to education.

Difficulties we face as parents in the third category: During the first pandemic process in distance education, we had a problem in storing the lecture videos sent to our mobile phone as WhatsApp as a section in e-learning. They had difficulties in focusing because their phone was always in their children's hands. However, distraction in children has become even more dependent on mobile and digital media. Problems in interaction, Problems on the Internet by location, Difficulties in accessing the Internet due to the Internet density, They temporarily lagged from education due to the digital environment due to power outage, They had difficulty in dyspnea due to the presence of our children in the home environment and the stimulus factors, They experienced physical fatigue while writing the information stored asynchronously on the phone in the notebook, There were difficulties in reinforcing what the students learned in the Asynchronous E-Learning model, Low participation and the workload of teachers' process-oriented approach while applying e-learning models increased.

With the transition of the Covid 19 pandemic into the second wave process, our children started to participate online, with the transition to the synchronous model in e-learning. Thus, we had difficulties in sharing the computer because we did not have enough information at our home environment and started to follow the lessons synchronously in distance education. We had to spend limited time with our children in online lessons.

Difficulties experienced by our children in the 4th category: Problems of focusing in the digital environment, Problems in interaction, Problems in information technologies, Problems in computer sharing, Internet problems by location, power outages, Material problems, children adopting a process-oriented approach As the burden increased, the children studying in secondary education were satisfied with this issue. Besides, while providing an asynchronous e-learning environment in the first distance education, the fact that our children took lessons from different teachers rather than classroom teachers who caused the learning to not provide a permanent behavior change.

4. Results

The 21st-century pandemic era provided important opportunities for education. Distance education, which is one of these possibilities, has emerged as an alternative learning process that fulfills the requirements of being an information age and network society. It gains an unrivaled quality with its opportunities. The

distance education e-learning management system, which takes place simultaneously (synchronous) and asynchronously, consists of e-content, virtual classroom, measurement-evaluation components. Although each of these components has its characteristics, there is a spiral structure among them. Success in distance education depends on a good construction of this spiral structure. During the pandemic period, we realized that the system and network infrastructure were neglected at the educational levels as instructors and learners due to the sudden epidemic. Therefore, we could not fully realize the education process. However, achieving idealized learning goals in distance education depends on the full realization of the roles determined in distance education. Within this pandemic process, we have been able to update ourselves with new approaches by preparing the necessary infrastructures by recognizing our missing points from the experiences of both instructors, parents, learners, and children in the distance education e-learning management system, which is realized as synchronous (synchronous) and asynchronous.

5. Future Suggestions

- During the pandemic period, teachers, academicians, and students working at all levels in the distance education process can be allowed to observe and reorganize learning and teaching environments.
- An infrastructure can be prepared to prevent the difficulties experienced in technology.
- Regarding the use of new approaches in technology, in-service training can be provided at all levels of education as a teacher and learner. These in-service training can be given to educators, learners, and parents.
- Equality of opportunity can be hidden in the learning-teaching environment.
- Opportunities can be provided to students for learning-teaching environments, settlements (support can be obtained with an internet package)
- Learning-teaching environment multiple learning theory can be used.

CHAPTER 7

FROM FLIPPED LEARNING TO EMERGENCY REMOTE ONLINE LEARNING: A POST COVID-19 CONCISE NARRATIVE

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1. Introduction

The outbreak of the COVID-19 pandemic came with a lot of surprises that affected different sectors of our societies. At a point, it was becoming obvious that the reality which we face would last for a time and there was a need for decisions to be made towards ensuring that normalcy is restored in these different sectors that were halted as a result of the pandemic, one of such sectors was the educational sector. There was a need for an emergency response to salvage this sector as academic activities were suspended as a result of the lockdown rules yet there was also a need for continuity of academic activities while the world awaits a cure of the deadly pandemic. In response to this, the Ministry of Education in North Cyprus announced the swift shift from blended teaching to online teaching ([CAN, 2020](#); Daily Sabah, 2020; Near East University, 2020). At that time, most institutions were conversant with the use of blended teaching either through flipped classrooms, computer assisted learning or other means though it seemed that the switch from a flipped classroom or any form of blended teaching to a fully automated online teaching was an entirely new concept within this context. There are numerous literatures which posits that flipped learning has gained momentum in the pedagogy of education (Findlay-Thompson & Mombourquette, 2013; Abeysekera & Phillip, 2015; Bergmann, 2014; Bonmann, 2014; Bishop & Verleger, 2013), yet limited literature have emerged on the concept of remote online-based teaching especially during an emergency. This domain seems an emerging area of teaching which requires more attention given uncertainties that arise in these present times. Numerous recent studies do suggest that lesson delivery during the COVID-19 pandemic academic session was administered through remote online

teaching (Hodges, Moore, Lockee, Trust & Bond, 2020) yet it seems that the mode of lesson delivery during these unprecedented times did not capture or fit into the basic features of remote online teaching as purports in literatures (Chen, Peng, Yin, Rong, Yang & Cong, 2020; Dewi & Rofiq, 2020). Whether remote online teaching or emergency remote online teaching, teaching during these periods came with a lot of success and challenges from which we can learn from for a better more organized post-COVID-19 academic semester. It could be true that the area of emergency remote online-based instruction is yet to receive more attention and this narrative intends to elucidate more on this mode of instruction delivery by sharing relevant information, ideas, challenges of this instruction so that educational administrators can reevaluate and possibly redesign instructions that would cater for emergencies in the future.

2. The Purpose and Importance of the Experience Gained

The purpose of this paper is to share a narrative on teaching experiences during the COVID-19 pandemic. An impromptu planned instruction especially an instruction delivery designed during an emergency may reduce the quality of instruction (Bozkurt & Sharma, 2020), and during the COVID -19 pandemic there was a swift redesigning of the instruction delivery which resulted in a switch from flipped classrooms to emergency remote online teaching. It was still assumed by most university departments using flipped learning before the pandemic that the mode of lesson delivery was a flipped based instruction as some of these institutions were still using the flipped classroom Moodle for lessons during the pandemic outbreak, while other added several add-ons like the videoconferencing tool to make it a fully automated remote online-based instruction. This is the novelty of this narrative as it assists in addressing these assumptions and pinpointing clearly that the mode of lesson delivery during the pandemic outbreak was an emergency remote online learning though it was making use of instructional design crafted for blended teaching. This information assists in academic researches as it is well documented in recent researches that the mode of lesson delivery was remote learning, while some refer to it as online teaching another claim it is a form of e-learning (Adnan & Anwar, 2020; Chen et al., 2020; Aliyyah, Rachmadtullah, Samsudin, Syaodih, Nurtanto & Tambunan, 2020; Wargadinata, Maimunah, Dewi & Rofiq, 2020).

Confusing as it may seem, the titles or names given to the instruction delivery may make little meaning to the pedagogy of education as recent studies are focusing on the experiences of teachers and learners while teaching and learning

during these unprecedented times (Hodges, Moore, Lockee, Trust & Bond, 2020; Bozkurt & Sharma, 2020; Karalis, 2020). This narrative also upholds that teaching during this period created the opportunity to critically examine our online-based instruction in a bid to ascertain their level of effectiveness, efficiency in rendering quality educational services to individuals in the society. This short narrative intends to share ideas, success and challenges gathered while teaching during this period so academicians all over the world can benefit and also be ready for the coming post-COVID-19 academic years.

3. Story Benefits and Challenges

It has clearly stated in research and this narrative that the mode of lesson delivery was an emergency remote online teaching against other studies which suggest online learning, e-learning, or remote online learning (Adnan & Anwar, 2020; Bozkurt & Sharma, 2020), as the features of the aforementioned does not describe emergency remote online learning. This form of instruction is not usually well planned in most cases as it is adopted as an emergency alternative to ensure continuity in academic activities during times of war, pandemic, environmental hazards, and so on (Hodges, Moore, Lockee, Trust & Bond, 2020). Though, part of the suggestions of this is on designing instruction for an emergency to avoid the hiccups experienced in teaching during this period. On the other hand, online learning, remote online instruction is carefully planned instruction which is usually implemented at the onset of the academic semester, yet emergency remote online-based instruction could be likened to a form of e-learning/ remote online learning. These clarifications are of great essence to teaching and learning, especially in educational research.

Again, most educational facilities always believe that their institutions are equipped with facilities for online learning and this amounted to numerous educational centers offering distant online programs. The outbreak of the pandemic was a period to critically examine these programs and evaluate how they fared during these periods. A critical evaluation will assist in examining their strengths, weakness, and possible opportunities for more development, and threats that could be avoided. This study believes that there is a need for a regular overhaul of our online learning systems to ensure that they are operating in line with recent trends and standards. This narrative will bring this information to the limelight.

More so, the issue of effectiveness in teaching could be reliant on teaching methods and classroom practices. Researches have shown that implementing classroom activities where students are collaboratively working together assists

in achieving positive learning outcomes (Karafil & Oguz, 2019; Demosthenous, Panaoura, & Eteokleous, 2020; Ekblaw, 2016). Literature has emerged which posit that the use of engagement tools are essential for online teaching (Karafil & Oguz, 2019; Toro-Troconis, Alexander & Frutos-Perez, 2019) as claimed by this narrative. During this period, a lot of online teaching resources were utilized for teaching like padlets, Mentimeter, nearpod, flipgrid, zoom application, and so on. Sharing this narrative will assist in highlighting pedagogical strategies and tools that were adopted for student engagement while teaching during this period. This narrative creates opportunities for information sharing with another academician who could explore and adopt these strategies and tools that would fit into their teaching context.

Furthermore, teaching with technology requires a lot of preparation and this study believes that it could be wrong to assume that all instructors are conversant with the use of technologies or teaching applications. Yet the switch from flipped classroom to emergency remote online instruction encouraged the full utilization of technology and its devices for teaching and learning. This comes with its benefits as well as challenges, for the students, some may not have some required technological devices like laptops and mobile devices to connect to lessons. Students may face difficulty in accessing learning management systems or understanding how to use these for uploading assignments or accessing teaching materials. Issues of efficient internet connectivity arise while teaching through online platforms and sharing these issues helps in tackling the technical aspect of online education for future purposes.

More importantly, the quality of the entire instruction is important to the field of education and it may seem that instructions administered through a fully automated online platform are usually not very tedious as compared to traditional face to face teaching. Even though there could be literature that posits so, this short narrative upholds that there is a need to examine the quality of instruction delivery during the pandemic outbreak as compared to instruction delivery before the pandemic and possibly afterward. These evaluations will help a lot in addressing areas that require attention which I have aforementioned in this literature. Issues of instruction design and implementation, especially during emergency and crisis issues, need urgent attention while educational administrators need to embark on researches on how to administer reliable and valid assessments during an emergency. While previous and recent studies affirm the use of e-proctoring which is an online artificial intelligent application use for efficient supervision of online-based examination (Davis, Rand & Seay, 2016; García-Peñalvo, Abella-García, Corell & Grande, 2020; González-González, Infante-Moro & Infante-Moro, 2020),

there are still arguments with regards to its functionality and efficiency. Academic researchers must share their experiences, successes, and challenges during this period of the pandemic outbreak to help solve numerous problems arising in such times. To carefully examine the switch from flipped learning to emergency remote online learning, we asked preservice teacher and instructors these questions;

1. What are the perceptions of preservice teachers on the sudden switch from flipped learning to emergency remote online learning?
2. What are the opinions of instructors on teaching experiences during the Covid-19 pandemic outbreak?

4. Results

This section discusses the result we obtained after an interview with some language instructors and preservice teachers. These participants made use of flipped learning before the pandemic outbreak while the switched to emergency remote online-based instruction during the pandemic outbreak. A semi-structured interview questions were administered to the participants. The participants were coded as D1 to D25 for the preservice teacher while the instructors were coded as G1 to G7 for anonymity purposes. A zoom application was used for the interview session and it was transcribed afterward. Findings obtained from the analysis of the transcripts were used to make conclusions on the mode of instruction delivery used for teaching during the pandemic outbreak, the experiences, successes, and challenges of the preservice teachers/language instructors while teaching and learning during this time. After analyzing the data through thematic analysis, these key findings emerged and are presented under these subheadings;

What are the perceptions of preservice teachers on the sudden switch from flipped learning to emergency remote online learning?

Change in the mode of lesson delivery

The preservice teachers thought that there was a change in the mode of instruction delivery as they were able to observe that the old model of instruction delivery was improved through the addition of extra add-ons that enhances teaching. Some of their statements do suggest this and are presented below;

“...we were asked to register again after the first registration and we were scheduled for live lectures as well” (D2)

“I noticed that there were a few modifications on the flipped learning Moodle which we were using before the outbreak of the pandemic outbreak” (D6)

"I think the way we were taught before the pandemic changed as a result of the lockdown rules, so we were taught using videoconferencing devices" (D11)

"...Instead of using a classroom, we were asked to use the videoconferencing tool for live lectures which we attended for every course for one hour" (D22)

It was evident through their comments that the previous model of instruction was different from the instruction used for lessons during the pandemic outbreak. Their comments also indicated that extra features like the videoconferencing tool were added to the LMS to ensure that students have access to live lectures every week. It was also evident that the change in the mode of instruction was not at the beginning of the academic session rather during the pandemic outbreak which further validates that the mode of instruction delivery could be one introduced as a temporary substitute to the previous one.

Progressive modification of the Learning Moodle

The study unveiled that there were a series of progressive modifications of the instruction from time to time. This suggests that certain changes were made to the mode of instruction during the period of lesson delivery. There were also adjustments to the assessment procedures as students were encouraged to ensure that they visit the Moodle platform constantly for new announcements or directives. A few of their comments are reported in this study;

"...A times we were asked to wait for further instructions before engaging in a particular activity" (D12)

"There was a time that we experience uncommon changes in our grades but we were asked to be patient as the technical team of the university were constantly upgrading the learning management system use for teaching" (D8)

"one day I could not access any of the uploaded learning materials and I was scared and then the teacher told me that there were new instructions on how to access uploaded material which requires every student to fill answer certain survey questions" (D10)

"During one of my presentations, suddenly students could not access the video of their devices while presenting... the teacher also experienced this as well...He assured all the students that this was as a result of a technical upgrade of the system" (D23)

"A times my grades appear and disappears on the system whenever I checked it, but I was reassured by the teacher that this was a technical problem and does not mean a lot" (D25)

These aforementioned comments are indications that there were modifications of the instruction during the period of teaching, as this was to ensure the efficiency of the Moodle. Though, it was clear that these constant modifications disrupted learning in some ways or caused panic among the students. There are also comments on the quality of instruction. This is presented in the next paragraph.

Quality of instruction

Furthermore, the students were concerned about the quality of instruction used as most of them were used to the traditional face to face teaching or the blended teaching methods which were in use before the outbreak of the pandemic. There were cases where students were concerned about the diploma that would be awarded to them while others were concerned that teaching was only for one hour. There was also concern with regards to the mode of assessment especially the quality of online assessment as compared to face-to-face assessments. Also during the lesson students complained about the rapid assignments that were given to them daily, generally, the students were demotivated at some points and this could be shown through some of their comments;

"I wonder what kind of diploma they will give to us during our graduation because I paid for normal education and now I am receiving a distant online education" (D5)

"Are there going to be some compensation as the normal education which we were receiving has changed to a full online program" (D8)

"I hope things can get better so we can return to the normal face to face teaching which we used previously... I do not enjoy the live lesson" (D11)

"Everything is new to me especially the virtual classes and I do not think that we are getting enough teaching for only one hour...I feel depressed every time" (D3)

"During last semester, we carried out our examination at our classrooms with teachers supervising the entire process, presently I wonder how examinations will be administered" (D1)

"it is very boring and tiresome to have lots of assignments every week... a lot has changed and I am depressed" (D10)

Another student narrates his experience from the closure of the school to the resumption of the online classes, his comments are presented below;

"It was sad as I had to return to bury my uncle who was caught up by the deadly pandemic...it was a very difficult moment for me...we live in a suburb of eastern Turkey where internet access was very difficult, first I did not receive information on the switch to online teaching and so I was not aware until the third week. when I told my teacher, he encouraged me to do my assignment as he will consider my plea to join the class despite the late resumption. I had difficulty accessing lessons because of the poor internet connection in my village. It was a terrible experience but I am glad that the semester came to an end" (D3)

A critical examination of the aforementioned excerpts from the preservice teachers' opinions does suggest that there were a lot of issues that emerged while teaching and learning during this period. These were a few of the narratives of the preservice teachers while learning during this period of a pandemic outbreak. It was examined the narrative of instructors below as well.

What are the opinions of instructors on their teaching experiences while teaching during the Covid-19 pandemic outbreak?

After analyzing the interviews, 4 different themes were extracted from the opinions of instructors on their experiences while teachings during the previous semester, the themes were presented and discussed below;

The sudden switch to a new mode of instruction delivery

Likewise the instructors thought that there was a sudden switch from one mode of instruction to another. Most of them posit that there was a need for a switch to a new mode of instruction in a bid to ensure continuity of educational activities during the time of the crisis. Some believe that it was a proper step to take to ensure that students are kept busy through educational activities during the lockdown. Some of their comments are stated below;

"There was a need for continuity of studies and this lead to the switch to a full online program" (G6)

"The instruction of the Ministry of Education was a step in the right direction to ensure that while the society was awaiting a cure for the pandemic, academic activities were ongoing" (G6)

"Teaching during these periods made some busy...others were depressed as a result of staying at home, academic activities were a good step taken to keep everyone busy, both the teachers and the students" (G2)

Poor training

Moreover, the instructors did not hide their opinion on the state of planning the switch which was abrupt and unplanned. Most of them thought that while they were conversant with the use of blending teaching methods, it was a new approach to teach through a fully automated online platform. They thought that proper and adequate planning was essential before switching to a new mode of instruction. These were some of their comments derived from the excerpt;

“Switching to a new mode of instruction could have been carried out differently... there was a need for proper planning” (G3)

“We were receiving memos every day on what to do... There was too much pressure in rewriting the course outline, preparing for lessons, uploading teaching materials and handling the learning management system which had extra features that requires time to learn” (G6)

“I think that there was a need for teachers to be properly trained as it is not enough to assume that everyone knows what to do or that the instructions sent out to the teachers were enough for them to know what to do” (G1)

“Some teachers find it tasking to use blended learning as a result of technology... I will like to say that everyone does not accept technology the way others do and this must be put into consideration...some instructors were fast to adapt while some were slow to adapt...there is need for adequate training for teachers” (G6)

“A times the networks were so slow and my lessons were disrupted a lot of times, I did not know what to do, students were complaining and I will always ask them to wait until I send their complaints to the head of department...It was a difficult moment of teaching for me” (G5)

Use of online resources

Again, the instructors thought that the use of online resources was utilized for teaching during the period of the pandemic. They mentioned that online resources made lesson delivery more efficient and effective as students were encouraged to interact and work collaboratively. Some of the online resources used for teaching were zoom application, Mentimeter, Flipgrid, Nearpod, Online quizzes, and so on. These were some of their comments;

“some of my colleagues shared their online resources with me... I was able to use that for teaching” (G2)

"My lessons were boring until I started using online quizzes to make it interesting...though there was a need for the use of more tool to make lessons interesting" (G1)

"I made use of online resources like Mentimeter, Flipgrid and zoom application for teaching, they were helpful" (G7)

"Google meet was a very useful tool for videoconferencing and making presentations...they were helpful" (G3)

"...A lot of colleagues narrated how they utilized online resources for teaching, though I did not know about this, I had to check them out to see how they could be used for effective teaching" (G2)

"The use of online self-graded quizzes was engaging for the students who were motivated to play the games during lessons...I used the games to for quick assessments while teaching though I assured the students that participation would not have any influence on their grades" (G1)

These statements were indicators that online resources were helpful for effective teaching during these periods. It was observed that the use of online resources enhanced student engagement while teaching and this made them motivated to learn. There were complaints from the teachers especially with regards to some areas to improve upon which was discussed in the next paragraph.

Areas to improve

The instructors thought that the entire instruction needs to be overhauled to ensure effective teaching and learning. They believe that enhancing other areas will improve learning and learning conditions. They pointed out that there is a need for adequate training before the commencement of the next academic semester. They thought that adequate teaching resources must be provided for teachers to teach effectively during the forthcoming semester. They believed that more reliable and valid ways of assessments should be provided as they pinpoint that quality assessment may result to quality instruction. They affirmed through their comments that there is a need for the technical departments that handle the learning management system to improve on the clarity of videos and audio during live lectures, they were more concerned about how students could access quality internet services that would ensure speedy access to live lectures and even download of learning materials. Their comments indicate that the safety of the teachers and the students must be a priority while teaching during the next academic semester. They also requested that incentives to be given to teachers and students which will act as a motivation for teachers to teach and learners to learn during this period of a pandemic outbreak. Below are some of their comments;

“There is need for training and retraining of academic staff before commencing the next semester” (G7)

“We must continue to work so much to ensure effective teaching and learning during the forthcoming semester” (G5)

“The school and government has a lot to do to ensure that things are put in place, like the internet connection, teaching materials and so on” (G1)

“I am worried about the quality of instruction especially the live lectures...I experienced disrupted classes as a result of poor internet connections, I hope this will be solved soon” (G3)

“I don’t know if the school management is going to increase the salaries or send incentives to us...we as the teachers must be taken care of as it is difficult to teach during this periods...I think the welfare of the students should be considered as well” (G7)

“...A times the video quality is of low quality, sometimes the audio quality is not clear enough for the students to hear and understand what you are teaching...teaching during this time is very challenging but I am optimistic” (G2)

It is evident through the comments of the interviewees that there is a lot to learn during this period. The experiences of the students show that some of the students were bothered about the quality of instruction while others thought that the hours of teaching were not enough. Also, others commented on the quality of the diplomas which they would receive upon graduation, others who could not afford technological gadgets for lessons had problems accessing quality learning during this period. There were lots of issues and challenges faced by the students during this period yet they were not alone in this, the instructors believed that the switch to a new mode of instruction delivery was a decision in the right direction.

The instructors firmly believe that it was necessary to continue educational activities while society continues to envisage a cure for the deadly disease. Their comments and the directives of the Ministry of Education were suggestions that there is a need for a redesign of instruction for the emergency. However, the instructors affirmed that there is a need for proper planning especially to get teachers equipped for better and more effective/ efficient teaching for the forthcoming semester. They mentioned that there is a need for the creation of a platform that would serve as a repository of online resources useful for teaching and fostering student engagement. Online resources like the zoom application, Google meet, Mentimeter, Nearpod, Flipgrid, and others should be used to enhance teaching. There were recommendations for certain areas that require further improvements.

5. Future Suggestions

This study is a short narrative that examined the perceptions of instructors and preservice teachers on the switch from flipped classrooms to emergency remote online learning during the pandemic outbreak. The present findings confirm that the mode of instruction delivery was not online teaching rather emergency remote online teaching. Additionally, this area can either be considered a promising aspect of remote online learning and future investigations are necessary to further validate the concept of EROT as a teaching framework for emergencies. This brief study suggests that educational administrators could brainstorm on possibilities of designing instruction for emergencies and crises. Countries like Afghanistan, Syria, Libya, and others that are experiencing crisis like war and ethnic violence could make use of specially designed instructions for learning during such times as this will ensure that children are kept busy with learning and away from the streets. A specially designed instruction for an emergency will ensure that quality education is administered to students during crisis erasing issues of hazy and abrupt planning of instruction whose quality is usually questionable.

Another suggestion is the need to create an online week/ month program as an academic activity. A special week or month can be allotted as an online week / month where all academic activities will be carried out through a fully automated online-based instruction. This will serve as the opportunity for educational administrators to test run their online platforms by examining their level of efficiency, quality of instruction, and making recommendations when and where necessary. This academic activity will be designed to help all stakeholders in the university community to familiarize themselves with switching from one mode of instruction delivery to another. This study believes that this will reduce the panic and jittering experienced by all especially in crises. Unprecedented times will continue to emanate and the COVID-19 is a reality that will fade away gradually yet there is a need for proactive measures to be put in place before the emergence of similar crisis in the future.

There is a need for constant training and retraining of teachers to equip them with information with regards to international trends and practices for online learning. This is essential for professional development and effective teaching thereafter. The study unveiled that numerous online teaching resources have been in existence for years yet these are rarely used for distant online programs in our educational centers. The emergence of COVID-19 created the demand for the utilization of these online resources for teaching. For example, Nearpod is useful for an interactive lesson where the teacher can create quizzes, videos, polls, and

carry out collaborative and interactive teaching. Flipgrid is a useful free online tool for interactive lessons and presentations, which makes lessons engaging and interesting. Padlet is another useful free online tool where teacher and students can use in making comments about lessons, which is a form of an online notice board that some instructors use for writing courses as well. Students can be put in a zoom breakout room for group discussions with the instructor moving from one room to another to ensure that students are participating. There are lots of educational online self-graded quizzes that teachers can integrate into learning to ensure that students are understanding what is been taught during and after lessons. This study recommends the use of online resources for teaching. This study recommends the use of e-proctors for administering online-based assessment as this will ensure quality assessment in our educational centers during this time. The use of e-proctors will reduce to questions of reliability, credibility, and validity of assessment administered during these times. These recommendations are very effective for online teaching as there is need to ensure that quality education is provided for our students during these challenging periods.

Finally, the students must be considered while teaching during these periods, some of the students do not have gadgets for accessing lessons, gadgets can be made available for students at a low cost so they can have access to quality learning. Again, the university management can liaise with telecommunication companies to provide cheap and high-speed internet connectivity for the school and students, which will ensure that the quality of instruction is of high quality with quality in audio and videos. The welfare of students and teachers should be of utmost priority as this study believes that without these stakeholders, there would be no university community. There is a need for adequate support for the teachers either by increasing their salaries or giving additional allowances for their extra effort during these challenging times. As reported in the literature, teaching through blended teaching methods is challenging much more through a fully automated online approach where all academic activities are carried out online and these calls for more support for the teachers' welfare. Scholarship incentives, palliatives should be provided for the students to ensure they are healthy and ready for learning, these are few recommendations of this study as we believe that implementation of these will ensure continuity in learning during these unprecedented times while keeping the school community ready for possible future occurrences of crisis.

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CHAPTER 8

FROM RESPONSE TO REIMAGINING— CREATING POSITIVE SUSTAINABLE CHANGE FOR THE FUTURES OF EDUCATION

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1. Introduction

The global COVID-19 pandemic has disrupted learning and knowledge sharing worldwide, affecting 1.57 billion learners in 191 countries. Today, we are at a crucial moment in history (UNESCO, 2020a). The global spread of COVID-19 has led to unprecedented disruptions in school systems around the world, which has created heightened interest among policy makers, educators, researchers, and the public in learning how education systems have responded to the pandemic and how students' learning experiences have changed (OECD, 2020).

Even before the pandemic, key initiatives were launched by the United Nations Educational Scientific and Culture Organization (UNESCO), which led us through the pandemic and its aftermath. One initiative to which I refer is the UNESCO Sustainability Targets (SDG), which is shown in Figure 1. The SDGs focus on spiritual needs, ecology, and people. In the educational context, the Sustainability Goal, number 4 (SDG 4) plays a crucial role (Education for All by 2030) (UNESCO, 2015).

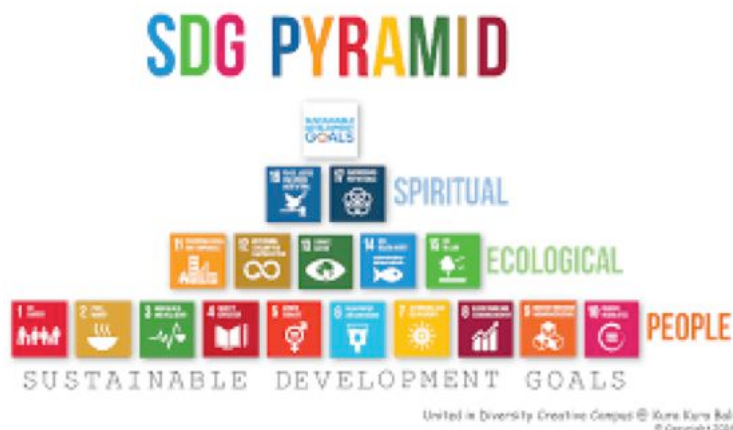


Fig. 1. UN UNESCO SDG

Another important initiative before the pandemic was UNESCO's "Futures of Education" initiative, which aimed to rethink education and shape the future (UNESCO, 2019a). The initiative has catalyzed a global debate on how knowledge, education, and learning need to be rethought in a world of increasing complexity, uncertainty, and precariousness (Figure 2).

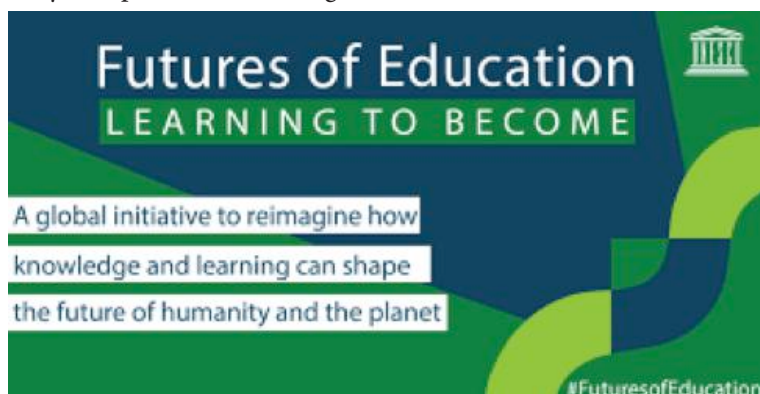


Fig. 2 UNESCO's Futures of Education: Learning to Become

In the initiative, Ideas for the Futures of Education for Public Actions, there are nine actions: (i) an increased public commitment to the educational good, (ii) a broader understanding of the right to education, (iii) the value of the teaching profession and of teacher collaboration, (iv) an emphasis on the participation of pupils, adolescents, and children, (v) protection of the social space of the school in the transformation of education, (vi) free and open source technologies for teach-

hers and students, (vii) science education within a curriculum based on a strong purpose, (viii) the need to protect national and global funding of public education, and finally (ix) a global solidarity that does not accept the current level of inequality.

In addition, before the UNESCO pandemic, the Open Educational Resources (OER) Recommendation for Implementation was adopted on 25 November 2019 by almost 200 member states (UNESCO, 2019b). This Recommendation was a historic and significant step toward quality education and access to information for all. It will support the development and sharing of openly licensed learning and teaching materials, which will benefit students, teachers, and researchers worldwide. The OER Recommendation will contribute to the building of open and inclusive knowledge societies and the realization of the UN's Sustainable Development Goals. The Recommendation will also support the creation, use, and adaptation of inclusive and high-quality OER and facilitate international cooperation in this area. Its objectives include the development of supportive policies and the creation of sustainability models of OER. The OER Recommendation embraces the following areas:

- *Capacity building and use of OER: includes developing the capacity of all key education stakeholders to create, access, re-use, re-purpose, adapt, and redistribute OER, as well as to use and apply open licenses in a manner consistent with national copyright legislation and international obligations;*
- *Developing supportive policy: governments and education authorities and institutions should be encouraged to adopt regulatory frameworks to support open licensing of publicly funded educational and research materials, develop strategies to enable the use and adaptation of OER in support of high-quality, inclusive education and lifelong learning for all, supported by relevant research in the area;*
- *Effective, inclusive, and equitable access to quality OER: supporting the adoption of strategies and programs, including relevant technology solutions that ensure OER in any medium are shared in open formats and standards to maximize equitable access, co-creation, curation, and searchability, including vulnerable groups and persons with disabilities;*
- *Nurturing the creation of sustainability models for OER: supporting and encouraging the creation of sustainability models for OER at national, regional, and institutional level, as well as the planning and pilot testing of new sustainable forms of education and learning;*

- *Fostering and facilitating international cooperation: supporting international cooperation between stakeholders to minimize unnecessary duplication in OER development investments and to develop a global pool of culturally diverse, locally relevant, gender-sensitive, and accessible educational materials in multiple languages and formats.*

2. The Purpose and Importance of the Experience Gained

Since the beginning of the pandemic, I have followed, joined, actively participated and collaborated with global and national initiatives to support educational institutions and learners. My narrative, story, and contributions concern global initiatives provided by global actors. As a global advocate, and influencer, I promote and enhance open and online learning related to SDG4 and the futures of education. I am a member of the Executive Committee for both the International Council for Open and Distance Education (ICDE) and the European Open and Distance and e-learning Network (EDEN), where I advocated and supported their campaigns during the pandemic, such as EDEN #onlinetogether, ICDE #learningtogether and the ICDE partners UNESCO #learningneverstops and Commonwealth of learning (COL) #opendoors. During my work as an international quality auditor for the European Association of Distance Teaching Universities (EADTU) and ICDE, during the pandemic, I observed that the quality agenda was challenged and that university rankings had to adapt to uncertain times. Most of my work during the pandemic was through the ICDE OER Advocacy Committee, which I chair and I am also ICDE Ambassador for the global advocacy work of OER. I even fulfill several other missions for the ICDE. In the ICDE's #learningneverstops campaign, I engaged in many activities, and webinars, including even those for EDEN. As the Vice President for the Swedish Association for Distance Education (SADE), I have undertaken important initiatives involving my advice and publications and as a partner in the campaigns of the ICDE and EDEN. These activities are summarized as follows: consultancy, webinars, keynotes speaker at conferences, book chapters, scientific articles, resource pages, and facilitator (Figure 3). Abstracts from some of the publications and screenshots are provided in 2.5.1, 2.5.2, .2.7.1, 2.7.2 and 2.7.3.



Fig. 3. A summary of activities since the outbreak of COVID-19

However, before going into details some of the overall global initiatives launched during the pandemic will be explored. Some of the most important initiatives, besides the ones described above are discussed below, and where I have been involved and contributed to underpin my stories and narratives.

2.1. UNESCO Global Education Coalition

The outbreak of COVID-19 has caused not only a health crisis but also a major educational concern. Over 1.5 billion students in 165 countries have been affected by the school closures at COVID-19. Never before have we witnessed educational disruptions on this scale. Lessons learned are that partnerships are the only way forward. This coalition is a call for coordinated and innovative actions to find solutions that support learners and teachers not only now but also during the recovery process, with a focus on inclusion and equity.

Since the closure of schools to contain the pandemic COVID-19, governments have implemented distance learning solutions and addressed the complexities of providing education at a distance, including content and support for teachers, advising families, and addressing the challenges of networking. Equality is paramount, as closures disproportionately harm vulnerable and disadvantaged pupils who rely on schools for a range of social services, including health and nutrition.

According to UNESCO, the exchange of experiences needs to be accelerated to help the most vulnerable, regardless of whether they have access to the internet. There have been warnings worldwide that for millions of children and young

people from disadvantaged backgrounds, school closures could mean the loss of a vital safety net of nutrition, protection, and emotional support. Accordingly, this is not the time to deepen inequalities. It is time to invest in the transformative power of education. As we enter the Decade of Action in the 2030 Sustainable Development Agenda, the calls for responsibility as a global community must leave absolutely no one behind.

The Global Coalition, launched by UNESCO, is a cross-sectoral partnership that aims to provide appropriate distance learning for all learners. The coalition is a platform for collaboration and exchange to protect the right to education during this unprecedented interruption and in the future. It brings together more than 140 members of the UN family, civil society, academia, and the private sector to ensure that #learningneverstops. Coalition members rally around three flagships involving the link between teachers and gender, and they support specific concerns, including education recovery (UNESCO, 2020a).

2.2. The Dynamic OER Coalition

During the pandemic, UNESCO made an appeal to OER, stressing that it was more important than ever that the global community came together to promote universal access to information and knowledge. Our joint action aims to address the challenges of this crisis and future pandemics for learners and to lay the foundation for the systematic integration of best practices to improve knowledge sharing in the futures of learning after the COVID-19 pandemic. The appeal emphasized that in this unprecedented context, OER are a crucial means of supporting the continuation of learning in both formal and informal settings.

OER offer a promising solution for accessing, creating, and sharing knowledge and supporting learning for learners at all levels, as well as for teachers, teacher trainers and educators, parents, education policy makers, and government agencies. They are also of value in a wide range of target groups, including cultural institutions (e.g., libraries, archives, and museums) and their users, researchers, civil society organizations (including professional and student associations), publishers, public and private sectors, intergovernmental organizations, copyright holders and authors, and media and broadcasting groups. They can help meet the needs of individual learners, including people with disabilities and those in marginalized or disadvantaged groups, to effectively promote gender equality and to stimulate innovative pedagogical, educational, and methodological approaches.

UNESCO has underlined the important role of UNESCO's COVID-19 Global Education Coalition, described above, in developing and implementing inclu-

sive distance learning solutions. Access to OER is essential to ensure the continuity of learning. The Dynamic OER Coalition, a multi-stakeholder group of partners committed to sharing expertise in the implementation of the OER Recommendation, will facilitate and support joint actions. Therefore, in the spirit of jointly implementing the OER Recommendation, UNESCO calls on the global community to support the use of OER in the open exchange of learning and knowledge worldwide to build more inclusive, sustainable, and resilient knowledge societies (UNESCO, 2020b).

2.3. Organization for Economic Cooperation and Development

The Organization for Economic Cooperation and Development (OECD) is an international organization that works for better policies to ensure a better life. Its aim is to design policies that promote prosperity, equality, opportunity, and well-being for all. The OECD has compiled data, analytical results, and recommendations on a range of issues to address emerging health, economic, and social crises, facilitate coordination, and contribute to the global action needed to meet this enormous collective challenge.

OECD recently conducted a study in connection with COVID-19, based on the following questions: 1) What impact and consequences does the coronavirus pandemic have on our lives and societies? 2) What solutions are needed to boost our health systems, safeguard our businesses, preserve our jobs and training, and stabilize financial markets and economies? The outcome of this OECD study is the Program for International Student Assessment (PISA) Global Crises Tool for recording learning experiences during COVID-19. The PISA Global Crises Module was developed to meet these needs. Sixty-two student questionnaires (grouped into 11 questions) and 68 school questionnaires (grouped into 14 questions) were developed following a process that included input from leading experts in questionnaire development, PISA National Centers, and small-scale cognitive interview studies in three countries. Although all countries have been affected by the pandemic, the module attempts to shed light on the different effects on students' learning and well-being and the degree of educational disruption or change in various education systems. Governments, organizations, researchers, and everyone can use the tools and the descriptions of the underlying constructs, adapting and implementing them widely, Figure 4 (OECD, 2020).

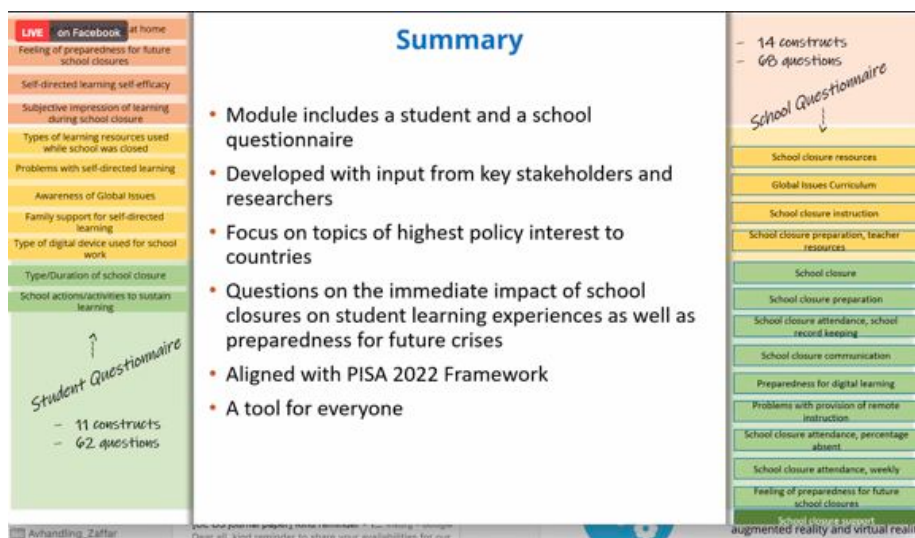


Fig. 4 PISA Global Crises questionnaire (Bertling et al., 2020)

The PISA Global Crises Tool goes beyond PISA's traditional questions, and it can be integrated into (i) the OECD test for schools based on PISA, (ii) the OECD study on social and emotional skills, and (iii) the survey on responses to educational disorders launched by UNESCO. The OECD analysis focuses on the backgrounds of students and schools and a global crisis model of student welfare and student performance.

The questionnaire in the Global Crises Tool will be included in future studies by PISA. PISA conducts knowledge evaluations to assess how fifteen-year-old students in different countries are prepared for the future when they start school. The project is carried out by the OECD, and the evaluation is conducted through tests in four areas: mathematics, science, reading comprehension, and problem solving.

2.4. European Commission

In September 2020, the European Commission adopted a new Digital Education Action Plan. An open public consultation on the new Action Plan ran from June to September 2020, I participated in this public consultation. The Action Plan for Digital Literacy (2021-2027) outlines European Commission's vision for a high quality, inclusive and accessible digital education in Europe. It is a call for action to achieve greater cooperation at European level.

In the past months, due to the COVID-19 pandemic, there was an unprecedented switch to distance and online learning to ensure continuity of the education.

on and training process. There are needs to learn from the crisis COVID -19, where technology is being used on an unprecedented scale in education and training to make education and training systems fit for the digital age. The new Action Plan has two strategic priorities:

1. Promoting the development of a high-performance digital education ecosystem. This requires infrastructure, connectivity and digital equipment effective digital capacity planning and development, including up-to-date organizational skills digitally competent and confident teachers and education and also training staff high quality educational content, user-friendly tools and secure platforms that respect privacy and ethical standards

2. Improving digital skills and competences for digital transformation.

This requires basic digital skills and competences from an early age Digital literacy, including combating disinformation-computing Good knowledge and understanding of data-intensive technologies, such as artificial intelligence Advanced digital skills that produce more digital specialists and also ensure that girls and young women are equally represented in digital studies and professions.

2.5. International Council for Distance Education

The International Council for Distance Education (ICDE) responded immediately by mobilizing its global network of Open Flexible Distance Learning (OFDL) experts in the #learningtogether campaign. Education providers and governments called for a general call for help as they sought to ensure that learning continued during the pandemic-related outage, focusing on the opportunities offered by open, flexible and distance learning (OFDL) arrangements. Now, months after the start of the global pandemic, the ICDE sees this current social disruption as an opportunity to reflect and rethink how we, as leading education experts, can refocus our efforts to build resilient, robust and strong education systems that can meet future societal challenges. And how can we learn from the experience of the current pandemic to prepare tools and systems to reduce it? As ICDE Executive Member and ICDE Member of the ICDE Quality Network, and ICDE Ambassador for the Global Advocacy of OER, and Chair of the ICDE OER Advocacy Committee, I have frequently participated in and contributed to ICDE activities, webinars, Blog-posts, video promotions, and overall consultancy.

In addition, several publications of the ICDE OER Advocacy Committee, which I initiated and coordinated, were carried out. Two of the largest ones are described in 2.5.1 and 2.5.2.

2.5.1. From Open Educational Resources to Open Educational Practices: For resilient sustainable education

Over the last twenty years, OER and Open Educational Practices (OEP) have improved access to and affordability of education worldwide. The synergy of OER-OEP reflects one of the most promising strategies for improving access to education worldwide. Despite significant progress, recent research suggests that a more concerted focus is needed on the transition from awareness raising to implementation. This article analysed the current status of OER and OEP in line with the recent educational response to COVID -19 from education providers with mini-case studies from Africa, Brazil, Canada, China, Sweden and Turkey. The ICDE ambassadors for the global advocacy of OER, and the members of the ICDE OER Advocacy Committee (authors) argue that there is a greater need and receptiveness to broadening access to education through OER and OEP in the six countries studied. To better address the immediate needs of the education crisis COVID -19 and to achieve longer-term improvements in education, countries should use the political support and actionable steps offered by the OER recommendation UNESCO. At present, we see the opportunity to move OER-OEP towards resilient, sustainable education and use the international policy framework to support this work. The article concluded with some general remarks for the way forward, Figure 5 (Ossiannilsson et al., 2020).



Fig. 5. Screenshot of a publication in DMS-DMK (Ossiannilsson et al., 2020)

2.5.2. A survey on the UNESCO OER Recommendation implementation

The ICDE OER Advocacy Committee (OERAC) survey collected feedback from ICDE stakeholders, members and partners on the state of implementation of the UNESCO OER Recommendation within the first seven months after its adoption and during the education crisis caused by COVID -19. The results of the

global survey indicated that only a few countries have taken action to revise their OER policies or frameworks following the adoption of the UNESCO Recommendation. However, the responses also suggest that most countries have already developed or were in the process of developing guidelines to support the integration, development and evaluation of OER, probably before the Recommendation was adopted. In addition, COVID -19 appeared to act as a catalyst for raising awareness of OER and commitment to OER in all regions. OERAC recommends that the ICDE support research and evaluation around the work of OER; strengthen communication around the existing efforts of OER, the evaluation activities and incentive structures and their further development in the coming years. The ICDE should also strengthen the network and practice around information exchange. If more policy makers and institutions are informed about existing (1) capacity building initiatives, (2) support measures, (3) examples of incentive structures and initiatives to create more equitable access to quality OER, (4) sustainability models and (5) examples of monitoring and evaluation efforts in other countries, it will be easier to adapt these efforts to local needs. Finally, the ICDE should conduct a follow-up survey as soon as there are more implementation efforts to report.

2.6. The European Distance and e-learning Network

The European Distance and e-learning Network (EDEN) also responded immediately by mobilizing its network in the #onlinetogether campaign. During spring 2020 EDEN held webinars each week (in total 11) on different topics to support its network during the COVID-19 under the theme *EDEN webinar series: Education in time of a pandemic*. In addition, a webinar series (in total 6) were hold in autumn 2020 under the theme *EDEN webinar series: Education in time of a new normal*. Furthermore, EDEN organized and hosted for the 5th year the European Online and Distance Learning Week (EODLW) an incredibly insightful and significant online event series in its fifth year. From 2-6 November (+9 November), in total of 13 sessions with 62 presenters and speakers attracted more than 2400 participants around the world. This week was a good time to reflect on the current changes under the influence of the pandemic COVID-19 and to improve the possibilities of online and distance learning and promote the quality of education in today's "new normal state". The online webinars with experts from science and practise presented a variety of highly topical issues in open and online learning, from innovations in design to assessment and open educational research. As EDEN Executive Member and Chair of the EDEN Special Interest Group on Technology Enabled Learning and Quality Enhancement I have frequently participated in and contributed to EDEN activities, webinars, promotions, and overall consultancy.

2.7. Examples of other publications and activities

2.7.1. A global outlook to the interruption of education due to the COVID-19 pandemic

Uncertain times require quick reflexes to survive, and this study was a collaborative reflex to better understand and navigate through uncertainty. The Coronavirus (Covid-19) pandemic hit us hard and disrupted many dimensions of our lives, especially education. In response to the disruption to education caused by the Covid-19 pandemic, this study was a collaborative response that reflects the overall picture, reflections from the K-12 and higher education landscape, lessons and proposals from a total of 31 countries around the world, representing 62.7% of the total world population. In addition to the value of each case per country, the synthesis of this research suggests that current practices can be defined as emergency distance education and that these practices are different from planned practices such as distance learning, online learning or other derivations. Above all, this study showed how social injustice, inequality and the digital divide have worsened during the pandemic and require unique and targeted measures if they are to be addressed. While support communities and mechanisms exist, parents are overwhelmed between regular daily/professional duties and emerging educational roles, and all participants experience trauma, psychological pressure and anxiety to varying degrees, requiring a pedagogy of care, affection and empathy. In terms of educational processes, the interruption of education means the importance of openness in education and highlights issues that should be taken into account, such as the use of alternative assessment and evaluation methods, as well as concerns about monitoring, ethics and privacy resulting from the almost exclusive reliance on online solutions, Figure 6 (Bozkurt et al., 2020).



Fig. 6. Screenshot of the article, “A global outlook” (Bozkurt et al., 2020)

2.7.2. Some challenges for universities, in a post crisis, as COVID-19

As the pandemic COVID -19 escalated further, educators around the world were encouraged to move to online and distance learning. Most governments around the world temporarily closed educational institutions in their countries to stem the spread of the pandemic COVID -19. The UNESCO have estimated that the COVID -19 pandemic has caused unprecedented disruption to education, with over 1.5 billion students and young people around the world affected by school closures. If education “moves home”, what impact will it have on students, academics, administrators and senior education managers, particularly in universities? This chapter discussed some challenges, as well as the crucial implementation of the culture of OER and issues of ethical sustainability, social justice and human rights to ensure the quality of accessible learning opportunities for all (Ossiannilsson, 2020).

2.7.3. Special Issue of Sustainability: The Futures of education

This Special Issue of Sustainability focuses on a topic that is demanding increasing attention because of the many lessons learned during the COVID-19 pandemic, including the significance of emergent distance education and sustainable distance and online education. The articles in this Special Issue will target the many futures of education in which “learning to become” is the main goal. As the COVID-19 pandemic continued to escalate, educators around the world were encouraged to move to online and distance learning. However, these practices could be regarded as emergency distance education, which differs from planned practices, such as distance learning, online learning, and their derivations. In terms of educational processes, the interruption, or rather the disruption, of education has underlined the importance of openness in education and has highlighted many issues that must be taken into account, such as alternative assessment approaches, safety, ethics, privacy, monitoring, and evaluation methods. An appropriate response requires the promotion of learning and reflection on the need to invest in innovative and creative solutions that will enable high-quality, efficient, and personal sustainable distance education to ensure that no one is left behind both now and in the future, Figure 7 (Ossiannilsson & Bozkurt, 2020).



Fig. 7. Screenshot of a special issue of Sustainability (Ossiannilsson & Bozkurt, 2020)

3. Future Suggestions

As up to date we are confronted with unprecedented disruptions that are not only transforming socio- economic and governance systems worldwide, but also exponentially affecting our education systems, in many cases setting them back by decades. The outbreak of COVID-19 has caused not only a health crisis but also major educational concerns. The crisis of COVID -19 affects the entire education

sector, not at least higher education from now and onwards. However, one has to distinguish emergency remote education and planned quality open online and distance education. Higher education institutions without effective safety nets will shrink or even go bankrupt. New institutions with new solutions will take their place. The wave of experimental higher education offered new models and practices that the mainstream of higher education could not ignore. Problem- and project-based learning, student-centered education and individualization became the norm. Now higher education has reached the point where it has to be innovative and it needs new solutions. At least three concerns are obvious. The most popular and obvious is the forced and hasty transition to the Internet. The second concerns institutional survival strategies for the autumn and beyond. And then there are issues that were already known before, but which became more visible than ever during the pandemic time, and the critical concerns must be resolved. With COVID-19 the solutions to these have become urgent and crucial.

The COVID-19 pandemic was a wake-up call for leaders in education and the world. The time has come to recalibrating educational leadership for resilient education. Education is the driving force for future sustainable societies and extends to all 17 Sustainable Development Goals (SDGs). If we disrupt education, we disrupt our future. The COVID-19 pandemic has led to a paradigm shift in how learners of all ages can access learning worldwide (UNESCO, 2020a). Improving the student experience means “meeting our students where they are”. It is from now on crucial to move from response to reimagining and creating positive sustainable change for the futures of education, which have to be in plural to embrace and empower diversity and education for all. It must be emphasized that COVID-19 will change the learning and education arena both now and in the future. The next normality is about resilience, mobility and sustainability.

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CHAPTER 9

TIMELY CREATION OF DISTANCE EDUCATION ENVIRONMENTS AND READINESS

Uzm. Hulusi YAHİ - Polatpaşa High School

1. Introduction

POLATPAŞA HIGH SCHOOL

Description of the School: A general high school affiliated with the secondary education department, with one academic class in the 7th and 8th grades of secondary school, and with Science, Turkish-Mathematics, Social Studies and Language departments in the high school department.

School Location: Akdoğan (Mesarya Area)

Number of Classes: 32

Number of Students: 707 (460 Middle School + 247 High School)

School Administration: School Principal and 4 Vice Principals

Number of Teachers: 80 (14 of which are Turkish Language and Literature)

Villages where students come from: Akdoğan, Beyarmudu, Çayönü, Dilekkaya, Erdemli, Kırıkkale, Gaziköy, İncirli, Köprülü, İnönü, Pile, Paşaköy, Türkmenköy, Vadili, Yiğitler

Total: 15 villages.

General Livelihoods: Agriculture, Livestock, Civil Service.

2. The Purpose and Importance of the Experience Gained

While the spring semester of the 2019-2020 academic year were continuing, with the first Covid 19 case in our country in March 2020, all schools were closed for precautionary purposes. The first two weeks passed in great uncertainty after

the school close up. We didn't know what to do. When it was understood that the school could not be opened for a long time, the need for distance education came to the fore. However, until this time, no teacher in the school administration and in our school was familiar with distance education models and equipment. The teachers did not have the necessary training. We had concerns about what to do and how to manage this. Despite this, each teacher tried to reach out to their students with their own means through WhatsApp and Messenger applications. However, no success was achieved.

Since a common path to be implemented by all schools could not be determined in this process, the motivation of the teacher and the student was lost. In addition to this chaotic environment, concerns about how the epidemic process would develop, education and training in April-May could not be implemented properly.

With the decision of the Ministry of Education, a make-up examination (single examination) was held for only 8th and 12th grades. Successful students graduated in June 2020. The intermediate classes, on the other hand, those who were not successful at exams were deemed to be indebted from the courses they received poor grades and moved to the next class without an examination. By the Ministry of Education, the possible program to be used jointly for the 2020-2021 academic year was considered as moodle, and training for teachers started in June.

At the same time, teachers were trained on the use of video conference programs such as google meet, zoom, jitsi meet.

However, the participation of an average of 250 teachers across the country in the trainings organized by the ministry (for each training) played an important role in the delay of the joint distance education to be implemented in the new period.

The common system that the Ministry of Education was trying to implement was disrupted due to both inadequate organization and technical reasons, and as of the end of August, all schools could not be gathered under a common roof.

As the school administration and teachers of Polatpaşa High School, we started to create distance education environments from the third week of August, independent of the Ministry of Education. In about ten days, we were able to start our online education with the video conferencing program Google meet and the related Google Classroom, except for minor problems, by adhering to the curriculum of the Ministry of Education.

3. Story Benefits and Challenges

Personal Acquisitions and Difficulties

GAINS:

- Synchronous and Asynchronous distance education models were learned.
- Google meet, jitsi meet, classroom etc. the use of distance education environments was learned and applied.
- The infrastructure to re-start distance education when necessary has been prepared.
- Training from distance has been experienced.

CHALLENGES:

- Waste of time due to inexperience in distance education.
- Inadequate technical infrastructure. (Internet)
- Some students lack of technological equipment.

Institutional Benefits and Challenges

GAINS:

- Communication environment was created in a technological environment.
- An infrastructure that can be switched to remote education at any time was established
- Teachers have become equipped in distance education.

CHALLENGES:

- Inadequate technical infrastructure.
- Some students lack of technological equipment.

4. Results

The loss of education and training, which occurred in the period from March 2020 to June 2020, started to be eliminated quickly from the first week of September, thanks to the timely distance education environment and regulations.

While face-to-face education started at the school on October 12, 2020, the success achieved in one and a half month distance education made a positive contribution to the teaching process of the students.

5. Future Suggestions

- The Ministry of National Education and Culture should keep the distance education models up to date, which are required by our age as adults, and also provide continuous education of all teachers.

- Schools should be ready at all times for distance education and should encourage their teachers in this direction.

- Teachers should improve themselves and use technology in distance education.

- Students should use technology efficiently and be open to new educational models.

CHAPTER 10

TRANSITION TO ONLINE EDUCATION IN HIGHER EDUCATION DURING COVID-19 PANDEMIC AND THE EFFECTS OF DISTANCE EDUCATION ON PERFORMANCE-BASED LESSONS AND QUALITATIVE ASSESSMENT METHODS

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1. Introduction

The virus that emerged in Wuhan, China's Hubei province in December 2019 was named Corona (SARS-CoV-2). This deadly virus, thought to be spreading from an ordinary animal market which called Seafood Wholesale Market in Wuhan city, has brought many restrictions with this virus, which quickly spread all over the world (Li et al. 2020). According to the recent spread history of the COVID-19 virus; it shows that the first coronavirus infection outside of China was reported on January 13, 2020. The first coronavirus deaths outside of China were recorded on February 02, 2020, on March 11, 2020, the World Health Organization declared the epidemic as an epidemic that spread to different continents (Cahapay, 2020; Secon et al., 2020). Among these restrictions, closure of all levels of schools –nursery, kindergarten, middle and high school, higher education/university, special education school, private and state courses-, besides educational institutions; intercity and international air, land and sea closed to transportation, the closure of workplaces came to the fore, partial and full curfews negatively affected individuals' social, educational, cultural and economic areas (Cahapay, 2020). Individuals had difficulties in adapting to the new order. In this context, the environments where individuals would socialize such as national and international competi-

ons, matches, concerts, sports facilities, cinemas, theatres have all been affected by new restrictions and as a result they were cancelled and no information was given when it would go back to its normal again. As stated in the literature after the Corona virus entered our lives in December 2019 in China, Wuhan, with pandemic lockdown started in every nation. Psychologically, it causes emotional distress, psychiatric problems, emotional isolation etc. (Pfefferbaum & North, 2020).

In this context, the epidemic, which poses a serious threat to international public health, has adversely affected the tourism industry (Acar, 2020; Oran, 2020). In recent literature, with the rapid transmission of the disease and the rapid increase in the number of patients, the issue will not only be limited to the medical dimension, but some negative effects have emerged in terms of sociocultural, ethical and moral, law, education, pedagogical, tourism, economy, agriculture and public health (Can, 2020; Üstün & Çiftçi, 2020). What happened in the world after COVID-19 is new and it is possible to say that it creates a normal and new paradigm and that creates a new world order (Bozkurt, 2020). Among the measures taken in many countries in order to reduce the transmission rate of the disease and gain time for treatment and vaccination studies, it has been tried to create as much social distance as possible with regulations such as interrupting face-to-face education for a certain period of time in educational institutions and universities or declaring a holiday (Telli & Altun, 2020). Universities and educational institutions have suspended face-to-face training, but since it is not known how long or when the pandemic process will end, some terms or practices that are new to many people have started to be mentioned. These are online learning, digital strategy, artificial intelligence, information management, social interaction, cybersecurity, big data, blockchain, privacy, technology and strategy from the lens of the current crisis in mobile and the impact on these specific areas. Thus it was understood that in the new order, our education, work and lives have changed with the effect of Covid-19 (Dwivedi, Hughes, Coombs, Constantiou, Duan, Edwards, Gupta, Lal, Misra, Prashant, Raman, Rana, Sharma & Upadhyay, 2020).

The situation in general has changed our movements, personal freedoms, ways of working, social life, entertainment and educational models have completely changed in a few weeks. In order to raise quality, beneficial individuals who can adapt to changing living conditions with the COVID-19 pandemic and at the same time to become one of the strongest countries in the world, the need for quality individual can be met with education. According to Pellegrini, Uskov & Casalino (2020) 'education is a strategic area for the development of the countries'. With the changing needs in the field of education during the pandemic process, the need to switch from face-to-face education to online lessons has emerged as a

necessity. In this process, adapting to the new order, giving online education from home and trying to focus on our work had challenged us like everyone else all around the world.

2. The Purpose and Importance of the Experience Gained

The purpose of this study is to emphasize the changes in the field of education, which is one of the most negatively affected sectors in our life changing with the pandemic. Other aims are to reflect the experiences gained as an academician and the cases regarding the lessons that require practice and research. In this context, the following questions will be answered in this study: How did the transition from face-to-face education to online education reflect on higher education? What is the Impact of Distance Education on Performance-Based Lessons and Qualitative Assessment Methods? What are the individual gains experienced as an educator in Higher Education during the online education process? Altuntaş Yılmaz (2020) concluded that undergraduate students were positively and negatively affected by the distance education situation applied during the COVID - 19 pandemic in higher education institutions. The importance of finding alternative methods for applied courses was emphasized in this pandemic process as well.

All over the world, face-to-face education was suspended at all educational levels, it was decided to switch to distance education, to postpone local and central exams, and to include web-based exams to measure and evaluate student achievement. In this context, the system structured according to formal education had to be transformed into a web-based distance education system with crisis management (Keskin & Özer Kaya, 2020; YÖK, 2020). Universities structured according to formal education have started to work rapidly in order to continue courses and programs with web-based distance education instead of face-to-face education, and have switched to emergency distance education (Gewin 2020; Lau, Yang, & Dasgupta, 2020; Keskin & Özer Kaya, 2020). Unfortunately, some universities could not shift online education immediately. As a result of the studies obtained from the literature, not all educational institutions were able to switch to online education at the same time (Peters, Wang, Ogunniran, Huang, Green, Chunga, Quainoo, Ren, Hollings, Mou, Khomera, Zhang, Zhou, Laimeche, Zheng, Xu, Jackson & Hayes, 2020). Thus, inequality in education has emerged. Therefore, it is important to review the functions and technological infrastructures of educational institutions. In all countries after the pandemic period, which made it visible that the educational inequality between class and social strata is gradually deepening (Yıldız, Akar Vural, 2020).

During the pandemic process, when the universities were vacationed, we thought that face-to-face education would start gain soon, but the fact that this period started in the second week of March in the Turkish Republic of Northern Cyprus and the uncertainty still continues. This once again revealed that an extraordinary situation was experienced. At the beginning of the pandemic, as an academicians thought that online education was not a substitute for face-to-face education. It was thought that online education could not replace face-to-face education. The reason for this was the question of how to do the practical lessons in the teacher training curriculum besides the theoretical lessons.

Table 1: Impact on teaching and learning by Region (IAU – COVID-19 Global Impact Survey, 2020)

	Not affected	Classroom teaching replaced by distance teaching and learning	Teaching suspended but the institutions is developing solutions	Teaching cancelled
Africa	3%	29%	43%	24%
Americas	3%	72%	22%	3%
Asia&Pacific	1%	60%	36%	3%
Europe	Almost zero	85%	12%	3%

As seen in Table 1 transition to online education in higher education during COVID-19 pandemic, teaching has been cancelled is very low in all regions all around the world. It shows that higher education institutes were able to quickly transfer learning and teaching online (Marinoni, van't Land & Jensen, 2020; Pellegrini, Uskov, & Casalino, 2020).

Given the new normal post-COVID-19 era, it is important to rethink education within curriculum study perspectives. By discussing the purpose, content, learning-teaching process, and measurement and evaluation, the educators in the field had to make new decisions in order to prevent the basic problems in order to adapt to the new normal. Also referred to as the new normal post-COVID-19 era, education laws highlighted the need for educational objectives and curricula to be restructured for makers. One of the aims of making it suitable and usable with respect to the curriculum, which is one of the most important criteria of teaching this new order, is the ability to be prepared and flexible in disaster, disease and emergency situations. In this context, the curricula should have the competence to be prepared for different situations (Reimers, Schleicher, Saavedra & Tuominen, 2020).

How has COVID-19 affected teaching and learning?

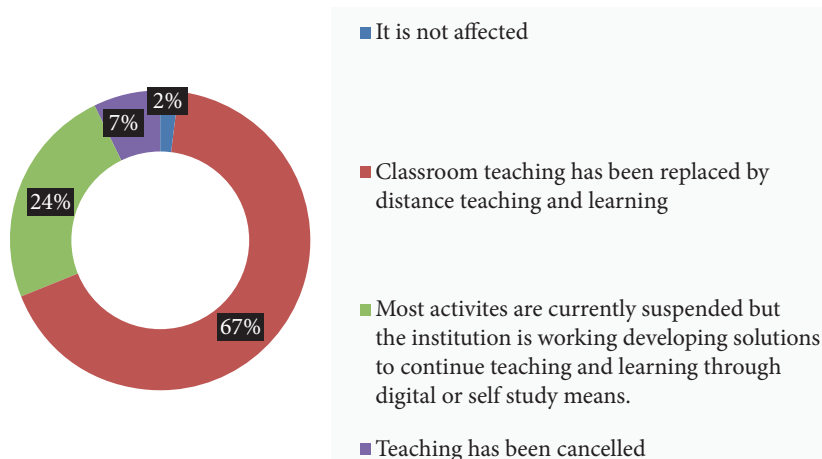


Figure 1: COVID-19 affected teaching and learning (IAU – COVID-19 Global Impact Survey, 2020)

According to the Figure 1, 67% reported that teaching has been transferred by online learning and teaching. Only 7% reported that teaching has been cancelled. These results show that two-thirds of higher education institutes were able to transferred teaching online while one third was not (Marinoni, van't Land & Jensen, 2020; Pellegrini, Uskov, & Casalino, 2020).

Despite all these negative thoughts, it was seen that; in fact, with online education, more time was spent on academic studies, and it was seen that there was enough time to update the lecture notes to adapt to the platform (Huang, Tlili, Chang, Zhang, Nascimbeni & Burgos, 2020). In addition, when there was time for activities that could not be planned and done for a long time personally, it was realized that in fact, individuals were adapted and adapted to the new order. During this period, it was seen that the new learning-teaching environment was beneficial as in formal education (Başaran, Doğan, Karaoğlu & Şahin, 2020).

3. Story Benefits and Challenges

The advantages of e-learning platforms are as follows: different learning techniques (interactive videos) knowledge could be grasped better, flexible; eliminates the distances, allowing more learners and data to be accessed at the same time, regardless of time and space. Learners in different geographies were able to access the same educational content. Each learned variety of appropriate learning met-

hod could be achieved. Low cost (space, transportation, cleaning, and administration) and time flexibility (the desired amount of training could be obtained at the desired time). The students experienced an increase in performance and the training could be followed.

With the COVID-19 pandemic, changing conditions have created benefits and challenges, both individually as an academician and worldwide. As an academician an adaptation to the new teaching environment; it can create a successful life in the online education process by planning time management, self-discipline and working at home, drawing the physical boundary between working and resting areas. Yılmaz Altuntaş (2020) states that this new layout has given students the flexibility and efficiency they prefer. It will be beneficial to spend more productive hours during the day by conducting academic research, updating course materials and uploading lecture notes to the online course platform. As in the formal education process, in order to provide efficient and effective education, it is important to be able to pass the online learning-teaching process, which is the new teaching environment, in the most efficient way, and to make the most of the students' benefit from the online education provided. In addition to the benefits of live video conferencing in terms of self-learning, it was stated with the internet problem and the disconnection of the live connection due to excessive intensity, which created difficulties in terms of educational activities. However, it should not be forgotten that they accepted that the most effective education method is the access of students with the material (Altuntaş Yılmaz, 2020; Cook & Dupras, 2020; Gewin, 2020; Schneider & Konseyi, 2020). Many educators had a question mark on whether performance-based lessons were efficient during this period in which education was suspended within the scope of pandemic measures. Since the Project-Based Learning lessons are research-oriented, students can have the most experience such as generating new ideas, exchanging ideas, experiencing a sense of individual accomplishment in project-based learning by using tabs such as chat, forum and workshop in addition to live lessons on the platform where online courses are taught (Yustina, Syafii & Vebrianto, 2020).

In order not to interrupt the education-training process due to the interruption of face-to-face education, the web-based distance education process was implemented in a short time. It was also expected that there were some difficulties and deficiencies experienced during the transformation of the training programs planned for formal education and the current education model into instant web-based distance education. The usual difficulties that may be encountered during the transition from face-to-face training to online education can be explained as follows: the working hours of the trainers have increased, while working actively

in the office for 7-8 hours, the new situation has reached 24 hours. Online learning requires much more time to devote to do planning of the lecture materials, workshops, and exercises. Student office hours and working hours, which are 1 hour a day, have spread throughout the day. Thus, working hours have increased with the notifications received by the trainers' e-mails and phones. In addition, in this process, with the transition to online education, there were also problems with educators who can use technology and are less prone to use technology. Yüksek-bilgili (2015) in Turkey, Generation Y age range of 1983 - 1995 has revealed that individuals born. The basic belts that make up the workforce consist of the X and Y generations, who are the amount of people that can effectively use online training (Keleş, 2011; Yelkikalan & Altın, 2010; Yüksekbilgili, 2013).

On students side; as the performance and project-based lessons which required long-term study, there were occasional decreases in the motivation of the students. In terms of students, it may be considered normal to experience some difficulties as a result of the distance education methods followed compared to the theoretical, general culture and practical application skills, which show that web-based education differs from face-to-face education. One of the qualitative research methods, observation and face-to-face interview could not be made. In this context, the data could not be collected in multiple ways. Technical deficiencies (internet and power outages, computer malfunctions) disrupt in online education are among the difficulties experienced. In addition to all these negative effects, it was necessary to continue online education to prevent the virus from contaminating.

4. Results

COVID-19 has and continues to create challenges for teachers and students in the learning and teaching process. Students in the educator and learner status had to make a rapid transition to learn distance learning. Especially educators have had problems using new multimedia technologies. More than 1.5 billion students worldwide have been affected by school and university closures due to the COVID-19 outbreak.

It can be concluded that the students had the opportunity to learn individually by researching in performance-based lessons, took responsibility for learning and learned to work in groups.

The COVID-19 created several opportunities for students; in face-to-face education, it was revealed that students spent more time in cafes or transportation to the campus, so the time they spent on research was low, but during the

pandemic period, they spent more productive time on research and investigation because they were in front of the computer at home. The remedial training of all the courses that could not be done within the scope of Corona virus measures was easy, students who could not attend the course live could attend and watch later. Fortunately, the students who tested positive for COVID-19 had the opportunity to make up for the lessons they missed by entering and following the lessons online.

It is true that there are many difficulties in the rapid transition from face-to-face education to online education. These can be listed as follows; not being able to use or educators being unfriendly with technology, planning and implementing the course objectives, content, learning teaching process, measurement and evaluation stages in the curriculum according to face-to-face education, lack of technological infrastructure, not having one computer per person living in the same home. For example, if the parents of a core family are teachers, the school age of children faced with problems such as not being able to attend online lessons due to the lack of a computer, electricity and internet outages, etc.

5. Future Suggestions

Just like in health, we are experiencing quite a difficult time in the field of education and we are going through extraordinary days. We encounter many unknowns which we try to overcome some of them with the right decisions. The most radical of these decisions is that universities have turned to online courses by managing this process correctly.

In line with these experiences, from a perspective of an academician, it can be suggested that project-based lessons should be done online. In order not to fall behind the curriculum, we should follow technology as an educator in terms of technological advances and we should spare time for In-Service Training, reading and learning. It has been understood how distance education / e-learning platforms have become a need with the Corona virus. We must be prepared for innovations and different scenarios in terms of social, political and economic aspects. The Corona virus has changed our lives. The whole world is in a state of panic with its psychological, political, global and local effects. Among these negative effects, it was inevitable that all production processes and all sectors were negatively affected by the interruption of education. For example, suppose graduations are delayed for one term or one year. Consider that individuals who cannot participate in the production process consume at the same time. Thus, it should be emphasized once more that education is the most fundamental issue. The necessity of increasing investments in the field of education has been revealed once again.

As educators; effective course contents can be planned by taking into learning - teaching environments account that matches with distance education necessities. Educators can adopt process-oriented assessment methods in distance education. Educators should not forget that effective classroom management and effective communication are important in terms of reaching our students with Distance Education. While developing the curriculum, it may be suggested to develop the curriculum according to alternative methods in accordance with different future scenarios. With the COVID-19 pandemic, it is necessary to rearrange the content of the curriculum with the transition to online education. Educators have to change the objectives of the courses in the curriculum without sacrificing much of the knowledge worth teaching students. During the pandemic period, when many occupational groups were unable to work, educators actively continued their business life, drawing attention to the importance of the teaching profession once again. The unprecedented effects of the COVID-19 pandemic have taken education systems to a new normal era in human history. This prompted rethinking from the perspective of the new normal post-COVID-19 assessment curriculum studies.

Regarding assessment in online teaching, some concerns about the assessment of learning have prompted educators to use new assessment methods such as hybrid (Baker, Unni, Ker-Sims & Marquis, 2020). In this context, it is necessary to reshape the curriculum, taking into account the new normal period after COVID-19.

In order to adapt to the new order, to ensure sustainability in order to adapt to hybrid education models, the things that can be done in the process of preparing for e-learning and teaching learning can be listed as follows:

- course design for online platforms,
- methods to increase online learner engagement,
- development of educational materials,
- educational videos suitable for the content of the courses (interactive videos),
- multimedia,
- animation,
- skill development based course design,
- process-oriented assessment methods,
- preparing lecture presentations suitable for online environment,
- using digital boards,

- creating online tests by using google forms,
- multiple choice test creation,
- e-portfolio creation,
- poster design etc. should include the competencies required for an effective online course in teacher training programs.

In future research, before starting to serve teacher training programs in faculties of education in higher education, educators should be supported with courses on internet-based teaching methods, in which virtual learning can also be used. Higher education campuses should be well equipped with an internet network. Internet assisted learning can be learned how to implement effective learning with Blended Learning, and this can be considered by policy makers for applications that can be implemented with Blended Learning (BL) and Performance-Based Learning.

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CHAPTER 11

IS THIS DISTANCE EDUCATION OR PANDEMIC TYPE ON-LINE EDUCATION?

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1. Introduction

The Corona virus, which emerged in 2019, adversely affects all areas of life. Under these conditions, education worldwide has been greatly affected as one of the main daily activities of millions of students, teachers and parents. In most countries, schools were closed and the education process went on distance education platforms. Almost all countries around the world have had to stop formal education. According to UNESCO data, a total of 1,724,657,870 students from pre-school to higher education across the world were affected by this situation as of April 17, 2020. In order not to interrupt education, countries around the world have adopted distance education as a model and have chosen to integrate it into their education systems with different application models at all levels of education (UNESCO, 2020). After the coronavirus (Covid-19) spread around the world and turned into a pandemic, almost all countries decided to suspend face-to-face education and close schools at all levels in order to restrict the spread of the virus. In all of Europe (except Sweden and Iceland), schools at all levels were closed within a week since March 16. With the closure of schools, online education processes have come to the fore so that children do not stay away from education. Synchronous (synchronous) and asynchronous distance / online education processes have been initiated depending on the existing technological opportunities of the countries, the technology use skills of teachers and the level of children's internet access. Distance education was carried out through various e-learning platforms that enable teachers and students to interact and work together during the education process, rapidly developed national television programs or social media platforms. In addition, in some countries, education continued through books and teaching materials bought from or sent to families by schools. The COVID-19 pandemic is

above all a health crisis. Many countries have (rightly) decided to close schools, colleges and universities. The crisis accentuates the dilemma that policy makers face between closing schools (reducing contact and saving lives) and keeping them open (allowing workers to work and keep the economy). The short-term disruption is hissing by many families around the world: homeschooling has a huge shock not only on parents' productivity, but also in their social lives and learning. Teaching moves in a simple, untested and unprecedented. The student moves with us with a lot of trial, error and uncertainty. Many reviews have been canceled. More importantly, these cuts will not only be a short-term problem, but can have long-term consequences for affected groups and are likely to increase inequality.

Sustaining education on alternative platforms, with the closure of the school has become important in Turkey. Distance education has become a key element for the Ministry of National Education to continue its services and to transfer these services to all education stakeholders. MEB has decided to conduct distance education courses on its online platform EBA (Education Information Network).

In Turkey, the Ministry of National Education (MoNE) is carried out distance education process in two basic ways: (1) formed infrastructure previously, the updating of the content in this process and the addition of new content that the national distance learning platform Education Information Network (EBA), (2) set according to grade level TV channels where video lessons are broadcasted in line with the program (TRT-EBA TV). Channels were determined according to the educational levels for the lessons to be conducted on TRT-EBA TV, and the program was made according to the grade levels on the relevant channel (MoNE, 2020).

The Higher Education Council (HEC) announced that as of March 13, formal education was suspended for 3 weeks until a second order. Later, this period was extended until the end of the term. On the other hand, HEC has planned to carry out the distance education process in two basic ways, just like the Ministry of National Education:

(1) All universities with a distance education infrastructure will offer their formal courses as associate, undergraduate and graduate distance education as of March 23 with their digital facilities.

(2) For universities that do not have this capacity, the open course material pool previously created by HEC was opened to all universities on 23 March. These universities will continue their courses on these materials (HEC, 2020).

The need and approach to provide open education access and distance learning has come to the fore with the change and effect of Coronavirus (Covid-19)

pandemic in education process. This pandemic is a clear understanding of the need to continue learning without interruption. It showed that more investment should be made in distance learning, rather than traditional education approaches to alternative learning approaches (especially open and distance education practices) which has shown that it is necessary to pay attention. It is now more essential than before to sustain open and distance education applications for the purpose of supporting formal education, but also at normal times. It is also important in some chaotic situations (epidemics, wars, disasters, forced migration, etc.) policy makers should consider advantages and disadvantages. The global pandemic process are still being experiencing today by all of us has made the importance of distance education not only in education but also in other fields.

2. The Purpose and Importance of the Experience Gained

The social distancing required to reduce the spread of Covid -19 in society has created a milestone for online education. Online education as synchronized and asynchronous distance learning is not new to academia, but has been seen as a complement to traditional face-to-face education, mainly due to concerns about teaching materials, other students, teachers, or students who feel disconnected from the entire program (Phirangee & Malec, 2017). However, online education is now considered the main way for students to socialize, connect with peers and teachers, and keep learning. The current situation thus presents, on the one hand, a conundrum for teachers to exploit and explore online education opportunities; and, on the other hand, due to the lack of knowledge and expertise in some teachers' online education delivery and high levels of stress among students, there are concerns that inadequate implementation of online education delivery may have negative long-term effects on online education.

The advancement of information technology has made online education possible in many parts of the world. However, the common challenge of online education - its potential to create a feeling of isolation and disconnection with other classmates (also called 'losing the human touch') - the risk of some students losing interest in their courses / programs remains extremely high (Khalili, 2020). For some teachers, this may be the first time using online education and may face difficulties in building and facilitating an engaging, positive and supportive online learning community for their students.

All educators with or without distance education experience and the learner suddenly had to teach or take lessons with the distance education method. Educational institutions and educators can discuss how lessons can be done with

distance education and they sought how to use online tools (Khalili, 2020). In the context of distance education, it can be stated that the world will not be the same as before. Most of the trainers have never used distance education tools before. These instructors prepare distance education and distance education material considering that their knowledge and skills that are limited, in distance education process, it cannot be said that everything will work perfectly. Mastering educational tools and programs in the digital environment is another major challenge. Finding themselves in a compulsory digital adaptation process, teachers competed with time while improving their digital literacy skills in a short period of one month. Distance education with theoretical foundations is a field of science, and these theoretical foundations are taken into account for successful distance education; therefore, practices and planning should be made meticulously.

The concrete experience that I have gained as a field expert who has been working as a coordinator in the distance education program for 4 years and who teaches 10 different courses as distance education has come to the fore in the subject of the courses given in our program, which continues in the pandemic process, as distance education. As seen in online education systems especially in distance education, learning-teaching processes are integration of education and training with technology to make it effective and efficient is required. Technology and web-supported new learning instead of classical learning methods aimed to create a higher quality and efficient education system by adopting the methods. Technically, I was able to take asynchronous lessons with any recording program, in the form of video lecture presentations, upload them to any LMS and manage the process as soon as possible.

One of the hardest things about distance learning is that you and your students are no longer in the same room to deal with misunderstandings. Instead, most of the learning time will inevitably be carried out by studies that require a high amount of self-management (self-management). On the academic side, it has enabled me to plan how to apply distance education in the most appropriate way at which education level, to use various types of assessment and evaluation, and to guide my colleagues and stakeholders around me.

Another key word when designing distance learning experiences is effectiveness. It will take more time to plan and will require a much higher attention to detail. You won't be able to fix mistakes immediately or make sudden changes when kids lose their interest. Effectively manage your time and mental health, you should prioritize longer, student-focused assignments and studies that will save your time and keep your students off the computer to continue planning the next units. On the other hand, pedagogically, it provided the students with the opportunity to

follow the lesson as close to the classroom environment with video lessons, enabling them to participate in synchronous lessons, providing sufficient feedback and giving them the chance to provide more guidance in the live synchronous lesson.

That's why simplicity is the key. It is very important to design distance learning experiences with very clear guidelines and use only one or two resources. Also, it is best to provide reading resources such as PDFs that students can always access if possible. As for digital literacy, it has provided the presentations used in the course to be presented in the form of an e-book by supporting them with the necessary visuals and graphics in line with effective presentation techniques.

3. Story Benefits and Challenges

One of the major problems experienced in distance education is undoubtedly the cost of digital education. Especially the lack of computers, tablets, mobile phones, and webcams or internet facilities for some students is one of the biggest obstacles to distance education. So, if you have students who cannot connect in this way, the aim of distance education will be ineffective at the beginning. This will show the deep inequalities in the education system. Also, the digital essential for every parent to help their children transition to online learning do not have literacy levels, or have sufficient time for homeschooling it is stated that lack of it causes inequalities. Alternative in open and distance learning, in measuring and evaluating students' achievement, assessment and evaluation approaches are needed. In this type of crisis, although there are many successful and unsuccessful applications in the emergency distance education process, one of the major discussions and deficiencies was experienced in the measurement and evaluation processes. The unpreparedness of educational institutions for the Covid-19 pandemic in many countries to suspend measurement and evaluation processes based on pass / fail (Koseoglu et al., 2020) or adequate validity and reliability studies instead of traditional exams and tests required online exams to be held in an instant way.

However, another reality that has come to light is that almost the entire educational process is result-oriented structured with measurement and evaluation approaches and process-oriented measurement and evaluation approaches are not used enough. Digitalization experienced as a possible consequence of learning analytics (Johnson et al., 2011) or the close implementation of alternative solutions that allow process-oriented measurement and evaluation. It is thought to be used frequently in the future.

Rapid digitalization in measurement and evaluation processes, although Covid-19 brought some solutions during the crisis, the data revealed by digital footp-

rints and this has raised concerns about how the data will be used. In this context, how digital data privacy will be carried out as well as how the measurement and evaluation processes will be carried out in the environment and how this data will be used within ethical frameworks is an important issue to consider.

Because of the perception, it does not really matter whether children are given exams or not, to give a concrete example, if a child's grade is five or four, in an environment where many people die, people cannot perform many daily life activities, and there are serious restrictions on going out. There are more important (social, economic, vital, etc.) problems for children than measurement and evaluation. But the critical point here is the decrease in students' motivation to learn. Moreover, the lack of remedial training means that the learning loss that is likely to be experienced more in disadvantaged students will not be intervened.

4. Results

Inclusion cannot be achieved with the same methods and strategies in distance education and formal education. In order to create inclusive educational environments that respond to different conditions and needs, we must prepare by considering the future, not the current situation. No matter how much the education system changes, teachers will continue to be the main actors of the education system. How the teacher feels and performs at work will continue to directly affect the quality, process and outcomes of education. Therefore, the "well-being" of teachers should be taken into consideration with their cognitive, psychological, physical and social elements.

The distance education process showed that digitalization is not an 'option', but a permanent element of our lives. It does not seem possible to imagine the future of education without digital tools and channels. In this process, teachers' increased mastery of digital tools and their digital literacy skills were an important achievement on the way to digitalization. Based on our knowledge and experience in digitalization in distance education, we can achieve a digital education that includes everyone.

It has been observed that there are universities that do not offer any live lessons (synchronous lessons). However, within the framework of the equality theory of distance education, "Learning outcomes are more equal, learning opportunities are given to learning experiences; therefore, live lessons should also be expressible. Instead of re-teaching the lesson in the live lesson, more effective learning is achieved if a lesson is carried out with active participation in the form of questions and answers over the video narration, it saves time to guide. If the

synchronous course recordings are also recorded and broadcasted weekly on the LMS, the students who cannot attend the live class will have a little bit of control over the process.

In order for distance education environments to be effective, instructional designers must have the ability to have a good command of the theoretical foundations underlying instructional design and to establish a relationship between theory and practice. At the same time, in content management, the way the educational materials are shared, the rate of sharing, the use of the correct measurement and evaluation system and feeding them with content that supports learning and teaching activities is very important.

5. Future Suggestions

Coronavirus (Covid-19) pandemic with its change and its effects, the need and approach to open and distance learning has come to the fore. This pandemic is a clear understanding of the need to continue learning without interruption and that more investment should be made in distance education, that traditional education approaches alternative learning approaches (especially open and distance education practices) has shown that it is necessary to pay attention. Open and distance education applications alone or for the purpose of supporting formal education, but also at normal times it is also important in some crisis situations (epidemics, wars, disasters, forced migration, etc.) It should not be forgotten that it has advantages and should be taken into consideration by policy makers.

This chaotic situation creates an understanding on the importance of open and distance education and that is providing maximum contribution to society-which should be seen as an opportunity in terms of benefit and more contribution to this field must be provided. An implementation process of the Covid-19 pandemic for open and distance education in society can be stated that they will make important contributions in terms of raising awareness. For example, open and more investment can be made in distance education applications, open and distance learning systems, infrastructure, management, finance, course contents, design, application. It can be developed by being supported in terms of resources in order to overcome the problems and improve the resulting numerical development qualitatively. The need to establish specific standards on the subject of competences and it is clear that there is a need for improvement in order to support distance education services, structuring, presentation, course and content determining the types of programs, teaching staff in the field of distance education. There are requirements such as regulation open and distance education in Turkey

establishing certain academic and financial standards in its applications, public support and providing interest can contribute to the development of the field in terms of quality.

Questions about how the education system will transform after the pandemic have started to appear in the minds of educational scientists. It is anticipated that the education of the future will be designed differently than today. In addition, it is obvious that the digital world and psychological factors are among the elements of the new education system and these two factors will be discussed below.

At this point, artificial intelligence (AI) can be one of the basic tools because there are many advantages that artificial intelligence provides. Like every person, every student has their own learning styles and needs. Although education is systematic and in a certain order, artificial intelligence gives students the opportunity to understand their individual needs in education. In this way, artificial intelligence can be a tool for the student to reach their full potential by increasing their potential. In addition, artificial intelligence can speed up the process by revealing the precautionary situations that need to be taken. Therefore, it is possible to increase the success of students by making early intervention with artificial intelligence. Especially university and vocational high school students have compulsory practical courses and internships. Even if distance education continues, unless an alternative is developed for this group of students, they will not be able to complete their education or have to take a break. However, a system can be developed to eliminate such training problems. Simulations can also enter the artificial intelligence education life and thus applied courses and internships can be done through simulations. In addition, digital systems (platforms, channels, and websites) can be developed and integrated into education.

When such extreme situations are encountered, a crisis management plan can be made for the education system. It can be integrated with an education or training program, taking into account the psychology of the students while making the plan. In this way, students can prepare themselves psychologically for such difficult situations and learn about the course of their education life after such cases. In this way, it can be tried to minimize their anxiety that may arise from uncertainties about their education by feeling more secure. In other words, it can be said that students who are currently in a difficult situation do not have to worry about uncertainties about their education.

Consequently, people affected by natural disasters or epidemics should not be overlooked when it comes to education while having the right to education. Although there are ways to continue their education remotely, it cannot be denied that students' psychology is more important than their education. In addition to

protecting people physically, their psychology should also be taken into account. These should not be forgotten while designing the future education system.

Distance education (also such as e-learning, m-learning, online learning concepts) as well as the presentation of content with educational technologies also attaches its importance to these processes. The new normally focused on these issues and purely result-oriented measurement, one of the wounds of the education system that has bleeding for centuries is process-oriented assessment and evaluation as well as assessment approaches. There is a need for studies to use the approaches. It in the context of using technology-supported alternative assessment and evaluation tools to start and gain experience on new distance education. It is necessary for the success of the work and to increase the learner satisfaction.

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CHAPTER 12

USING SOCIAL MEDIA TO SUPPORT ONLINE TEACHING AND LEARNING

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1. Introduction

In a scientific study a researcher makes an important methodological choice between collecting interpretivism favored quantitative or positivism favored qualitative data. If chosen, one of the strategies used in qualitative research design involves narratives as a form of inquiry; besides phenomenologies, ethnographies, grounded theory studies, or case studies (Bahari, 2010). Although narratives became quite a popular research design in the last years, storytelling is known as one of the ancient methods to pass the history and culture to the next generations. First oral, then painted, and later written storytelling was used as methods of passing along ethics, values, and cultural traditions. “For most people, storytelling is a natural way of recounting experience, a practical solution to a fundamental problem in life, creating reasonable order out of experience.” (Moen, 2006, p. 56)

I started to be interested in the narrative while spending a New Year's Eve holiday in the renovated cave hotels in Güzelyurt (formerly Gelveri - Cappadocian Greek: Karvali), a town of Aksaray Province in the Central Anatolia region of Turkey. There I was thinking of researching the innovative uses of technology and social networks to convey my story to other academicians. My resting-state brain experienced an insight solution with the Aha! moment - Eureka effect (Kounios & Beeman, 2009; Shen et al., 2016). That moment I also recognized that in ancient times philosophers from many cultures around the world isolated themselves within space and time and be more productive.

After I wrote the previous paragraph, I encountered that McAlpine's (2016) paper has a similar introduction approach with a story. This paper will provide the narration of my use of online teaching and social media during my academic

career, starting from the beginning until now. This time I will be the researcher and narrator for my story.

2. The Purpose and Importance of the Experience Gained

The purpose of using narrative research was to gather the experiences of on-line and with social media support in face-to-face classroom teaching and learning, from my stories 2002 onwards. Mitchell and Egudo's (2003) explored in their study that a rising trend of using the narrative approach across some disciplines as anthropology, history, linguistics, psychology, sociology, and organization studies. Although storytelling is an effective approach used in teaching environments, the narrative has been taken up more recently in educational research (McAlpine, 2016).

I was a faculty member at Eastern Mediterranean University (EMU) in North Cyprus and later at Aksaray University (ASÜ) in Turkey. I have started teaching online during 2002-2007 at EMU for Information Management 2-year Associate Degree Program. This was a pioneering initiative of Işık Aybay, Director of Distance Education Center that used custom-developed software EMU-LMS v1 & v2. I have digitized and uploaded course materials in the form of documents and slides. The asynchronous interaction with students was via e-mail and discussion forms.

Those days Anadolu University was a leading higher education institution for distance education going back to 1982s. However, few other universities had these organizations (Geray, 2007). EMU was one of them.

2008-2012 in EMU, while I was teaching in Information Technologies and Computer Education and Instructional Technologies, with a colleague Begüm Çubukçuoğlu Devran we together practiced and gained experience in using social networks, Ning and FaceBook. After I moved to Turkey, I was teaching at Aksaray University Department of Management Information Systems I continued to use FaceBook, Twitter, and Google Docs.

Narratives create a construction of the self; the participant is the narrator, an active agent where the story reveals her/his goals, intentions, and experiences during a time frame (McAlpine, 2016).

My colleague also liked the idea of doing narrative research which caught my attention. So, we first started to investigate narrative research about what it is, how to design and develop the research methodology, collect and analyze data. Those years narrative methodology was rarely used, so it took a while,

and we have written a paper covering our review of literature, what we have learned about the research methodology and procedure. We submitted it to a conference, and the conference paper was published as a book chapter in Springer (Elçi & Devran, 2014). After this achievement, we have written our individual stories of using social media to support traditional classroom teaching and learning. Although we had different characters, I was talkative and anxious and she was quiet and calm, both of us were enthusiastic to go on this narrative journey. Later we have asked another colleague, Nurten Kara from the same university to read our stories and restore it.

Restorying is when the researcher re-reads narrators' stories and reorganizes them regarding the aim of the research (Elçi & Devran, 2014). The researcher needs to be more aware of the missing pieces on participants' stories, besides conflicts and hesitations. Also, they need to reflect their feelings appropriately.

Our aim was to share our experiences with the faculty members who want to extend their classroom beyond the traditional boundaries to an online environment. Since the new generation of students was spending more time on the Internet and social media, integrating it into teaching and learning would be an approach to interact and communicate with them in "their way" (Elçi & Devran, 2014).

McCormack (2004) explains the process of storying the stories; emphasizes looking through multiple lenses (i.e. active listening, narrative process, language, context, and moments), sharing with the participant, and later reflecting on the interpretive story in relation to the comments that the participant has made.

While we were working on this study, I have got a post-doctoral grant from the Scientific and Technological Research Council of Turkey in 2015 and went to Roger Williams University (RWU), Bristol, Rhode Island in USA as a visiting researcher for Faculty Development. As co-advisors, I worked with Linda L. Beith, director of the Center for Scholarship, Assessment, Learning, Teaching, and Technology (CSALT), and Farbod Farhadi, Assistant Professor of Management in the Mario J. Gabelli School of Business. First, I have investigated the faculty development institutional infrastructure and initiatives in RWU (Elçi, 2016). I have attended a Teaching Online Certification Course, a Faculty Development program that used a hybrid learning approach. The first and last courses were face-to-face, the others were online. Also, I have done a mixed survey to investigate the students' and faculty members' perceptions and expectations on online and technology-enhanced teaching and learning environments (Elçi, 2020).

Although RWU made efforts to embrace digitization in teaching and learning, the teaching members were hesitant to adopt innovative technologies and there was a gap between student and faculty perceptions about utilizing technology in teaching and learning. The findings point towards the need to increase the knowledge base, to expand faculty development on digital teaching and learning strategies, and to foster student-faculty collaboration to improve learner engagement and performance (Elçi, 2020). As a result of changing roles, the pedagogical methods and technological tools used in the digital teaching and learning process should not be the decision of the institution solely, but as a result of a collaborative mindset of institution, faculty, and students. This great experience helped me to compare and contrast most of the stakeholders; administration, students, faculty and initiatives; teaching, learning, faculty development, online learning, social media in a higher education institute of a developed country and a developing country. Although it may be considered that there is a big digital gap and way of understanding, in some cases some problems and difficulty to find a solution that will improve digital teaching and learning can be similar.

We have organized a Technology Enhanced Faculty Development Workshop with another colleague Mohammed A. Abubakar in 2016 during the Academic Informatics Conference and then organized five more workshops in the Faculty of Business and Economics of ASÜ (Elçi et al., 2016). Some graduate and undergraduate students also worked with us. Aside from these, I was author in various papers on faculty development initiatives and faculty development centers (Elçi, 2019; Elçi et al., 2020). Besides, I have co-edited the Handbook of Research on Faculty Development for Digital Teaching and Learning (Elçi, Beith, Elçi, 2019).

These latter studies are expected to contribute to the literature on faculty development for digital teaching and learning.

3. Story Benefits and Challenges

The challenges faced will be written in advance, so it may be easier to recognize how the author benefited while overcoming the challenges. As mentioned earlier, the reason and context for using narrative are explained in detail in the study of Elçi and Devran (2014).

We were thinking that the narrative is an interesting and important research approach. After we have written the theoretical framework of the narrative methodology for the conference, our aim was to publish our full research paper in an SSCI journal. First, we have written in Turkish and submitted it

to some journals in Turkey. Unfortunately, the paper didn't get as much attention from the publishers as we have expected, the editors rejected it. Some journals also asked both Turkish and English version, so we also wrote in English. This time we couldn't get a response from the reviewers. Finally, we have decided to submit to journals published abroad. After a few direct rejects, a journal caught interest. We got a major review; the critics to improve the paper came from the reviewers. Although we thought we went through many papers and updated the literature every time still there were some important references missing. Also, to use some other details of the narrative was suggested since the participants' emotions, type of narrators, used language, and social context was not sufficiently stressed. And finally, after doing many more learning and updates, it was accepted and published by an ESCI indexed journal Research in Learning Technology (RLT) (Kara et al., 2020).

The specialties are summarized by McAlpine (2016) "Narratives are inherently and explicitly agentic and demonstrate how individuals attempt to navigate their desires, hopes, and intentions within the vagaries of the structural features of their lives as well as the unexpected." (p. 46). Types of narrators are known as first person, second person, and third-person subjective narrator. The benefits of writing a narrative is helping the researchers to learn more about the practice since when they write they also reflect on their experiences. Also, by storytelling and sharing the experiences with the researcher, the emotional aspects need to be included.

4. Results

This paper is the story of enthusiastic narrators and narrative research. The study of narrative methodology seems easy; contrarily the researcher should be more involved while doing the analysis and try to be in the shoes of the narrators. Using social media to enhance online teaching and learning which the author used for more than ten years brought many advantages. Some of these are using social media to support face-to-face classes for enhancing communication, interaction, student engagement, active learning, faculty-learner collaboration, peer collaboration, and enhancing digital skills.

These skill-building advantages are in line with the following literature. Friedman and Friedman (2013) states that fully or partially online courses that use social media will benefit students to acquire valuable and persistent skills (communication, collaboration, community, convergence, creativity) for their careers. Blaschke (2014) points out that the learning activities taking place via social media

will improve specific cognitive and meta-cognitive skills (new knowledge construction, course content reflection, learning to learn). Rothkrantz (2016) stresses the use of project work and virtual communities to integrate social media to courses. Al-Bahrani & Moryl (2020) suggests using social media to overcome some challenges of online education to connect with the students and recreate social connections also find innovative ways of developing connections.

5. Future Suggestions

Everyone has a story, a novel, by Savi Sharma (2016) has a stunning quote “Everyone has a story to tell. Everyone is a writer, some are written in the books and some are confined to hearts.” So, let’s not keep our stories in our hearts and share them with narratives.

It is suggested to write more narrative research to embrace the higher education institutions’ faculty members’ and students’ narrations about the challenges of the use of digital teaching and learning environments since their use will increase due to Covid-19 makes distance education inevitable.

Using a narrative approach has some drawbacks to be considered. First, after time passes everything that happens cannot be remembered easily, also the storytelling skills of the narrator need to be considered. And, the last disadvantage may be the difficulty of publishing since not many of journals accept narrations.

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CHAPTER 13

PSYCHOLOGICAL EFFECTS OF PANDEMIC

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1. Introduction

The transformation of epidemics into pandemics is an existential threat to every individual in society (Tabri, Hollingshead & Wohl, 2020). Therefore, it is of great importance to understand the psychology of individuals who make up the society and to increase their psychological resilience in terms of understanding the change and transformation process of the society during the periods when epidemic diseases occur (Asmundson & Taylor, 2020; Çerkez, 2017). In addition, it is necessary to understand the feelings and thoughts of individuals in order to take the necessary precautions to prevent negative developments in the society. During a pandemic, feelings and thoughts can deepen and become complex. Some emotions that may arise in individuals who are psychologically healthy are fear, anxiety, and stigma (Taylor, 2019). In addition to these feelings, feeling safe, which is one of our most basic needs, can also be traumatized. Individuals who have uncertainty about the future in their lives cannot feel safe and their emotional balance may deteriorate. The pandemic situation also causes insecurity and anxiety as it creates uncertainty about the future in the minds of the individuals who make up the society, such as when this situation will end, whether the people they love will not be harmed, whether they will be able to return to their old lives, and whether

they will suffer economic collapse. Experiencing the loss of a loved one directly or indirectly can raise existential anxiety to higher levels (Wind, Rijkeboer, Andersson & Riper, 2020). Besides feelings and thoughts, the system of values can also be changed. Man is a social being and needs socialization in order to survive (Ferreira & Serpa, 2019). Therefore, social cohesion and solidarity increase in this pandemic process that requires physical isolation. Thus, the values individuals attach to the phenomenon of society are strengthened positively, including cooperation and caring for others.

Although it has many negative psychological effects on individuals during the pandemic process, it is possible to talk about its positive effects and importance. In this context, suggestions were made on what should be done in the future. In this section where the psychological effects of the pandemic period on individuals are discussed, the importance of the experiences gained, difficulties and positive aspects, results and suggestions are included.

2. The Purpose and Importance of the Experience Gained

Due to the pandemic process we are in, the awareness of the psychological dimension of distance education and distance education that we have done in our homes as instructed sheds light on the variables we want to work with in this study. A lot of efforts were made for both ourselves and our students in order to pass this process in the most efficient way.

Although the fear, panic and anxieties, which surround us in the event of not being able to complete our work due to being at home, affect us negatively; we tried to obtain efficient results by trying to use all the tools of distance education in the most effective way. We tried to do our best by constantly updating ourselves and our knowledge about online learning and teaching processes. In addition, we faced the fear of death for ourselves and our immediate environment, which is felt by the pandemic process we are in.

Everyone living in the Turkish Republic of Northern Cyprus is going through an uncertain and troubled period like all over the world. In this period we are in the pandemic process, our work life, home life and school life have changed within the framework of certain conditions.

Within the scope of the coronavirus pandemic measures and also due to the interruption of education and training activities all over the world, distance education is a practice that is implemented quickly both in order to prevent students from falling behind from their education life and to prevent students from suffering

ring such as not being able to graduate and extend their semesters at school (Kürüncü & Kurt, 2020; Uzun, Eş & Evram, 2020).

Distance education is an application where students and teachers are provided with communication technologies for the integrity of education and the interaction between them without time and space barriers (Şakar, 1997).

When the studies conducted abroad were examined, Brinkerhoff and Koroghlanian (2005) found that learners' attitudes towards distance education were negative in their study. In another study, it is seen that attitudes towards education lead to both positive and negative results (Belcheir & Cucek, 2002). Similarly, research conducted in Turkey examined the distance learning programs of individuals who participated in the research has emerged that include both positive and negative effects are present (Heavy, Lush & Archer, 2008; Thompson, 2007).

In the quarantine process, news sources have a very important place in addition to the time we devote to ourselves while spending days and weeks and also months inside the house. Being constantly exposed to pandemic news and following unreliable news sources can cause us to feel negative emotions such as fear, anxiety, and hopelessness and make us feel this in our environment (Barbisch, Koenig, & Shih, 2015).

It is a natural feeling to experience feelings of boredom and hopelessness due to the minimization of face-to-face communication channels during the period we stay at home and to lead an isolated life from social life. This feeling can manifest as a desire to sleep, feeling unhappy and resentful, and not being able to enjoy the work we love (Barbisch, Koenig, & Shih, 2015).

Anxiety, the individual's sadness, the thoughts and worries they worry about, the anxiety felt by the individuals against the strong desire in the society; it is defined as anxious feelings that appear in situations where a strong desire seems to fail to achieve its goal (Cabı & Yalçınalp, 2013).

Anxiety is a normal condition that exists in an individual's life since birth. The normal state of anxiety helps the person to improve himself, increase the level of motivation and to work efficiently (Uzdu, 2016).

3. Story Benefits and Challenges

In the current century, the field of information technology is constantly being renewed and developed. With all these developments, distance education is also becoming a necessity. Due to the global epidemic disaster affecting the whole world, distance education has quickly entered all areas of life all over the world

and this system has been adopted especially in the field of education. However, since this transition is unexpected and sudden, it seems to cause some problems (Sayan, 2020).

In many parts of the world, education systems continued to continue education by discontinuing face-to-face teaching in the classroom and rapidly transforming online or distance learning. The fact that the instructors in education institutions had to switch to distance education without any prior preparation caused a great panic and anxiety among the instructors. While trying to cope with all these psychological negativities, being a mother, a spouse and a teacher at home at the same time made the teaching staff overwhelmed. In other words, having to fulfill life roles at the same time and place created a psychological pressure. It can be said that a great effort has been made to pass this process in the most efficient way.

The work to be done in the process of having to work in a home environment and preparing lessons for online training; the fear of not being able to complete tasks such as preparing written, visual and video-based lecture materials, recording and recording asynchronous lecture records, and providing student counseling together with these caused a great panic and revealed negative emotions such as anxiety and worry. Despite all these fears and worries, all the tools of distance education have been tried to be used in the most effective way. With the start of the pandemic process, distance education has come to the agenda and because of the rapid developments, teachers could not find the necessary time to learn and train the technical and pedagogical skills required to integrate digital technology education.

With the start of online courses, new information and training videos about online learning and teaching processes were shared with the instructors by the Distance Education Center. It has been tried to provide education in the best way by learning new information, online teaching methods and techniques and updating old information. In addition to all these, an important issue was whether the teachers had the opportunity to provide online education at home. Despite difficulties with the availability of digital devices, which was necessary for teachers to provide distance education became a necessity for them to transform face-to-face lessons into online teaching using simultaneous and / or asynchronous methods.

Petrie (2020) states that teachers who start distance education without preparation are faced with many stress factors. It is obvious that teachers who struggle to move to digital teaching platforms without adequate course material and training are experiencing great stress. Lessons to be made on Moodle could not be done with internet-related problems or had to be postponed. While preparing all

the course materials in written form was a very good preparation for the future, spending much more time and energy to prepare for the lesson caused difficulties in time management. In order to ensure that all information is up-to-date and updated, continuous checks have been made on training contents, moodle page and e-mail addresses. Along with these, many students who are very anxious and away from their families, being alone, not being able to focus on the lessons, being the victims of students who do not have computers or internet have also been a stress factor for teachers. Due to the low motivation of the students and also distance education itself, it was observed that there was no interaction as in face-to-face education.

In addition, many parents who could or could not help their children with distance education practices reached out to student counselors and expressed their problems and sorrows. In addition, it was quite difficult for the person and his / her immediate environment to face the fear of death and to get used to live with this fear, which is intensely felt during the pandemic process. With the Covid -19 epidemic, that the most important thing is health came to the realization more than before, and the recollection of how important family relationships and family ties are, was perhaps the most positive side of this process. In the observations made, it is thought that, for fear of losing their loved ones, many families bond became much more closely to each other, people spent more quality time together, and awareness of how important communication between parents and children contributed to the development of the child (Sorakin, Altınay & Cerkez 2019). The rapid transition to distance education and the link between work and family life, combined with the constant concern for the health of the family and the person, created high levels of stress for teachers. Teachers try to do their best using a variety of techniques (MacIntyre, Gregersen, & Mercer 2020). It has been emphasized that even before the pandemic process; the teaching profession is often one of the most stressful professions (Johnson, Cooper, Cartwright, Donald, Taylor & Miller, 2005).

The Covid-19 pandemic significantly increases the anxiety of teachers who suddenly find themselves in distance education and face new teaching methods. It causes anxiety, physiological effects, worry, cognitive distractions and avoidance behaviors (Reeve, Shumaker, Yearwood, Crowell & Riley, 2013). The fact that professional and personal life cannot be separated with a clear line in life in the home environment and that has forced us to have a strong sense of time management. In general, the stress factors that teachers experienced before the pandemic continued within the pandemic. Pressure caused by teachers' workloads, time constraints, unbalanced work-life integration, administrative obligations, relationships

with tense colleagues and school leaders, role conflict, managing innovation and change, emotional labor, fear of losing control of the classroom, fear of evaluation and low professional performance and self problems such as respect can be seen (Mercer & Gregersen, 2020). To assess the psychological health of teachers who bear the stress of the pandemic, perhaps the most obvious concepts to evaluate are happiness and well-being.

By switching to the distance education model during the pandemic process, a difference has been gained about the importance of individual learning and sharing of learned. However, it has been realized that distance education provides many advantages. Especially, learning and applying the use of technology and the existence of different teaching methods in education can be considered among the most important advantages. However, it is known that distance education has its advantages along with its disadvantages. Especially in distance education, the importance of the concept of equal opportunity has been understood once again. It has been stated that it has positive aspects in terms of flexibility in measurement tools, the opportunity to benefit more from the possibilities of technology, and easy communication with faculty members (Doğan, 2014). It was shared with their teachers that the students had problems due to internet quotas and that they could not attend live lessons, and that their students experienced many anxiety with stress.

4. Results

As a result, it can be said that Pandemic is an epidemic with effects all over the world. The effects of pandemics on physical health are frequently emphasized (Rubin et al; Wang et al, 2020). However, although the bodily effects of the epidemic are destructive and vital, it is stated that psychological reactions leave long-lasting effects than the bodily effect of the epidemic (Taylor, 2019). It is emphasized that the most common emotion experienced during pandemics is an individuals' anxiety about their own health or the health of their relatives (Kahvecioğlu, 2016). Although anxiety is a subjectively negative internal experience, it is stated that it would be beneficial to have a certain level. In addition, it is stated that certain level of anxiety has functionality in terms of avoiding dangers, acting cautiously and obeying the precautions (Watson & Hara, 2017). It is emphasized that the concerns about the security of the outside world experienced during the pandemic are among the concerns experienced by people developmentally. It is stated that the pandemic is psychologically challenging in terms of triggering such a basic emotion (Shultz, Baingana, & Neria, 2015). If people are exposed to a vital threat

by a virus that they cannot see exactly and do not know how to take a course, it will also trigger feelings of uncertainty. It is stated that the fear that a person will experience about the unknown is one of the basic fears, such as the fear and anxiety about security (Carleton, 2016).

It is stated that individuals show a normal distribution and variety in terms of their psychological reactions to the pandemic. In addition, it is observed that some individuals have no anxiety and are reluctant to take the necessary precautions (Kiecolt-Glaser, 2009). On the other hand, some individuals feel excessive anxiety and this state of anxiety negatively affects their professional and academic performance. When the literature is reviewed, it is seen that most of the people experience a moderate level of anxiety and thus, they both reduce risk factors and maintain their functionality (Kang et al., 2020). It is emphasized that the emotional and behavioral reactions given during the pandemic process resemble the symptoms of some psychological disorders. In particular, if individuals have previous or current psychological disorders, relapse of symptoms may occur during the pandemic process (Chen et al, 2020).

It is stated that the psychological effects of the pandemic can be triggered not only in terms of the threat it poses to the lives of individuals, but also due to the effect of daily life routines (Çetin & Basım, 2011). For example, it is stated that people who has covid 19 positive results are expected to prevent themselves from leaving the house; otherwise, people condemn them for not obeying the social isolation rule. Of course, it is observed that it can be difficult for an individual who is deprived of social interaction to get social support by triggering feelings of loneliness (Bolat, 2013). It is stated that this situation can also trigger depressive mood. It is also observed that depriving the individual from his / her freedom and not doing what he / she wants to do will cause a feeling of frustration (Lima et al., 2020). Therefore, it is said that individuals who feel frustrated due to the pandemic may find themselves reacting more aggressively than they normally do. In addition, it is stated that people's limited social relationships may also be impaired (Lau, et al., 2005).

It is stated that the most important factor that constitutes the well-being of individuals is physical and psychological health (Mukhtar, 2020; Polizzi et al, 2020). In addition to the damage to the physical health of individuals such as illness and death due to the pandemic, their psychological health can also be damaged due to concerns about the inability to adopt or adapt to new working models (Holt-Lunstad, 2017). At this point, the psychological situation created by the virus; It is emphasized that although it varies according to personality traits, reactions and experiences of the person to negativities, it is necessary for them to see that this si-

tuation does not only happen to them, that the whole country and even the world are trying to cope with the same difficulties and that they are not alone (Polizzi et al, 2020).

As a result, it is emphasized that epidemic periods affect individuals both physiologically and psychologically due to the effects they create. Therefore, epidemics can have many different effects in the society such as anxiety, fear and stress (Rajkumar, 2020). It is seen that individuals try to protect themselves from the disease while trying to stay psychologically intact during these periods (Traş & Arslan, 2013). It is stated that individuals have to break away from social support networks such as family and friends during epidemic periods when social isolation occurs and they go through this process difficult (Yalçın, 2004). On the other hand, it is seen that individuals with a strong social support system are psychologically more robust during the epidemic period and adapt much more easily to their old lives (Karal & Gül Biçer, 2020). In addition, it is said that individuals' individual, familial and environmental risk factors and guardian factors may have an effect on their health in the epidemic period (Eker, Arkar & Yaldız 2001).

5. Future Suggestions

Due to the situation, individuals' focus time and motivation may be reduced. Individuals may also be in the direction of postponing their work that they think is necessary. In this case, they should not be burdened to themselves; therefore, they should follow a path in the same way that they will free themselves from the feeling of necessity and be happier and more peaceful. It should not be ignored that loss of productivity is a normal situation in the current process. As a matter of fact, it is stated that it will reduce the possible anxiety and stress level (Shultz, Baingana & Neria, 2015). In addition, the most important factor in dealing with the psychological factors created by the pandemic process is to help the person to remember that emotions such as anxiety, fear, uncertainty, anger are not excessive and that they work as long as they do not eliminate the functionality of the person. In this process, it is stated that when emotions are shared with close individuals, social support elements will increase and it will be easier to cope with their negative effects (Akin & Akin, 2015). Therefore, it is emphasized that during the pandemic process, it will be beneficial for the individual to be in constant communication with individuals who are emotionally close to them and to share negative emotions in terms of maintaining the psychological health of the individual (Kaner, 2004). Again, it is seen that there is a relationship between a person's psychological health and body health. It is seen that if the individual does not experience intense psychological stress, the immune system will also be more resistant (Öz & Yılmaz,

2009). The reason is that stress will have negative effects on the responses of the immune system (Kiecolt-Glaser, 2009). For this reason, it is said that the measures to protect psychological health will provide more resistance to the disease (Sipahioğlu, 2008). In addition, the importance of physical activities to protect physical health is observed during the pandemic process because it is emphasized that better physical health is closely related to psychological well-being. However, it is stated that regular sports, good nutrition and attention to sleep patterns are important in terms of protecting both physical health and psychological health during the pandemic process (Rubin et al., 2010; Wang et al., 2020). It is stated that it is especially valuable for the individual to maintain their daily routines as much as possible in coping with the psychological effects of the pandemic. As a matter of fact, instead of changing all life habits of the individual, continuing it in a way similar to the one before the pandemic can help to get rid of the feelings of extraordinariness brought by the pandemic. For example, it is observed that the timing of sleep, leisure time activities and continuing family activities can positively benefit their emotions during this process (Terzi, 2006). Even if most of the people who experience this pandemic all over the world feel very unlucky due to the fact that such an epidemic coincided with the period they lived, they should not forget that there are still better reasons to feel optimistic in the future (Aksülün & Doğan, 2004). Of course, having better communication opportunities, more advanced technology and more educated societies can offer effective methods to cope with the problem (Tian et al., 2020). However, when feelings of helplessness are dominant, it is recommended that every person should remember and be optimistic that the resources to cope with this problem are much higher than in previous years.

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CHAPTER 14

PRACTICES OF ONLINE EDUCATION: PROFESSIONAL DEVELOPMENT AND COLLABORATION

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1. Introduction

Telling stories about collaboration and networking enhances the construction of knowledge for professional networking. Online education practices provide a bridge for strong networking and collaboration besides the opportunities in education and learning. Our story relies on the merging points of collaboration in mutual backgrounds and interests to provide more understanding in the world. As authors of this chapter, we paid attention to universal values for the equality in education by emphasizing the importance of online education, open education resources and management. In this respect, our joint collaborations in events and research have become shared as a story for professional development.

1.1. Service diversity with online education:

Online Learning; as it does not recognize the boundaries of time, space and online, it helps reach students from all over the world in the name of multicultural education while offers lifelong learning opportunities for adult learners. On-

line education reflects the learning environment in which learning and teaching activities are carried out with the help of information and communication technologies, which is different from the traditional learning-teaching environment. Online education has an important role in ensuring the right to education for all individuals today along with its reflecting lifelong learning philosophy, education service for a wide range of learners, education service with different applications for people with individual differences, affordability and student-centred education characteristics.

Online education as remote learning during the pandemic period has come out to have an important place and offered us opportunities at the point of application. In this respect, it appears with many qualities, both positive and negative. When we consider the advantages, online education is as;

- The opportunity to receive education and training at the same time
- Saving time, space and economy
- Interact with various learning techniques
- Instant feedback to learners

Considering the disadvantages,

-Face-to-face interaction and the disappearance of the communication environment

- Solving problems on overcoming learning difficulties
- Inability to control behavioural development

When advantages and disadvantages are taken into account, we must achieve quality and standards in order to demonstrate efficiency and effectiveness in online education.

1.2. The Role of online Education in Higher Education

The work and experience of our team in various institutions, both in management and in the field of online education show efficiency in the cooperation efforts. In this context, the webinars and conferences we have held during the pandemic period reinforce information sharing and reveal the power of international synergy. The education sector around the world, especially higher education institutions, has started studies to restructure education and training in the digital age.

In higher education, in order to preserve vitality and dynamism, we academicians and scientists have a great responsibility. It is also clear that if we want to increase the number of students and go beyond the political problems experienced,

by emphasizing the importance of professional development, we need to carry out serious studies on quality assurance and development in online education. The following items should be in synergy for online Education and Quality in Higher Education.

- Online pedagogy perspective
- Digital Citizenship achievements
- Research and project-based organizational development
- Participant Management and Recruitment

As a result; over the past decade, online education has developed significantly to become an important alternative form of education in higher education. What is not more surprising than that is the fact that the focus of current interest and different opinions are regarding the impact of online education on universities. The proposed synergy model can shed light on what will be the indispensable parts of online education and how to apply it, and at the same time, it can be alternative method by paying attention to international standards and quality (Gazi A., Aksal A.2011).

1.3. Quality and Standards in online Education

Quality and standards are set in online education with subjects such as accessibility, learning environment, technical support and infrastructure, technical support and promotion to students, programs and courses, evaluation, corporate cooperation and sharing, finance and facilities, documentation and open learning resources.

Technologies Used in online Education

Technologies such as MOOC, Wiqu, WebCT, and Blackboard are widely used in online education. Here are examples but not limited.

2. The Purpose and Importance of the Experience Gained

Unlike online education, to reflect the learning environment in which learning and teaching activities are carried out, to provide a benchmarking strategy, to provide sustainable cooperation, especially to enable goal-oriented cooperation, to save time and effort, has a great importance in terms of specially to gain experience in enriching professional development.

Benefits of the COVID-19 Outbreak for us:

- Covid-19 pandemic process taught us how close and how equally we are: It helped us to understand much better by experiencing that all people are very close to each other, and it was able to instantly meet with anyone on the other side of the world. In addition to these, we have seen very well that whether we are rich or poor, everyone is subject to the same equal conditions during the pandemic process. Naturally, this pandemic process taught us that the world is small and that we can work under the same conditions as everyone else. The importance of sustainability has become evident in smart societies and services that should be established on the basis of an equal view and life.
- Collaboration showed that we can build the new by using the existing examples, and also it helped us to understand that, thanks to open sources, we don't need to rediscover the world. We have thoroughly understood that there is a great need for cooperation during the pandemic process. We have learned that many problems can be overcome much more easily in cooperation. In addition to these, we had more opportunity to make comparisons. Thus, it allowed us to find better methods of making new things while doing something new. We learned that our resources are sufficient for us by using the resources we have more effectively and efficiently.
- Manual preparation or adaptation: We realized that there are many incomplete user manuals during the pandemic process. We realized much better that there should be serious user manuals, especially when they need to use the technical aspects of digital media. Thus, we made contributions to many international research and guide preparations with our colleagues and team. We understood much better that especially in online education measurement and evaluation methods had to be changed due to the training that could not be done face to face. In this context, our university sent us manuals regarding all activities carried out especially at the online education centre. We benefited a lot. In addition to these, as a result of preparation, distribution of measurement and evaluation of user manuals in online education for all of us allow us to have great benefits of it. Our awareness has increased. Naturally, we can say that thanks to the manuals that contributed a lot to our professional development.

- Adoption of participatory understanding in the guideline preparation process: As a result of the user guides prepared by our universities, we can say that it greatly supported the development of participatory understanding in all our academic staff for their personal and professional development. We can clearly say that we have come to a very advantageous position in solving our problems more easily with the participation of other academic staffs by asking other academic staff's views. This contributed us to make joint collaborations and made diffuse of our works to international networking and platforms. In the course process, we prepared many videos for students for the compulsory studies we want and need to do with our students. We made the desired event or activity much easier and more understandable with these explanatory videos we prepared. Thus, we were able to explain exactly what we wanted from our students. By using these videos, the students prepared their projects in a much better way in accordance with their purpose, and thus, we understood in our assessment and evaluation that they greatly help our students' learning and development. We created an atmosphere of developing generic skills for students with the support of teaching activities and engagement during our online courses (Altınay, F., Altınay, Z., Aydın, C.H. et al. , 2020).
- The need to improve ourselves in professional development and accessibility: During the pandemic process, we understood thoroughly that we, as academicians, had to improve ourselves within the scope of professional development. We have notified these demands to our universities. Our university has organized in-service training courses in many areas related to technology. We led the trainings of our university for staff and by this way, we have increased our professional development especially in the technological field and online pedagogy with these courses. In addition to these, we understood much better during this pandemic process that we had many shortcomings in accessibility. In this context, we have understood much better that we need to improve ourselves in the field of accessibility and that is a necessity in the practice.
- It will not be possible to make all courses and all programs unimpeded. For this reason, to include inventory studies within the institutional structure: It is understood that every university needs to develop its institutional infrastructure very well in order to make all the courses in our university smooth and unimpeded. Most universities were caught unprepared for the online education model in the pandemic process.

In this context, both academic staff and students faced many obstacles and problems at universities. It is understood that all universities should adapt their existing infrastructure to the online education model and complete the measures to eliminate their deficiencies as soon as possible in order to avoid these problems.

- Orientation in such cases (explanation of student, teacher, technical infrastructure support and roles): Both academic staff and students should be given periodic orientation trainings at universities in order to overcome the difficulties, obstacles and problems. These trainings help minimize the damages that may be faced by the universities during the pandemic process. A very special orientation training should be planned and implemented especially for students who have just started universities. Our researches and delivered seminars have become solution for these expectations. All we collaborated and tried to facilitate services to different universities
- Education and training is whole. Therefore, campus facilities are important (it is also very important to be a guide for online library resources): Education in universities is a whole. They cannot be separated from each other. For this reason, every university should use its campus facilities to get the maximum benefit. Strategic planning in using university facilities should be prepared and implemented in a serious way in this pandemic process (Karaatmaca, Altinay, Altinay, & Dagli, 2020).

3. Story Benefits and Challenges

- Different platforms (webinar, zoom, google meet): The use of Moodle course management programs has become the most important resources and needs in the pandemic process in addition to Jitsi, webinar, zoom, google meeting and many other programs in online education environment. Therefore, all faculty members and students had to make great efforts to become familiar with these platforms as soon as possible. However, as a result of these great efforts, both our students and our teaching staff had to improve themselves in terms of educational Technologies; as a result, they became very effective in professional and developmental context. However, everyone had great difficulties in doing this at first, faced with great problems, and in the course of problems, both students and faculty faced tensions and stresses.

- Information sharing environment, peer support: Students and lecturers had to create information sharing environments very quickly within the scope of education and training in universities during the pandemic process. For this purpose, whatsapp groups were created. In addition to these, efforts have been made to work on Facebook. While doing these, those who our most attention was in the same peer group established more communication and information sharing environments. Thus, education was tried to be achieved during the pandemic process by supporting each other a lot in this difficult process.
- Making measurable and explainable strategies and practices: Every university had to put forward its measurable, explainable and applicable strategies to overcome this difficult process in terms of usefulness during the pandemic process. In this context, each university has had to benefit from all the stakeholders while creating its strategies. Therefore, since each stakeholder has a role and duty in the strategies formed by universities, it has been easier to implement the strategies because every stakeholder has embraced the strategies produced in order to get out of the chaos in education in this difficult period as soon as possible. Thus, it was ensured that the casualties in education during the difficult process were minimized.
- Educational institutions during the pandemic process: If we consider the structure of these institutions, the created corporate culture, entrepreneurship and vision are very important. Of course, the families also have crucial roles to play, but in these conditions, the best method is to provide individualized teaching and teaching with a portfolio that takes into account the needs of the child. It is very important not to miss the detail that online education or technologies used in emergency situations is not the main purpose of education but only a tool. Therefore, videos, repetitions and programs that support social skills, a course content and lesson design should be designed according to the conditions of the home and family, and the needs of the child. Stereotyped designs, unfortunately, cannot be expected to be useful in this process. In this context, it is necessary to benefit from technology acceptance, supportive process and development-oriented evaluation in this process in which urgent strategies will be developed.

4. Results

The following issues must be included in the synergy elements for online Education and Quality in Higher Education.

- **Understanding of Online Pedagogy:** It is of great importance that the logic of online pedagogical education is given to all faculty members within a certain plan and program with many in-service training courses to be organized. Thus, we need to teach that teaching in a digital environment is not the same as teaching face-to-face, and that many different activities need to be done.
- **Digital Citizenship Outcomes:** It has been understood that both students and faculty members have many deficiencies in digital citizenship issues within the scope of digital citizenship. In this context, it is understood that both teaching staff and students should eliminate the shortcomings they experience in these subjects with many courses and lessons in order to achieve digital citizenship in in-service training.
- **Research and project-based organizational development:** It is more understood during the pandemic process that it is necessary to make research especially in the education model of the students and to ensure their development in project-based studies. For this purpose, it is considered that research and Project-based educational developments should be provided during the pandemic period.
- **Participatory Management and Recruitment:** During the pandemic process, it has been observed that there should be more participants from all sections in management, whether academic staff or students. Thus, deficiencies and mistakes that may occur during the management process could be minimized. In addition to these, it has been understood that there is a need of personnel in online education centres of universities. In this context, many universities have had to recruit personnel by improving the personnel of online education centres. If the pandemic process had not been experienced, the staff of universities in online education centres would have remained weak and they would have experienced personnel weaknesses.
- **During the pandemic process, universities understood that they should attach much more importance to international standards and quality.** Therefore, it has been understood that even if the pandemic process is over, the online education model has entered the life of all universities

and this education model cannot be abandoned from now on (Altinay, Dagli, Altinay, & Altinay, 2020).

5. Future Suggestions

There are few suggestions to have better practices in online education and strong collaboration for professional development.

- Whether academic staff or students, everyone must have a story to live.
- During the pandemic process, goals that are more abstract need to be transformed into concrete goals.
- We can say that the intellectual capital of both students and academic staff should be developed.
- It is suggested that all stakeholders should stay in communication seriously during the pandemic process. Major problems can be encountered even in the slightest lack of communication.
- Great attention should be paid to establishing clear and understandable communication in communication.
- We can suggest that the information flow between stakeholders should be adequate and appropriate.
- During the pandemic process, more attention should be paid to information management and technology.
- Universities should be open to innovations and used continuously.
- In this process, efforts should be made to improve self-confidence and interpersonal communication.
- Particularly, one should be more careful about getting a job done by the right people.
- Authorizations should also be given to the right people.
- The amount of share allocated to the online education model in performance evaluations should be allocated even more.

Considering forward-looking suggestions, efficient productions and studies we have done with our teammates show that management in online education is an important element. Pedagogy and technology as an integral whole in the education strategies of the future will play a major role in the development of future competences.

n our stories, pandemic times make us to come together and share experiences through our networks. We have made collaborative seminars, conferences and research studies. In this way, we made a strong connection for our professional developments in OER, management, disability and online education for giving services to smart societies (Altinay, Altinay, Aydın, Altinay, Dagli, & Kalac, 2020; Huang, Liu, Tlili, Knyazeva, Chang, Zhang, Burgos, Jemni, Zhang, Zhuang & Holotescu, 2020; Huang, Liu, Tlili, Lazor, Amelina, Varoglu, Chang, Zhang, Jemni, Burgos, Othman, & Altinay, 2020).

Our message to readers for the future suggestions is on the fact that it will be important for the services that add value by enriching the innovative and entrepreneurial structure in higher education with the vision of cooperation and professional development, and implementing a participatory management approach in online education.

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CHAPTER 15

PROJECT-BASED LEARNING APPROACH IN HIGHER EDUCATION: STUDENTS' STORIES FROM NORTH CYPRUS

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1. Introduction

With the continuous developments in technology and the effects of globalizations, educational practices also require certain innovations and changes in their nature. Traditional teaching methods and approaches have started to become insufficient in meeting the needs of 21st century learners. The needs of the learners, which are being shaped by the changes happening in the world and requirements of professional life, necessitate teachers to continuously update their skills to accommodate with new approaches and methods in teaching and learning.

One of such innovative methods is project-based learning (PBL) which is not so old in its history but also not very commonly used due to the comprehensive planning and implementation procedures it requires. Project-based learning is partly based on Dewey's (1903) theory of learning-by-doing and can be defined as "any programmatic or instructional approach that utilizes multifaceted projects as a central organizing strategy for educating students" (<https://www.edglossary.org/project-based-learning/>). These projects should require learners to use various skills such as critical thinking, problem-solving, researching, speaking in public and team-work. Teachers design the projects in a way that they would last over a few weeks or a full semester based on the overall duration of the course. Through such a project, students learn to combine more than one discipline together and prepare their projects. Thus, as Bell (2010) pointed out, "from gleaning new, viable technology skills, to becoming proficient communicators and advanced problem-solvers, students benefit from this approach to instruction" (p. 39).

In order for effective implementation of PBL, there are certain elements that need to be established. These eight elements are:

- Key knowledge, understanding, and success skills such as content and skills;
- Challenging problem or question to be solved or answered through the project;
- Sustained inquiry via asking questions and finding resources;
- Authenticity through real-life tasks and tools;
- Student voice and choice in the way they work and what the end product will be;
- Reflection on learning and effectiveness;
- Critique and revision upon receiving feedback from the teacher and peers;
- Public product is presented to people other than their peers (http://www.bie.org/about/what_pbl).

Larmer & Mergendoller (2010) expanded on these seven essential elements through an example and renamed them as follows:

- i. A need to know
- ii. A driving question
- iii. Student voice and choice
- iv. 21st century skills
- v. Inquiry and innovation
- vi. Feedback and Revision
- vii. A publicly presented product

These elements can also be considered as the stages to be followed in an effective implementation of project-based learning. The current study follows these steps for the implementation of project-based learning in higher education context.

Bas & Beyhan (2010) examined the effects of project-based learning based on multiple intelligences and traditional foreign language teaching on students' achievement and their attitude towards English lessons. The study was conducted with a total of 50 students in two different groups in an elementary school in Turkey. The findings of the study revealed differences in attitude scores of students and that activities based on multiple intelligences are more effective. Students who

were exposed to project-based learning approach were more successful and more motivated at the end of the study.

Also, in their study on the integration of problem and project-based learning into sustainability program, Wiek, Xiong, Brundiers & Leeuw (2014) worked on a case study for implementing PBL at undergraduate and graduate level courses. The authors collected data through literature review, document analysis, observations, interviews, student evaluations and faculty surveys. The results indicated positive results regarding PBL integration into the programs.

In another study conducted in higher education context, Lee, Blackwell, Drake & Moran (2014) focused on how faculty defines PBL and their PBL practices. The overall findings of the study express a positive attitude towards PBL along with the challenges in the implementation of PBL and how teachers' self-perception of their role in PBL shapes their PBL practices. Biasutti & EL-Deghaidy (2015) studied the integration of Wikis as an online tool in project-based learning in a teacher education context. Participants worked in small groups over Wiki space. The results of the mixed-method study indicated that the processes involved can develop teachers' abilities to design projects in interdisciplinary contexts.

In their poster presentation from the ITiCSE'17 conference, Badets, Grasser & Peltier (2017) shared the results of an on-going study on the use of PBL in two international higher education institutions. The results up to the time of the presentation showed positive results in general with cultural differences regarding the perceptions towards PBL approach from France and Ohio. Gomez-Pablos, Del Pozo & Munoz-Rapiso (2017) collected teachers' opinions regarding PBL from various schools in Spain. A total of 310 teachers participated in the study by completing a questionnaire about PBL practices. Similar to other studies, the results of the study revealed positive evaluation of the PBL approach because it encouraged active participation of students, motivated students more to learn and helped them to acquire various skills.

Chu, Zhang, Chen, Chan, Lee, Zou & Lau (2017) also examined the use of wikis in project-based learning across three different disciplines: English, information management and mechanical engineering. The triangulated results showed a general positive attitude towards PBL and Wikis with differences in the level of participation among disciplines. The differences are explained by previous learning experiences, technical knowledge and links between learning goals and collaborative learning. Lastly, Mohammed (2017) studied the effects of integrating project-based learning into traditional teaching and the benefits of PBL over traditional methods. The study was conducted with 62 female students over a 14-week semester. The findings of this mixed-method study showed that PBL helped

students to develop 21st century skills, such as presentation skills, interpersonal communication, negotiation, creativity and innovation skills. It also indicated that using PBL as a complementary component of traditional teaching can increase the quality of education as well as learning outcomes.

2. The Purpose and Importance of the Experience Gained

The present study is an action research conducted in her course by the researcher. The study implemented project-based learning method as part of traditional learning and investigated its effects on students. The researcher was teaching an undergraduate level philosophy course and she decided to give a single question to the students to prepare their projects. Ten students participated in the study and the study lasted over a period of one semester. Data was collected through student reflections regarding the overall course at the end of the semester. This small-scale action research also functions as a case study which may not yield generalizable results but give inspiration and ideas to other educators to try out new ideas, methods of teaching and reflective practices.

As for the implementation of PBL, the researcher attempted to follow the seven steps given by Larmer & Mergendoller (2010). A need to know step was created during a regular classroom discussion when the researcher told about an anecdote where she explained her daughter started talking about philosophical concepts at the age of five or six and the students thought it was a joke. Based on the students' reactions, the researcher gave students a single question to prepare their projects on: At what age can philosophy education start?

3. Story Benefits and Challenges

The main challenge was at the course design and planning stage where it was needed to find ways to implement project-based learning principles through online learning. Although there was no similar example in Northern Cyprus, the instructor planned her classes over different online platforms and used different methods in order to implement all stages of project-based learning effectively. Two main platforms were used for the course to create an online learning community among the instructor and the students: Edmodo and Google Meet. The former was used mostly in asynchronous form to provide theoretical input about the course (e.g. definition of philosophy, its origins, etc.), upload and explain project guidelines, give assignments and announce any updates regarding the course. The latter, Google Meet, was used in synchronous form as an alternative to traditional in-class discussions. The students received feedback from the instructor as well as

their peers regarding their projects in terms of clarification and suggestions for improvement. The implemented project-based learning steps are explained below.

Once the students accepted the project, the instructor asked how they want to work. Thus, the students' voice and choice existed in choosing to work in pairs and doing a presentation of their project at the end of the semester. As for the 21st century skills, the students had searches on the Internet as well as asking people around them about the given question. Then, they decided to visit schools and/or talk to children of different age groups about simple philosophical concepts in clear terms to see how children would respond. This stage enabled students to develop critical thinking, problem-solving, interpersonal communication, researching and technological skills.

At the next stage, inquiry and innovation, based on the responses they collected from children, the students have realized that children can start discussing philosophical concepts in simple terms at a young age, as early as the age of three or four.

At the time of the fifth stage, the in-depth peer discussions were held Google Meet as an alternative to traditional in-class discussions. The students started discussing amongst themselves, if it is possible to encourage schools to implement philosophical discussion practices in their school and if yes, which activities can be conducted in such practices.

The feedback and revision stage which also took place online, enabled students to present their projects either through media tools and they received feedback from both their peers and the researcher. Based on the feedback they received, the pairs revised and improved their projects. However, although, the presentations were ready to be presented to the public, the last stage, which included presenting the planned courses to volunteering school administrators and representative from the Ministry of Education, could not be completed due to students' heavy workload at the end of the semester. Yet, in an attempt to familiarize students with virtual presentations as part of emergency education during the pandemic and avoid discouragement at the last stage of the project, the students were asked to present their revised ideas and their gains from the project over a series of Google Meet meetings held with voluntary citizens from the public and other educators who were interested in the project.

The data regarding the evaluation of the PBL implementation from the students' perspectives was collected through students' reflective journal which they provided in online form upon completion of the course. The findings from the reflective journals are presented in the next section.

Overall, the benefits of the study include helping university students plan philosophy education for different age groups; findings methods and techniques to transfer their philosophy knowledge to children of different ages; gaining self-discipline and learner autonomy during online education and project-based learning stages. As for educational benefits, this enabled enriching the course through alternative assessment tools, educational platforms and use of different teaching methods. The need for emergency education solutions arising from the pandemic also contributed to the instructor's and the students' problem-solving and crisis-management skills. On the other hand, this experience resulted in certain challenges for both the instructor and the students. As explained above, the main challenge for the instructor was at the planning stage. Then, the instructor had to keep students motivated in a virtual setting which was another challenge to overcome. For students, the main challenge was adapting to the project-based learning method which was quite different from the traditional teaching methods they were used to. They had to follow the subject-matter input as well as actively participating in the classes with their projects and present what they have done each week. However, despite all challenges faced by the instructor and the students, both parties did not give up on the course or wanted to drop out of the project at any point throughout the semester. It is possible to conclude that the instructor and the students were open to try out a new teaching/learning method and were motivated to see the results.

4. Results

The overall findings of the study revealed positive attitude from students towards the course design and project-based learning. The most interesting finding is that each student suggested a different aspect of the course or a different skill they have gained from the course. The individual responses of students are as follows:

One student focused on the benefit of being able to have multiple perspectives on an event before judging a situation:

"...This course gave me a different perspective on life. It taught me how to look at a single event from multiple perspectives. I always had a philosophy course but I never liked it up until now. I finally understand why philosophy is important and how I can approach different situations from multiple ways" (S1).

Another student highlighted the importance of being able to think critically:

"With the help of this course, I learned to suspect everything through critical thinking and I think being suspicious is a good thing because it teaches us how to think and stop memorizing things or believing everything, we are told..." (S2).

A student emphasized the significance of asking the right questions and questioning our own actions before others:

"...I learned how to ask questions. More importantly, I have learnt that it is very beneficial for us to ask the right questions, think about the answers to our own questions, use our own logic but also question our perspective from making a decision. Because what we need other than criticizing other people is, firstly, being able to criticize ourselves and our own actions" (S3). Similarly, another student also stated that being able to question ourselves is the most important thing he has gained from the course: *"...The questions and discussions that stimulated us to question our lives and actions were the best part of the course..."* (S4).

The next student focused on asking the right questions, questioning everything but also stated that the most important thing she gained from the course was presentation skills:

"This course taught me how to ask questions, question everything. However, the most important thing for me, as someone who has never done a presentation before, was learning how to prepare presentations and how to actually do a presentation..." (S5).

Different from the previous responses, one student explained that the best part of the course was conducting research about a topic and trying to prove it:

"...I believe that doing research about a given topic and trying to prove or disprove it was the best and the most beneficial part of the course because while doing research, you learn about all the aspects of a given topic..." (S6).

One student said the course and the activities helped her to demolish her prejudice against philosophy and stated that the project-based learning approach helped to revise and implement the topics they have covered in class:

"...I had a high level of prejudice against philosophy course due to my previous learning experience. However, the way this course was designed and the activities helped me to eliminate my prejudice and actually I like the course" (S7).

Similarly, another student taught the way the course was designed and implemented was very beneficial:

“...I think the best part was how the course was conducted even during the pandemic, especially the online discussions with our peers and the comprehensive project we had to complete with the presentation” (S8).

Two students focused on the benefit of questioning everything and how this can contribute to their professional lives after university:

“The skills we have gained from the course such as questioning, expressing ourselves, approaching a certain issue or situation from different perspectives and being able to work with different people will help us a lot when we start working after university...” (S9); “...this course did not only taught us how to do better research for academic purposes but also taught us how to question things and what we need to do in order to achieve a certain goal as well as helping the society we live in. These skills will help us become better students, better professional and better citizens...” (S10).

5. Future Suggestions

To sum up, the implementation of project-based learning led to positive results based on students' perspectives. It did not only increase students' motivation and classroom atmosphere but also, helped students to develop various 21st century skills. The adaptation of the project steps in accordance with the emergency education launched due to the COVID-19 pandemic also had an unexpected positive contribution to the course design in addition to the instructors' and the students' problem-solving and crisis management skills. The modifications made indicated that face-to-face or traditional education is not a pre-requisite for PBL implementation and that fully online or blended courses can also include PBL to help students gain 21st century skills even in remote education. The future studies can focus on completing all seven stages with better planning and time-management. Also, project-based learning implementation in a department-wide or faculty-wide concept can be investigated in terms of comparing the responses and perceptions of multiple teachers and learners from different courses. Another study may examine the challenges faced in project-based learning practices in institutions providing education at different levels. It can also be recommended to implement the philosophy courses planned by the students of this study for different age groups in schools through either traditional or online education and evaluate their success.

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CHAPTER 16

QUALITY ONLINE EDUCATION FOR ALL DURING PANDEMIC COVID-19

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1. Introduction

In the past, many different pandemics interrupted the life by causing loss of many lives: Spanish Flu in 1918-1919; Asian Flu in 1957-1958 and Hong Kong Flu in 1968 and influenza-H1N1 in 2009-2010. We were again all informed that the outbreak of COVID-19 started caused by SARS-CoV-2 virus in Wuhan, China in December 2019 and spread to all countries by the announcements in the news and media. On 30th January 2020, we were shocked to hear that unexpected, sudden COVID-19 outbreak was declared as a global public emergency and then it was announced as a pandemic on 11th March 2020 by World Health Organization (WHO, 2020). Every day, we heard recent news about the incidence of COVID-19 in many countries. Many symptoms of COVID-19 can be treated now and several potential therapeutics were evaluated by clinical trials but unfortunately, there isn't any vaccine which will protect us yet against this virus (Unicef, 2020).

On 11th of March, I was teaching Biol 105 course to psychology students in an amphitheatre of CL building of Eastern Mediterranean University. There were 45 students in my class from different countries. While lecturing in the classroom, we suddenly heard the voices of people running down the corridors. After one or two minutes, voices in the corridor grew louder and screams became louder. We were all so scared. I immediately opened the door of the classroom. The teacher in the classroom across from my classroom opened the door and we made eye contact. We asked what is happening to each other. She didn't know what happened like me. I asked one of the students running down the hall why she was running. The student told me that Covid-19 has surrounded the whole world; I think it has

spread in Northern Cyprus. All students and teachers quickly vacated the classes. The students ran in a panic and went to their dormitories. I immediately went to my room at Faculty of Arts and Sciences and collected my belongings. All the teachers ran, got into their cars and drove home. When I got home, I immediately turned on the TV and watched the news. On the BRT news, I learned that the COVID-19 is rapidly spreading around the world and the government and the Ministry of National education have ordered the closure of all schools and universities in Northern Cyprus to prevent the risk of contamination. The next day, the government imposed a nationwide exit ban and everyone was locked in their homes for 15 days. I have an undergraduate degree in biology and one of my master degrees is in Molecular medicine. Therefore, I knew the structure of viruses, their reproduction patterns and how they are transmitted between organisms. During the lockdown, I have read dozens of articles about COVID-19 and I was horrified after reading each of the articles. Because I learned that COVID-19 is a mutated virus, can remain suspended in the air; settle in the lungs by respiration and cause death and severe respiratory problems. The way of reproduction and spread of the mutated Covid-19 was not similar to other viruses because this virus could survive in a non-living environment like on paper and on pencil. In other words, this virus could be transmitted from human to human and from inanimate objects to humans (Kamerlin & Kasson). This virus was spreading all over the world and was threatening our health and psychology. So how would we educate our students?

2. The Purpose and Importance of the Experience Gained

Many messages started to come to my mail from the university. All teachers were informed that most of our students are returning to their home countries and our University shifted from face-to-face education to online education. I had attended online conferences and seminars before, but I had never taught online. Instructors in the educational technology department and the distance education department of our university gave information about online education to all teachers. This team prepared videos and lecture notes about technical topics of online education such as how to teach in Microsoft teams, prepare exams, assess students, learning online, how to share lecture notes with students and sent these videos and documents to our emails. During this time, I read many articles and books about online education. I tried to adapt all my lecture notes to online education. After a 15-day break, we started to provide synchronized online training to our students on Microsoft team's platform. We had regular departmental online meetings to share our experiences and to find solutions to our problems. I prepared all my lecture notes as power point presentations with many visuals and uploaded

to the online platform. I rearranged my course outlines and changed the dates of the lectures which will last from 30 March to the end of May 2020. I uploaded many videos, animations and scientific articles about each topic to the platform to attract the attention of students to the course. The teaching strategies that I used during my online lectures were question-answer, problem solving, and discussion. To enhance students' engagement and to foster their collaborative learning skills, I related the course topics to daily life and I gave them projects and let them to present their projects as power point presentations. I recorded all my lectures and uploaded these records to the Microsoft platform. This gave a chance to students to have an access to the previous lectures again and again. In the first week, I had students who did not attend classes. I sent e-mails to my students who did not attend the class to find out why they did not attend the class. I called my students who did not reply my e-mails. To preserve the well-being of my students I warmly greeted all my students at the beginning of each lesson and asked their problems related to health, food, psychology and tried to help them. I directed my students with psychological problems to the psychological guidance counselling department of the university. A team of instructors and officers from my university delivered food to the students who could not return their home, countries and stayed at dormitories. I tried to use different assessment techniques such as online quiz, research projects, essay writing and online midterm and final exams. During my courses, I asked simple questions to my students related to topics so that they could answer these questions easily and they felt happy. This motivated my students and increased their engagement to the course.

3. Story Benefits and Challenges

Pandemic COVID-19 has forced and accelerated the digital transformation of higher education in response to school closures, recommendations to keep our distance from other people and travel bans to limit the spread of this outbreak. Digitally developed countries successfully delivered distance education to the students (Basilaia & Kvavadze, 2020; Zhou et al., 2020) by following alternative learning pathways such as online education (Italy, China, Germany, and France) and homeschooling (Lebanon), radio programs and TV programs (Vietnam, Mongolia) (Azzi-huck and Shmis, 2020). Undoubtedly, using both synchronous and asynchronous type of online teaching platforms helps students to access information without time and place limitation, provides continuous learning, enables collaborative work and contributes students being technology literate. When the lectures are recorded and uploaded to online platform, students can reach the subjects over and over again and this helps to consolidate the subjects.

Unfortunately, online education was ineffective in most of the underdeveloped countries (Adnan & Anwar, 2020) because of many challenges. There are some serious obstacles faced by the instructors during online teaching such as psychological problems-fear of being contaminated with COVID-19 and death; technological problems in facilities of some of the students (not having computer, not having a smart phone or not having internet..), internet interruptions at home, difficulty of some students to access online lectures with their cell phones and insufficient knowledge of students about using online platforms. As students take support from the educational technology teams of the universities, they learn how to access and use online platforms. Other problems can be diminished only by the collaboration between the government and the universities.

4. Results

Corona virus disease continues to spread across the globe and there is still no treatment for COVID-19 and scientific researches continue to be able to find one. Many schools and universities started to reopen in the world and some universities will continue with only online education or some with hybrid education. Online education becomes more prominent in universities and needs more attention and adequate investments of government, universities and instructors. Policymakers and universities may use the COVID-19 outbreak crisis as an opportunity to evaluate and enhance the online education that can reach every student and prepare all of us for any possible emergencies in the future.

5. Future Suggestions

I have some suggestions for the government, universities and instructors to enhance quality of online education and provide equity in education for all during Pandemic:

For government, I suggest

- the use of high-quality broadband,
- agreeing telecom companies to eliminate the cost of internet to students and instructors
- to equip teachers and students with electronic devices
- custom reduction for laptops and smart phones
- providing legal, financial and administrative support to the instructors for their professional development

- free randomly COVID-19 tests for students and instructors
- free delivery of face masks and disinfectants to the universities
- For the universities, I suggest
- providing systematic teacher training for the use of online platforms
- adding educational technology course as a compulsory course to curricula for each department
- starting hybrid education after all safety precautions against COVID-19 are taken at universities
- doing research to evaluate online experience of their students and instructors during COVID-19 to see their weaknesses and strengths in online education and then find ways to eliminate the weaknesses.
- re-manage and redesign their online education to meet the needs of students and instructors based on the data obtained from researches done

for instructors, I suggest

- offering both Synchronous and Asynchronous online education
- using different teaching strategies to enhance interaction between students such as relating each topic to daily life, question and answer, problem solving, discussion, using more visuals, videos, animations in lectures to attract the attention of students to the topics
- using different assessment techniques such as projects, essay writing, student presentations, quizzes, midterm and final exams
- re-designing all instructional and assessment materials suitable for the student to work with either smart phone or laptop
- designing self-study projects and home works for students in the time of Wi-Fi failure or poor connection
- improving two-way interaction of teaching
- preserving the well-being of students with warm greetings, asking their personal problems related to food, physical and psychological health and trying to direct them to responsible officers in your University

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CHAPTER 17

FROM UUCP TO ARTIFICIAL INTELLIGENCE BASED APPLICATIONS: JOURNEY OF THREE DECADES

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1. Introduction

I laid my hands on the computers in 1986 for the first time when I joined my first job as a lecturer in a teacher training college. Then in the late 1990s while working on my doctorate dissertation, I was getting my chapter typed on manual typewriters. My younger brother then introduced me to a great friend who was Systems Analyst at the Computer Centre of Maharshi Dayanand University, Roh-tak, Haryana, in India. He was promoted as System Manager; afterwards he left India to join a good organization in Canada. This was that time when there were no internal HDD in the machines and they were with monochrome monitors, no mouse. I learned typing for two months by going to a shop in the city which was a training center on shorthand and typing using manual typewriter. This helped me a lot to work on keyboard and typing my own thesis!

My experience with online learning they began in 1996 when I joined Indira Gandhi National Open University as its Regional Director at Shillong Regional Centre. Shillong is the capital of Meghalaya. In our University office, we established a small computer centre and purchased a modem so that we can use internet. Internet came to India in 1995. So in that way we were fortunate to use it since its infancy stage. In late 1996 I was transferred to Jaipur (Rajasthan State) Regional Centre of Indira Gandhi National Open University. In Jaipur I got the opportunity to be in touch with some friends at National Informatics Centre, a Government of India body, under the Ministry of Electronics & IT (MeitY). I requested them to provide us internet facilities period. These were those days when we were using modem and to connect to internet with some service. There were no modern-day

browsers at that time. I remember we used Microsoft's IE and Netscape Navigator. Later on, I got local area networking done in our office so that we can work on a network of various computer machines. Since then I have been regularly using internet and tried various online tools for teaching and learning and research purposes. I have been very much interested since the beginning in computing and learning programming languages and how to use the power of computer and internet for teaching learning and research. I have the experience of creating various online courses and some massive open online courses. It was in the year 2013 when we offered a massive open online course on open educational resources for the first time in India. We had used WizIQ platform for our massive open online course. Next year (2014) I moderated one module of a massive open online course offered by National Council of Educational Research and Training in New Delhi. This online course was also on open educational resources.

2. The Purpose and Importance of the Experience Gained

Over the period of the around three decades, I have acquired lot of experiences on computing and in online teaching and learning. Let me share some of them.

Quality Board for Campus NooA

I was a member of Quality Board for Campus NooA (pl see <http://campus.nooa.info/>). NooA (Nordic online Academy) was established in 2012 by Morten Flate Paulsen, Professor of Online Education, with a mission to provide quality online education that creates sustainable value, public awareness and footprints to follow. The Quality Board is set up to support Campus NooA in assuring, maintaining and developing the quality of NooA's total operations, including information of courses and programmes, administration of courses and programmes and student services, course contents, teaching and learning methodology, evaluation of students, and teacher qualifications. <http://campus.nooa.info/mod/page/view.php?id=543>.

The Quality Board is set up to support Campus NooA in assuring, maintaining and developing the quality of NooA's total operations, including information of courses and programmes, administration of courses and programmes and student services, course contents, teaching and learning methodology, evaluation of students, and teacher qualifications.

Main activities:

1. The Quality Board will advise NooA in designing and carrying out evaluations related to all projects with national and/or international external funding.

2. The Quality Board will advise NooA in developing and carrying out suitable evaluation of courses and programmes.

3. The Quality Board will contribute to and ensure that NooA administration produces a yearly quality report to the Main Board of NooA.

4. The Quality Board will advise NooA in developing a suitable quality assurance system.

Integrating Educational Technology and launching of fully online programme at Wawasan Open University, Malaysia

I developed and directed the appropriate educational technology and learning facilities in the University to enhance the learning experiences of students. This included supporting development of online courses including MOOCs; planning, advising and providing pedagogically sound instructional design support for course development mounted on Moodle.

Commonwealth Executive MBA programme (CeMBA) was launched in fully online mode in January 2017. <https://www.openlearning.com/wou/> is the portal for this program.

eLearning at University of Fiji, Fiji

I organized number of programmes for capacity building of the faculty members by training them and to strengthen their eLearning programmes using Moodle, and introducing mobile learning through Moodle Mobile. The website is <http://elearning.unifiji.ac.fj/moodle/>

Seamless integration of conventional education with MOOCs

I was a member of the MOOCs Expert Committee constituted by University Grants Commission (Ministry of Human Resource Development, Govt of India) to formulate credit framework for seamless integration of conventional education with Massive Open Online Courses (MOOCs). Its another objective is to undertake comprehensive deliberations on all issues concerned with successful implementation of MOOCs.

The OER MOOC

<http://drrameshcsarma.wiziq.com/course/28219-the-oer-mooc>

I co-anchored the first ever MOOC on OERs in India, named, “The OER MOOC”. The Open Education Resources MOOC was jointly organised by LMP Education Trust, India and Commonwealth of Learning, Canada. It was a 4 week online program designed to enhance knowledge about OERs and to equip for effective use and adopt OERs in ones programs as well as to be able to create our

own OERs and contribute to the pool of OER resources. The nominal duration for completing this course was 4 weeks. However, because of the nature of this program which allows flexibility and personalisation, participants were allowed to take another 2 weeks if they so wished to complete the course. This MOOC was designed to help impart the knowledge and develop the skills needed to be successful in learning from OERs or teaching the chosen subject to post-secondary students and life-long learners using OERs. MOOC after OER included access to colleagues and discussion forums with other MOOC participants centered upon common interests and pursuits. The OER MOOC was conducted from August 9th – September 22nd, 2013. However the support continued thereafter for those who were interested in more information and were working on activities or assignments. Around 1500 participants registered from 80 countries.

Virtual Open Schooling in India

Virtual Open Schooling can be defined as an educational practice that provides opportunity to learners to study a formal school-based course online and gain credit for certification purpose. Learners can study using asynchronously or synchronously technologies. The courses are based on existing Open Educational Resources, and are built around a learning management system with content stored on online repositories. Digital media integration would facilitate effectiveness of curriculum. Synchronous and asynchronous technologies would facilitate interaction - with peers, with teachers, and with content. In India, NIOS has initiated to launch and start VOS to serve learners to continue their education and skill development. See the site at <http://vos.nios.ac.in/niosvirtual/>

I prepared the feasibility report on Virtual Open Schooling in India and it is being successfully administered through NIOS (National Institute of Open Schooling), Noida, India, which can be accessed from the URL on the Feasibility Report by Ramesh Sharma = <http://goo.gl/AdB8jD>

eLearning at the University of Guyana

A workshop on eLearning was conducted at the Institute of Distance and Continuing Education (IDCE), University of Guyana on 14 December 2009. Teachers from the University of Guyana, Cyril Potter College of Education and Guyana Technical Institute participated in this workshop. We focused on quality in distance education, design principles for eLearning and integration of multimedia into eLearning. A session on copyright issues in distance education generated a lot of interests among participants.

Digital Learning Integrated Course Design (DLICD)

We organised a faculty development programme Digital Learning Integrated Course Design (DLICD). It is a 10- credit programme consisting of 2 Modules. While Module 1 is transacted through a workshop, Module 2 focuses on transacting a course in a full semester and sharing of experiences in Workshop 2. The entire programme is equivalent to one Orientation / Refresher Course.

Virtual Museum of the Teatro São João – Salvador, Bahia, Brazil

This was a unique experience. I have worked collaboratively with Professor Alfredo Eurico Rodrigues Matta from Universidade Do Estado Da Bahia, Dr Maria Antonia Lima Gomes, Professor Lucas Robatto, and Mr Rafael Bernard Lima Gomes, on building the virtual museum for the Sao Joao Theatre in Salvador, Bahia, Brazil. We followed the Social-constructivist Cognitive Design by considering the following parameters: Context, Collaboration, Mediation, Interactivity, Metacognitive Diversity and Content related to the context. We were conscious of working on one or more principles regarding to the content of the collection. When we create a museum on religious freedom, we need to adopt a principle for interpretation of the human rights; if it is a museum on the slavery, maybe it should have a principle for understanding of the African diaspora, or of interpretation of the racism; if it is a museum on a neighborhood of a city, some understanding on this city.



Image 1: Virtual Museum Teatro São João

We laid greater focus on contextualization. We examined the context that helped in the reconstruction of the design of the Theater, its characteristics and social presence. At the end we had an interpretation and a script of the collection about the theater: memorable shows, important moments, characteristics of the building, the interiors, the relationship between the theater and the city, and finally, a set of data on the location and neighboring spaces of the theater. We further involved community, admirers and researchers of the Theater of the Faculty of Music of the University, Historians and any person interested on the subject in the city. As the technical solution adopted, we used socio-constructivist cognitive design, conceptual notions about virtuality, virtual museum organization and 3D modeling for WINDOWS system. The museum was tested on the client computer and the data was stored in a database on the server, for later remodeling. The museum can be visited at the link: <http://www.teatrosaojoaodabahia.net.br/>



Image 2: Virtual Museum Teatro São João

The National Institute of Industrial Property (under the Directorate of Patents, Computer Programs and Integrated Circuit Topographs, Federative Republic of Brazil) issued Certificate of Registration of Computer [Computer Program Registration Certificate Process Number: BR512018001203-5], valid for 50 years from 1st January following the date of 03/19/2017, in accordance with § 2, art. 2 of Law 9,609 of February 19, 1998.

3. Story Benefits and Challenges

My experiences have been very helpful to me for my teaching and research work. I have been able to design applications to be used in open and distance learning to provide solutions. I was able to take up educational technology solutions for capacity building of faculty and promoting the open resources.

4. Results

The journey from UUCP to AI based applications has been phenomenal. We have been able to use the technology for betterment of educational attainments. For the past few years we have been offering free capacity building programs for anyone who are interested in technology. We believe that mobile learning is the future mode of learning technologies and thus offer courses using WhatsApp as the main channel. We found that asynchronous mode of communication is more convenient to our members and thus have created a unique framework for sharing knowledge.

5. Future Suggestions

We are currently witnessing two revolutions: 4th Industrial Revolution and 4th Educational Revolution. We live in a VUCA (Volatile, Uncertain, Complex and Ambiguous) world. The pandemic has revealed that we were not ready for such a state we are in now. But no one imagined that we all shall come to a standstill due to one tiny micro-organism we cannot see with our naked eyes. There are implications for it. We need to be better learner and active learner. We need to explore how modern technology like 3D printing, Internet of Things, Deep Learning, Quantum Computing and etc, can be put to beneficial use to humanity.

CHAPTER 18

LEARNING DISTANCE EDUCATION

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1. Introduction

COVID-19, which emerged in Wuhan, China in December 2019, previously thought that it would just stay there. As shown on the news, the number of people who died in Wuhan due to this, new hospitals have started to be built, quarantine hotels have been created, etc. while watching news broadcasts, we were continuing our lives with the thought of being away from them. Yet the world was very small now. Maybe we did not want to think about this, but hundreds of flights were taking place every day to many parts of the world. People could travel the world from one end to another. No one had predicted that COVID-19 would turn into a pandemic soon. By the way, what was the “pandemic”? Most people have researched this online. It meant “epidemic”. It is an epidemic that will affect the whole world for months. As the TRNC, we were comfortable. Our months of January and February were comfortable. We also did not have any disease until the first week of March. Tuesday, March 10th was a normal day. We got up in the morning and went to our school with our students. A few hours later, the news was heard. First COVID-19 case in TRNC! We didn’t believe it at first. From time to time such news had appeared before. Maybe this was so; we even prayed that I hope so. But of course it was soon heard that the news was true. We went to our classes in fear. Afterwards, an announcement was sent to the schools from the ministry. Schools would be closed until March 16. For this period of about 1 week, we prepared and gave homework and repetitions to our students immediately. Because we were expecting that we would meet on Monday.

A few days later, it was reported that the schools were not opening on Monday. When I heard about this, I started to do research on the internet while thinking about what I can do to prevent children from falling behind their education. I had serious concerns about distance education in primary school children. I thought how much the little boy would use the computer, the internet and how he would listen to us. Of course, as I learned about this later, I learned that there was a method for this job. Meanwhile, I contacted the parent group that I created on the phone. In the first place, I started sending them homework over the phone. I also sent the lecture videos I took or that were on the internet in this way. Business people helped families who said that they could not afford buying phones, tablets and internet. Meanwhile, I and some of my friends searched the possibilities of distance education on the internet. Our Ministry has already started to organize some trainings in this sense. I attended these trainings. I realized that I had a lot of knowledge about distance education and that I can now use it well. In the new academic year, we requested e-mail addresses from our parent groups and included them in the online classes we created. We made video submission, paper submission, and homework control from these classes asynchronously. We did the live lessons with the students who can participate in the synchronous training at the times we determined.

2. The Purpose and Importance of the Experience Earned

The most important thing in this process was to continue education. Since the new term cannot start with face-to-face training, we started with distance education without wasting time. With the communication I created over the phone with my new class, I asked them for a mail account. I created a distance education class on Google Classroom with the incoming mails. In this process, we had to work to start lessons without wasting time and to reach the outputs required by education. During this period, our ministry had lecture broadcasts on Moodle and on Brt 2 channel. We also shared the videos we obtained from the distance education classes. In this sense, there were videos I prepared from the mathematics lesson for the ministry. We asked them to follow them both from the Brt 2 screen and from the links we sent. We also showed that they can access videos by entering the Moodle system of the ministry with guest login. We sent homework in line with the lessons taught. Reaching the outputs was our main goal. Then we switched to online class and saw each other face to face. In this process, the psychological dimensions of the work also came into play. As the flights stopped for a while, we had students whose parents were abroad. They put us in their parents' shoes. Some of our parents were dismissed during this process. For our students, who experi-

enced distress caused by this, it was an opportunity for our students to be face-to-face with them and to talk about their troubles from time to time. We chatted with them about this and tried to motivate them. We told them that this situation was a temporary situation, that everything would be alright, and we were very sorry and we were looking forward to meeting them. Motivating the children, talking to them both took them away from the disruptions in their home and brought them closer to the teacher.

3. Gains and Challenges from the Story

At first, distance education was a situation that seemed very difficult and even impossible for some people. I had not done any work related to distance education before. We were doing lectures in the classroom using the computer, projector and internet connection, we prepared our work on the computer and presented it to the students, but when we were distant, we were uncertain at the point of doing this. The same thing was the uncertainty that all children could watch and participate in this training. It was a challenge to make up the equipment deficiencies of students with poor economic conditions. In this sense, it was tried to make up for these deficiencies to the students who could be determined. No matter what was done, there were parents who never contacted the teacher. There were also students who did not respond to messages or calls and could not reach due to number changes. Some parents did not attend the distance education although they were aware of it.

Teachers also tried to equip themselves with the education they would provide remotely. In this sense, we participated in the trainings organized by the TRNC Ministry of National Education and Culture, Education Joint Services Department and we developed ourselves with these highly efficient trainings. We met various programs that we can use in distance education and that can help us prepare materials. There were many teachers who never attended these trainings. Trainings were not compulsory which resulted in less attendance. In this way, as a result, I saw the people who really care about this job and wanted to learn, that became clear. We have seen that some teachers claim to be older and are not open to new information as they approach retirement. We also saw that some branch teachers said “distance education is not for us” and tried to stand aside. Of course, later they started to do something with the ministerial pressure and the statement of the manager.

4. Results

In this long and challenging process, I once again saw the importance of teacher-student-parent cooperation and teacher-teacher cooperation with perhaps the most vivid example. It was very important for families to support distance education in order to shape the future of their children with a system they do not know, and take into account the guidance of teachers in this direction. Because the children that I teach were primary school children and as a class, they could not do this alone. Teachers also supported each other when necessary, tried to solve the connection problems, and shared a new knowledge they learned with their colleagues. With the new information I learned, I learned about many distance education programs in the technological sense. I am sure that my fellow teachers, who attended the courses organized by the TRNC Ministry of National Education and Culture, Education Joint Services Department, and gave time to them, agree with me.

I think that my competence in using time effectively during the distance education that we are doing in this pandemic time has increased. Since some of our students tried to study 2-3 children on a single phone or a single tablet, it was important to use time effectively in this sense. In order to prevent the hours of the lessons from coinciding with those of the other children, the lessons that we used to do asynchronously were able to return to synchronous later. I think we have achieved maximum efficiency in terms of time with both synchronous lessons that we started and finished on time and asynchronously supported studies when we cannot do this.

We have seen that education can be done only if desired, without being under the roof of the school and the classroom with the distance education and other studies we have done. The important thing was that the guidance of the teacher with the desire and determination of the teacher also parents' motivation has been increased. To a large extent, I think what was aimed in the beginning has been achieved.

5. Forward-Looking Suggestions

The pandemic process has not yet ended. Therefore, schools can be closed again at any time. In this respect, I think that teachers who do not receive the training provided by the ministry may have difficulty again. It would be better if these trainings provided were compulsory and the participation of all teachers was mandatory. While there were hundreds of teachers working in primary and

secondary education, the number of teachers attending these trainings was only 250-260 people.

Hardware deficiencies still apply to some children. These deficiencies can be advanced for children whose computer, tablet and internet deficiencies still continue. In case of closing schools, if these children are detected, they can be intervened immediately and the problem can be solved. In this respect, they will be transferred to distance education without lagging behind their education. There is no equipment deficiency for my own school, but it is also important to eliminate these deficiencies in other schools. Because teachers may want to come to school from time to time and do some of their lessons from the classroom during this distance education process. In addition to our Ministry, there are many sponsors and business people who have supported education. We can take action to increase this number and reach other sponsors because I think even a minute to be lost in education is very important.

CHAPTER 19

4 WALLS, 4 MONTHS, 4 LIVES...

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1. Introduction

I am a graduate of Hacettepe University Department of Social Service and I decided that I wanted to be an academician while continuing my undergraduate studies. I started my master's degree at Dokuz Eylül University as soon as my undergraduate education finished; however, the situation for doctoral studies did not develop so quickly. I moved here because my husband is from Northern Cyprus and I have not had a full-time job for many years. Just when I said I had given up my academic career, the universe sent me a message and said that I was not kissing you while you were looking at me, and I was offered to become a lecturer at my lovely university, which I did not know it was my own department, and after eight years, I started my Ph.D. So why did I tell you all this?

Even when I was a student in undergraduate education, I was always intrigued by the teaching of the profession and the different teaching methods. I am in the academic environment I have been longing for four years, and suddenly the lights went out, and next thing I know, as an unemployed, I am at home.

Four walls... My life, which I have not even been able to live as triangular between the clinic and the house for years (maybe it could be a triangle if I add the grocery store) has briefly become a point now. The school is closed, the clinic is closed, and even the markets were closed. Going to the grocery store has never been more desirable in my life, even when I was a kid, sticking to my mom for chocolate. For many years, I have been trying to enrich my social functionality with many hobbies such as wood painting at home, knitting amigurumi dolls, growing flowers, and I stayed at home without enough rope, paint and flower seeds just

when I said this was the life I wanted. It was simply dysfunctional. I have never been a person who likes to stand idly by. I, my husband and my child were at risk for covid-19 because we had chronic asthma, and the concerns started to load up. That was where it was a lifeline to be able to do my favorite job with online education. What about before and after?

Four months... The first two weeks when it was not announced yet that the education would continue online from a distance, to tell you the truth, it was like a honeymoon. We were in the middle of winter and it was nice to be at home as someone who did not like to get cold. I rested, spent time with my child and my husband. I was tired of being a lecturer, doing doctorate education and working in the clinic. So, this rest made me feel very good at first. But then being at home soon became annoying with the alarming details of pandemic. While we were feeling these things, our university prepared for online education in a short time and we would now be able to start classes. It was nice to hear that at first these days when I was bored with anxiety, but online training was a good action but soon after it did not take long to face the question of how. The happiness of having improvements in terms of functionality in my life has been replaced by questions such as what online education will be like, what platform it will be on, whether students studying in the field of health will come out with positive gains and whether I can manage it. And so a war started for me in the pandemia process. For many years, I thought the desire to meet with students and pass on my profession, which I love very much, and to make the right contributions to the field was greater than pandemia, and I think it was. And what else was going on at home when I was doing it?

Four lives... I am one of the so called four lives. In other words, I am a mother, a wife, a student, a social worker, but I was mostly my child's teacher and lecturer during this period. Besides, because of my husband's illness, I was also a chaperone, and a caregiver. My husband is a father, a husband, a doctor, and unfortunately he was sick most of the time during this period. In this process, apart from chronic asthma disorder, he suffered from severe problems due to herniated disc and avascular necrosis. He had two surgeries and could not walk for three months. The third person in the middle of my intensity and my husband's illness is our child. The joy of that house was surely, but like any child in the void, he was naughty. During this period, he was perhaps the most bored and the most amused person. The fourth person is Tancu, our cat. Our feather ball friend, who had a very chatty character, continued to add the greatest colors to our lives during this pandemic time. I also know that during pandemia, cat owners can better protect their mental health. There are actually five of us now. We have opened our home

to another kitten coming into our garden. We got too creative about his name, and the animal's name was Kedik.

Four walls, four months and four lives...

2. The Purpose and Importance of the Experience Gained

I think the greatest experience in this period was that the pain that did not kill has been strengthened, and we have lived by remembering Nietzsche. However, it is good to have experience in life, but it is rarely fun. While this experience was also online, it was not much fun except to meet with students online, teach them something, get positive feedback from them and taste the pleasure of succeeding. It was important not to victimize the students and to give them credit; However, it is more accurate not to leave the table for 9 hours except for the need breaks, to be cared for by my child's grandparents with a plus of staying in the family apartment, not to create time to take care of him, and my husband's waiting for me on the television screen was not that fun, it was more of a feeling of guilt.

Other than that, it was exciting to be one of the heroes of an event that will be known around the world for centuries. That is why it has become difficult for me to comprehend this event with my perception of reality. Come on, honey, the thought that I can not live in such a ridiculous time has come and gone. As an academician in the field of social work, following the reactions of the society in micro, mezzo and macro dimensions has become more and more worrying as we watch the news about pandemics as well as being a professional developer. The fact that the supply of social institutions such as family, education, health, economy and leisure evaluation and the demands of individuals need still are not well met. However, the fact that the need for much more specific social policies and projects during such pandemic periods should be made has been obvious. Thanks to technology, the biggest contribution was made during this period. The aim was functionality, communication, entertainment, socialization, education by means of technology.

3. Story Benefits and Challenges

The biggest gain in this process was to stay functional with online education. During the pandemic period, the focus was on physical health due to the danger posed by covid-19 on individuals; however, we know that in order to be healthy, there must be not only physical but also social and psychological well-being. Therefore, with the presence of online education, it was possible to remain functional,

to taste the feeling of life goes on, and at the same time made an important contribution to socializing and staying psychologically healthy.

It was very enjoyable to listen to experts in the field with online webinars and to ask questions in an interactive way. I think these events were very beneficial for this period, and I wish with all my heart that continues after the pandemic.

The fact online certified trainings and the opportunity to increase competencies about online education and hybrid education has made significant gains for both the process and the future. I was excited to be aware of the new teaching methods that can be applied in the face-to-face classroom and to offer rich content with them. The knowledge I learned from these trainings, which I liked the most, was that “if you have fun, they have fun and they learn.” Now I’m trying to have fun, entertain and teach in the meantime, and my students are really happier and more committed to their lessons.

Having online conventions was perhaps the most easing element of this process. In this process, I had the chance to participate in four different congresses with eight different papers. It would have been almost impossible if it was not for pandemic time. Plane-hotel costs, congressional attendance fee, my child and my other responsibilities. I hope that the online congresses will continue after the pandemic process.

Let us get to the difficulties. Nine hours of desk work was agonizing. Preparing presentations, reading and answering e-mails, doing lessons, the process took too long. In addition, concerns about testing students’ qualifications through the online exam caused me to give assignments for both the intermediate exam and the final exam, which totaled 450 assignments. In addition to that these assignments, where I questioned my idealism in abundance while reading the assignments, a subtle serious back pain was inevitable.

Being able to protect domestic privacy during classes was a serious problem. My husband went hungry for hours as I put the table, I had worked at first in a place to cross on my way to the kitchen. Then, with experience, I was stationed somewhere else. Towards the end of the period, we had to share a room with my child, who was very bored and did not want to stay with his grandparents, during online lessons, and there was an online education accident with the cry of “Mom eeeeeaa poop came iiiiiiiiii “. I think that was enough for a lifetime of students to laugh.

Working from home also created uncertainty during working hours. In fact, not only during working hours, but also in general, there was attrition in the concept of time and norms. Morning-to-go mailer, midnight students’ questions and

answers to them, tasks transmitted on Sunday. So many things to do such as writing about the article at midnight, exchanging ideas, and webinars ending at 12:00 a.m. were a very normal routine. In short, time was not the old time.

In this period, it certainly had to be mission-oriented for things to work; however, there was a serious role imbalance. As a mother and wife, my functionality was almost insufficient in my life. In a WhatsApp message that my husband sent me, a woman was lovingly caring for her other child when a child was about to drown, and there was a skeleton sitting at the bottom of the pool. The woman was representing me, the child who was taken care of with love, my career and school life, the child who was about to drown, and the skeleton at the bottom of the pool was representing my husband. It was funny; but it was just as tragic. Although the area covered by online education in our lives, it did not cause serious problems at home, this was certainly not due to me. My husband is mature and he has an understanding and tolerable attitude about the process. It was life-saving to have a great family support behind when especially considering my child.

Normally it was an interesting experience for this period to observe that I was already living a quarantine life besides going to work. Staying in the family apartment made sure there was no change in relatives' visits. Online education has been a substitute for business; unfortunately, playing grocery store with the child was no substitute for grocery shopping. I think the market has not been this much of a attraction even when the first supermarkets opened.

In all of this, despite all the distend, there were always concerns about whether I take care of my child enough, I have enough time for my husband, whether my husband's disease will heal, I will succeed in online education, I will be able to pass doctoral classes, we will be infected with this virus, if we get infected or if we die, no it can not be so soon and as a result to face an existential crisis that makes every person realize that they are mortal. It was good in terms of missing sleep and providing more work. Even if he does not have as much sleep as he used to, I still have an existential crisis around here that is going to improve me and take me to a different level.

Finally, it is what, I have always had problems with all my life, and while I hope not to have anymore, I am still having problems: time management and orientation. My difficulty in lining things up according to their importance and being able to focus deeply on one subject at a time made me functional in one area, which is online education. It is largely covered my time; but here are the questions: what if my husband was not so supportive? or if the big family could not provide support for my child's care? I think the existence of these possibilities shows how important time management and orientation skills are in online education.

4. Results

From the moment we were born, we change and evolve. The moments when we think we have not changed are just like the brief resings between labor pains. Either we are becoming mature due to our physiology or life is making us bigger with sweet as pandemic surprise (!). As Heraclitos said, we can not wash twice in the same river, and inevitably the river flows nonstop. Therefore, whether it is a result of our physiology (such as puberty/old age) or the sharp changes that life gives us (such as having children, losing a close person, retiring), they all destabilize and destabilize human beings. Our lives are about maintaining or maintaining the balance that is already deteriorating. Adjusting to new life, set new rules and boundaries, redefine roles, it takes serious labor, and depression becomes inevitable. Ignoring the problems can make the depression go away, but unfortunately it can not offer a solution to the balance problem.

Based on these, I look at my pandemic-era online educational adventure with the essence of my own profession. When I make an assessment according to ecosystem theory, my micro-system has my family, relatives, colleagues, students, grocery stores and pharmacies near the house. I think I have survived the crisis created by pandemic period with the social support offered by my husband and relatives. My friends, who used to be born like the sun in my micro system, my social activities seem to be quite dark; I can tell you that we are reshaping roles and having new rules at the point where we are now in my family system, which has been in crisis due to pandemic and is de-sized. I think it is fair to say that our personal characteristics and problem-solving skills are quite effective here, too. When I evaluated it on a macro scale, the fact that the loan payments were deferred along with the decisions taken to close protected me from an extra burden; culturally, carrying values for assistance as a family was the key to the solution;

As a result, the online education experience during the pandemic period reminded me over and over again how important the issue of “balance” is. I have also experienced that my life can turn into a movie with the role of the woman who crosses the road (It is true that I fit the role of woman that have small checkered shirt, glasses and is chubby because I have three different risks related to covid-19) while deering that one day zombies uncovered by a virus will come true.

5. Future Suggestions

How to survive during crises in our lives is shaped by many different factors: how we are, how we have the skills to cope, how we have survived past crises, our close social environment, our husband-relatives and whether the social support

they offer is there; our family cohesion, whether we are trying to solve other problems with it, the possibilities of our environment, the social policies, laws, social services of the geography in which we are destined. Therefore, the suggestions for future are as follows:

First of all, I am proposing a very big awareness. Against ourselves, our husband, our friend, our neighborhood, our country. I wish for an awareness that make the problems to be seen deeply and clearly, strengthens them and carries the will to reach a solution.

I wish that the webinar and online congress practices that online education brings to our lives will be sustainable activities in the long term and that the wind of change towards development will not be put to rest after this process, where even those who are firmly committed to traditional methods are forced to follow new technologies.

I would like to remind you that crises are a loss of balance and that we cannot reach sleep and acceptance with a broken balance, and that a day is only 24 hours a day. In these twenty-four hours, we need not only to not satisfy our basic needs such as sleeping, eating, working, resting and taking time for our loved ones. I think that the number of couples in China who applied to the court after the outbreak and wanted to divorce (1) emphasizes the importance of the effort to sustain life even in the event of an extraordinary crisis, such as an epidemic, which will not cause another crisis. In short, I mean, the more balanced the roles we have, the better in our lives.

In addition, considering that countries with SARS virus experience in the 2000s were observed to adapt very quickly to the process, I think having different plans for extraordinary situations will make us less troubled in the future. Moreover, I think that macro-sized studies that will increase the common sense in the society, especially when we think that pandemic-controlled success in Hong Kong depends on the measures that its citizens quickly implement, can help us achieve similar successes with Hong Kong in extraordinary situations that may occur in the future (2).

Finally, although extraordinary state can impose limits on the rights of citizens, I think it is important to make maximum efforts for practices while protecting basic human rights.

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CHAPTER 20

TEACHING ARTISTIC KNOWLEDGE AND SKILLS IN DISTANCE EDUCATION

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1. Introduction

Covid 19 virus was an event we heard only on the internet and in the news, we did not predict that it will come to our country and include us in this process. On March 9, while I was in class with my undergraduate students, 2 of my students came late to the class and said, “We apologize, we went to the internship school, but they said that the schools will be closed due to the virus” and I continued my class by taking them into the classroom with surprise, I had not noticed the pandemic process until that hour. It drew my attention to people who were in a hurry while leaving my class and going to my office, and we, as teachers, were informed to go to our homes urgently by the supreme committee, we went to our house quickly, but we were confused, we did not know what to do because we started to think about how we could go to our university again, how we could continue our classes without a classroom environment, while we were talking about what kind of a classroom environment we will have at home for a week, distance education has not only entered our lives as a subject in our scientific researches.

When the schools at all levels of education around the world and in Turkey would start education again, if possible then how? People’s mind were so confused, but; fortunately, an urgent action plan came to the fore saying that schools could be opened with the circumstances in which questions were heavily preoccupied found a place in our minds. We were following that new scientific findings about the virus emerging day by day and the course of the pandemic were constantly changing in each country. For this reason, decision makers had to both follow these developments and work on how education would progress in the most efficient way.

Our distance education process started as a result of fast and dynamic work of our university. The only thing that I was curious was the methods in our lessons. As a teacher, it made me think about the efficiency of the lessons in the distance education process and the psychological effects on our students.

As a teacher, I was confident in managing this process and my technology competence, but I had to reflect this on my students. The fact that my visual arts and artistic skills lessons were applied most to me was the fact that I was designing with my students in the classroom and workshop environment, and the pandemic in the distance education process was the only issue that made me think. Because I realized that I had to add technology and use it as a tool in the content of the special education teacher candidates' artistic skills course.

Developing artistic skills was important for our lesson, as it is known that the use of tools and equipment in these lessons once again came to the fore, but at the beginning of the pandemic period, all workplaces were closed and people could not go out, resulting in a restriction for our lesson.

At the beginning of the lesson, I told my students to design materials at home and in a computer-based environment, and we created an online workshop for ourselves, with cameras and sounds turned on. The beginning of the pandemic process had begun to become a whole with the artistic skills course in special education, and in this process, I entered the course with new techniques and methods.

During the Pandemic Period, there were many positive and negative reactions from parents, who are one of the most important stakeholders of the education process, towards the opening of schools. If the pandemic period affected everyone psychologically and physiologically at different levels, the face-to-face education would affect the parents in different ways. For this reason, I thought that explaining every decision taken to parents in an open and transparent manner, focusing on the quality of education in any case, and ensuring parents' participation in decision-making processes would support the progress of the process.

Distance education has an important place in the education system. Relevant institutions and organizations (universities, ministries and others) should give importance to distance education model. Education needs of individuals should be met by using distance education. Only in this way educational institutions can survive for centuries to come.

While writing this chapter of the book, I see that despite everything, some compulsory measures should be taken if schools are opened while the epidemic continues to increase. The most important of these is the additional budget. Education during the epidemic is not something we can not take it serious.

2. The Purpose and Importance of the Experience Gained

If I were to mention the main experiences he gave me, I produced scientific studies, I started participate in conferences online, taking into account the process of covid 19, taking new teaching techniques in artistic skills and how to form and express these techniques in the digital environment.

For us, academicians, it was revealed that Distance Education, which we took part in scientific research during the pandemic process, would not be a short-term process, but a long-term process. Information technologies are developing rapidly in the 21st century, which is called the Distance Education Information Age. These developments in information technologies have made significant contributions to the development of the global communication network with distance education applications.

In the 21st century, which we call the information age, communication has become an inevitable need for individuals living at all levels of society. The distance education applications, which were considered utopia for societies in the past, have become easily applicable through the global communication network today, with the developments in information technologies. The global network is the main source of information for scientific research, productivity, cultural changes, global trade, and global education. The specified information communication network to create a global center for written, oral and visual communication between all people exists in the world. In addition, the global communication network provides the educators with the opportunity to present the global distance education service (Isman, 2008).

Rapid developments in technology are driving all societies towards an information-intensive life. Education programs, investments in education and education policies are also intensified by knowledge. All segments of society, including scientists, agree that the 21st century is the information age (Isman, 2008). After gaining the necessary experiences in distance education, I had to prepare the place of the Art Applications course in distance education and teach the Art applications course to my students.

When we look at the teaching of Artistic Skills in Special Education, art education is of great importance for individuals to express themselves and to form aesthetic perceptions. Since art education improves creativity, it requires individuals to produce practical solutions to problems with its interdisciplinary role; it enables students to establish relationships with other courses. The visual arts course, given at young ages, enables children to establish eye-hand coordination and develop their fine-gross motor muscles and minds. The boundaries of art are so

wide, which is even used today for therapeutic purposes. Art therapy improves the physical, mental and sensory well-being of individuals with various applications (American Art Therapy Association, 2013; Eracar, 2006).

Visual arts lesson is an important tool that facilitates learning in a positive environment by affecting all developmental areas of the child (Erim & Caferoglu, 2012). Visual arts lesson help mentally handicapped individuals develop their self-expression skills. We state it as an expression of understanding, talent and creative power and teach it to prospective teachers. Mentally handicapped children do exercises such as handicraft, clay and painting in this course; they relax emotionally, have a good time and acquire different skills (MEB, 2013: 273).

When we look at the pandemic process in the world of science and in the studies conducted, scales about psychological events, teacher competencies, student competencies were designed and many scientific articles were produced.

In the experiences I have gained, I observed that my students were not able to use the communication tools in the correct time formats, I saw that they did not use the communication tools that we created with our students and most of the time and they were personally connected to me, forgetting that they were teachers and asking questions and writing articles in this process instead of using communication tools for the purpose of benefiting students. Consequently, it showed me how to act selfishly.

What kind of experiences I gained as an academician during this period; I have understood the importance of teaching prospective teachers to develop materials during distance education, to create virtual workshops in Visual Arts and Skills Teaching and to prepare digital materials in this process.

3. Story Benefits and Challenges

The distance education model enables the student to receive education according to his / her own learning method, to monitor the location independently, to determine the learning capacity and speed and to maximize their potential, to determine their interests and abilities and to make their career plan healthier. For this reason, I expect the orientation of parents at schools that use this technology well.

The main problem for distance art teaching is that I have to consider what is available in my students' homes. We are not in our class. They cannot just open a closet and make a can of watercolor red or teal acrylic paint. They cannot take a piece of clay off a whole block and start designing a container. I cannot assume that

every student has certain materials. There must be equality, so I work with projects that can be done with basic materials.

Advantages in this story have given teacher candidates the ability to use art in a digital environment, to express the materials at home through art, to create designs and to develop these skills, to prepare the exhibition works online, to think of their places as a workshop and to teach and express how to deal with the difficulties that they will face in the future.

While applying the teaching of artistic skills in special education, I showed how the appropriate education program preparation and application process should be in the distance education environment. The idea I taught them during this process: I have to use my imagination. Benefits: Watching my students as creative as possible, with limited use of specific tools. I would like to talk about what projects we did with our students during the pandemic period and share examples:



Figure 1. Basic Design Works

- Basic design projects (balance, proportion-proportion, asymmetry-symmetry) composition works

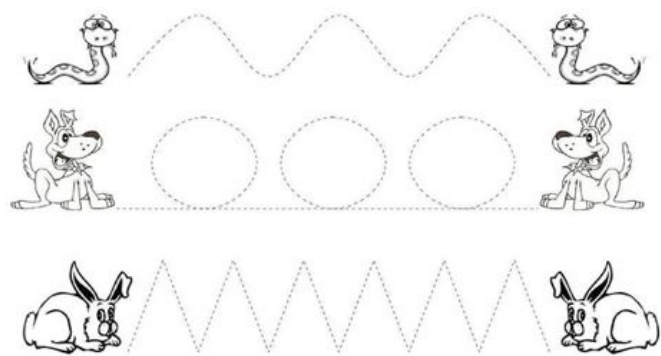


Figure 2. Draw work sheet

- They prepared a book on line study in digital environment.



Figure 3. Draw work sheet

- They made point studies in a3 dimension by using drawing programs for individuals with special needs.



Figure 4. Illustration Works

- They carried out illustrations describing special education.



Figure 5. Infographic Design in Special Education

- They created infographic designs using Adobe Photoshop program.



Figure 6. Origami Example

- Using the Sketchup program, origami works created sketches and then they created origami models by folding a4 size paper.



Figure 7. Collage Works

- They Made Collage Works from the materials found in their homes

If I explain the difficulties and gains during the pandemic process, I would lists as follows:

When I consider the difficulties;

-In practice and project studies of art teaching

-Students stand back on the online platform

-Students interruting the lesson by entering the class late on the online platform while lecturing.

-There is a shortage of stationery

When I consider the gains;

-Working art in a digital environment

- Preparation and presentation of the project in digital design programs

- The increasing importance of technology skills that we describe in teaching skills in the distance education environment.

4. Results

As a result, during the Covid-19 Pandemic process, I have seen better in visual arts applications in special education, project management, crisis management and art can be prepared digitally.

Another benefit of the Internet to educational environments during the Covid-19 Pandemic process is the development of self-confidence as a result of individual learning in online education. The internet motivates the student to a certain extent and provides continuity and mobility in learning.

Three-dimensional integration is ensured by means of media, communication tools and face-to-face training. On the Internet, the desire for education is increasing. Since there is no time-space problem, learning takes place in line with the needs, the education desire of individuals increases.

The concept of unlimited and indefinite education emerges with the Internet, which we see in distance education. The Internet provides standardized education and training opportunities. As educational institutions could share their experiences over the internet, standardization in educational opportunities would be realized, as students anywhere in the world could take their courses from an educational institution that provides education over the internet. The Internet provides flexible and objective assessment and evaluation. Training of the trainers on the Internet should also begin and is much gaining importance.

In this process, most people benefit from this education due to the low number of educators specialized in distance education. Internet reduces the cost of education. It provides instructional consistency and increases interest in the lesson.

The visual arts course has been updated and made more effective than the classical stance of the painting class. By expanding its content, I took an active role in the teaching alongside the student. Within the image of a teacher worthy of the 21st century, every teacher should expand their vision and make the lesson more positive by using rich materials (Basbug, F., & Basbug, Z., 2016).

It is a result of technology that information is obtained at an increasing speed. Therefore, societies that will shape the future have an increasing need for individuals who use technology very well. This situation has made it a necessity to go out of the traditional methods of education and reshape it according to the needs of the day. "Today, the increasing number of students and knowledge has started to bring some problems with it. It has become necessary to use technology to alleviate these problems to some extent and to increase the quality of the education process (Dilmac, S., 2019).

In the light of the developments in computer technology in recent years, an increasingly cheaper structure draws attention. Tablet computers, especially in terms of usage and portability, are at a level that can make individuals more creative with the drawing programs they contain. Tablet use in educational institutions should be increased, encouraged, and individuals such as notebooks, books and pens should always be with them (Basbug, F., & Basbug, Z., 2016).

From the early days of distance education, I saw people showing an incredible sense of gratitude and appreciation to teachers in general. I think parents who are not teachers are starting to have more respect for what we do every day.

Although it is a difficult process to explain artistic skills and knowledge in the digital environment during the pandemic process, it has given many ideas about how art can take place in technology and can be developed with the hard work. While we were teaching art face to face, we have now reached not only to students but also to everyone who heard our voices in their families in thousands of homes with online education.

5. Future Suggestions

As teachers and academics, we need to learn the use of technology as it flows quickly, no matter what field we are from, and we need to start practicing correctly in our lessons.

I have made suggestions to forward-looking teachers, students and academics after the events I experienced in this process.

- Learning design programs to be able to work on projects in art applications
- Ability to apply art both theoretically and in 3 dimensions in the digital environment
- To better use our interest in technology for educational purposes
- All professions, students and families need to know crisis management
- Being open to innovations and improving oneself to learn

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CHAPTER 21

FIVE “W”S ONE “ME”

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1. Introduction

The Covid 19 Pandemic process, which has become the nightmare of the whole world, has shown its effects in several areas and caused me to experience all emotions at the same time. This virus, which caused many comments about its source of origin, turned life upside down and affected emotions, and behaviors depending on emotions. Since the first case report in our country, the virus has spread globally and rapidly, and except for some limited regions, has deeply affected and started to change life (Aslan, 2020). There was a need for renewed data and information about this serious situation. While the research was continuing at full speed, the news that even scientists were tied up, and the duration of vaccination studies decreased motivation and increased anxiety. With the news received, stay at home orders, which according to some people perceived as imprisonment, became a psychological shelter for me. Knowledge, ideas, and predictions about various feelings, thoughts, and lifestyles for individuals and societies created an inevitable need. In the post-pandemic period, knowing how the feelings, thoughts and behaviors of people and society will be, albeit with predictions, has become an important and necessary dimension in emotional terms. The sky I looked at from the window of my house was a comforting element with the feeling of limitlessness. However, the occasional ambulance sirens etched in my ears as a sound that reminded me of the truth. I was here, belonged to this world, and I had to live the realities of this world. I had to face and struggle with the facts I ran away by looking at the sky. Even though giving up was the easiest way that came to mind, it would not change the result. Giving up was not the solution then. Searching for ways out was a better option. It was important to look for the right thing for myself

and my family. But how and in what way it should be? It was impossible to achieve this with television and social media alone. Because an environment of chaos in which the world was constantly dragged into was on the agenda. It would take some time to understand whether the fearful concept of chaos when first heard was really worthy of fear. All of life, including economic, administrative, political systems and education systems, has entered into a great change network due to work, transportation, consumption, communication, and changing perceptions. However, I thought that I had to resist my feelings for a very long time in order to be one of the conscious person that have strong and sustainable approach during the pandemic and also I wanted to be open to new perceptions and lifestyles by establishing a high balance of fear and hope. I have previously read in many studies that pandemics cause traumatic effects and increase anxiety and stress levels (Aslan, 2020; Manav, 2020). However, I never thought I could go through this process by myself. I was unprepared for this situation. Even as a society, and as the world, we were unprepared, and I was caught in the middle of this situation. Even looking at the sky, I thought I was stuck in a tiny space. I saw my family and loved ones rather than myself, I was afraid that something would happen to them. Moreover, I was thinking about the pain they would suffer behind me if something happened to me, and I realized that my anxiety was not caused by death itself, but by what my environment would experience after my death. I knew that the way a situation is perceived affected the reaction to that situation. I was mentally reminding myself every minute that the behaviors in this process would play an important role in the rate of spread and loss of life (Aslan, 2020). This caused me to limit my many freedoms and even interfere with the freedoms of the people around me. I read in psychology books that the natural stress that develops in the state of fear increases the energy of the organism and develops a reaction to the threat (Manav, 2011). With this knowledge, I was trying not to lose the sense of control that would develop this response in the management of Covid-19 psychology (Yalçın & Öztürk, 2018). Because that was the state of being psychologically healthy. My loss of control meant that the order in the house was disturbed, that a state of uneasiness appeared, and that the psychology of the household was negatively affected.

2. The Purpose and Importance of the Experience Gained

A few weeks before the first case appeared in our country, tests were carried out based on suspicion. Although the test results were negative for the moment, it gave us clues about what could happen in the future. And finally what was frightened became true. The first positive case was detected in a German tourist group that came to our country at the weekend. The hotel they stayed was quarantined

immediately, and contact tracing was carried out. The German tourist couple was over 70 years old. Their different chronic disorders that exist, unfortunately, caused their death. However, with our first case, a lockdown was ordered across the country. The one-week lockdown decision of our university turned into a 2-month lockdown experience integrated with curfews. Lockdown seemed like cleansing to me. However, the interconnected social problems that would be experienced step by step also had their place in my mind as a sociologist. There were so many people who were unemployed, and so many students with families unemployed. Just as I explained in my lectures, the change in one institution affected and changed other institutions (Özkalp, 2014). Moreover, it happened with a pace visible to the eye. For health reasons, economy, education, and family were all part of the chain and were negatively affected by this process. Education had almost stopped. Except for a few private schools, online education was not available. However, teachers working in public schools were trying to reach their students with a great effort and informed the families. Violence and divorces in family life increased worldwide. In our country, this problem was not very serious. However, the first local case in our country after our German tourists showed that our social mood was not very good. A citizen and his wife who tested positive for Covid 19 were exposed to verbal violence on social media as if they had committed a major offense. I could understand the social concerns, but who would on purpose want to contract this disease? As I saw and heard the attacks, my level of empathy with the people who had the disease increased. An inextricable situation. You would fight the disease, and your society in which you lived and worked would almost try to lynch you because you got sick. It was a heavy psychology. But I wanted to interpret it as society's first reaction to the unknown. Actually, the behavior was not unforgivable. We could be in this family's place. There is no guarantee that we will not be in the same situations in the future. It was hasty to respond to individuals who gave unfair reactions on social media. Everyone was protecting the family who lived in this unknown and wished to get well soon. The keyboard monsters who made ruthless criticism and almost insulting expressions were instructed in appropriate language to empathize. I thought there was still hope in social life. A good language could be the answer to a bad language. Moreover, by teaching a lot can also increase a sense of understanding. Reminding that every thorn has a rose, it was important to live in a society where there are many individuals who continue on their way. So seeing and reacting to what is wrong can also be perceived as a civic duty. I was hopeful. The reason for this hope was that I wanted to find positive things in negativities and play the happiness game. Therefore, I learned the lesson I should take from this situation and continued on my road. Complaining about the society you live in is generally the easiest way to be preferred. However, as a

sociologist, it seemed more correct to establish a cause and effect relationship. If we realized the reasons, it would be easier to change the results. Why do we lose our empathy? Is selfishness concept that gets in the way of this case, or are we not making enough guidance in our education system to develop this feeling? The answers to these questions were similar to my solution. The idea of doing research on this subject also excited me. The permanence of the gains at a young age has been emphasized over and over again in many studies. However, repetition of behavior was also an important factor that provided permanence. In what period did we stop repeating? At what ages did we stop using the skill of empathy? Or were we really able to master this skill? Or did increasing anxiety decrease our level of empathy? What were we experiencing socially? The things that were written to the family whose test result was positive on this subject had provoked the questions of this subject in my mind. Philosophy came into play again, and it was the first step to many issues that needed to be investigated in depth. There would be efforts to answer questions scientifically. Thanks to the questions of philosophy, science could see where we should take the first step. The scientific method was a solid wall behind us that we always lean on. In the light of the questions, many research topics were formed in my mind, and when I set new goals, my hopeful waking ups started in the mornings.

3. Story Benefits and Challenges

Although it seemed like an exhausting process to collect, parse, sift, assimilate and apply a lot of information about what we should do in order to be protected from corona virus in the beginning, in fact, thinking that we are living the infancy of our new life made it easier to cope with this process. I started the struggle by saying FIVE Ws ONE Me.

When?----- My perspective on life has changed after 8 March.

Because we remembered that our priority is health, thanks to a virus that hit us like a slap in the face. Without health, there was no work, no education, and there was no point in dreaming about the future. Whatever we do was meaningful as long as we were healthy. Whatever we live was valuable as long as we were healthy. What did it matter to succeed if we had no health? My perspective had changed accordingly. The principle of “here and now” was the best value that creative drama workshops added to me. Being able to enjoy the moment, focusing on living the moment as it deserves came to light with my new perspective. The past was over, the future was unknown. However, what belonged to me was the very moment I lived in. I was either destroying the moments I lived in with the past or

wasting them for the future, and I was doing it without being sure that the future would come. Being here and now was actually the most valuable thing. Because the past that carried me to this moment had completed its mission. The future was not clear. It was this moment that was real and fact.

Where was I?---- Physically at home, mentally else where or everywhere.

I was worried. With every ambulance sound I heard, my mind was running to patients struggling with covid-19 in hospital rooms. I was physically at home, but I was tired from the mental rush. The things that my students lived and felt were hosting my thoughts in their rooms and student houses. My family, who was abroad, their feelings, the struggle they gave to come to their country, the quarantine processes, caused my mind to be everywhere at all times. I thought this must be traveling without a ticket. In moments when my anxiety subsided, my mental travels also calmed down. At such moments, I tried to focus on my family, and I wanted to show them that I was not really worried and managed the process well. It was true that I managed the process well, but my state of not being anxious or claiming that I had no anxiety did not reflect the truth. I was sure that my family was also aware of this situation. However they did not rattle me, even when I was acting, they acted like they believed me. Just like the real effects of a fake smile.

Why? ---- The reason is because of a tiny virus that is still the subject of controversy.

The reason for everything I was going through was actually a virus too tiny to see with the naked eye. However, the way this virus emerged could not come up with convincing results. Scientists work days and nights, but the treatment process and vaccination studies, which are more important than the form of emergence, attracted my attention. It did not matter how it emerged. After all, it was here and was real now. Dwelling on the reasons increased the "I wish"es. But I needed results. The results were important in order not to say "I wish" in the future.

How could I cope? ---- Anxiety, panic, the condition of being good for my loved ones. Yin-Yang Philosophy.

There was news of corona virus everywhere. Corona virus was everywhere, on the social media, on television, in family chats, in phone calls with loved ones. Many of these news were triggering my anxiety. But I also did not want to stay away from the news and stay off the agenda. This could get me out of control. For this reason, I muted all the groups on social media first. Only twice a day, morning and evening, I started to follow the developments from a really reliable news source. I was trying to focus on other things during the day. I started thinking that if I was physically and mentally well, I could help my surrounding. Another

dimension was this: I knew that if I were good, they would feel happy, too. But this well-being should not be mere acting, I should be really and sincerely good. When people feel bad, they take refuge in their loved ones, so I looked for a way out in philosophy. Yin-Yang was a philosophy I covered in one of the creative drama workshops. Philosophy has been a comforting field throughout my life. There is something good for everyone. Philosophy has always been at the center of my life with its own perspective, looking at events as a whole, being subjective and respecting different views. Reading different philosophies has been a source of hope whenever I am stuck. The Yin-Yang philosophy was the point of view I received the most support in this process. In Chinese philosophy, Yin Yang means dark and light, negative and positive. With this duality, it is intended to explain how completely opposite things complement each other, how things that are 180 degrees opposite to each other in the world are actually interconnected. Covid 19 was a virus that spread from China to the world and could make people sick psychologically. The Yin Yang Philosophy was also a philosophy that emerged in China, and unlike Covid 19, it could make me feel good psychologically. Yin Yang could also be applied to the human body. In traditional Chinese medicine, health was formed by the balance of yin and yang. Starting from this idea, I started thinking about something every day that the Covid 19 pandemic is changing in a positive way. Of course, this process took some time. You ask why? Apart from the way we shop, washing the items that come home with detergent water, wiping the non-washable with disinfectants, and not knowing how long this process will last increased the feeling of mental fatigue rather than physical fatigue. Television, radio, newspapers, social media, corona virus infected everywhere. Most importantly, it found its way into minds.

What happened? ---- I learned and remembered a lot.

In this very process, the announcement of “we are switching to online education” by the university was a turning point for me. The excitement and curiosity of resuming life again, but with a new life, integrated with my passion for my profession. Many things were new to me during this period. Previously, I was particularly interested in technology to express myself. However, now life itself, the most important part of my profession, was technology. While we were getting my loved ones with technology, we were able to do our classes with my students again thanks to technology (Karadağ & Yücel, 2020).

Although some of my students seemed cool, others expressed their concerns during the lectures. I realized that I was not disturbed by the interruption of the class, thinking it was more important to be able to comfort them than the topics I was trying to explain at that time. In the eyes of my students, as an educator, I was

the person who guides and directs. In this direction, I had a great responsibility towards them. Removing them from their worries, answering their questions as much as possible, or looking for answers together, at least during class hours, was a different experience for me. Feeling the presence of my students made me hopeful for the new day. The question of what more can I do for them, Covid-19 alleviated my anxiety, provided a space for mental movement.

Every day I had lessons, I started the day early. The recommendations of the experts for this period were in this direction. I was getting ready just like going to university and sitting at my computer as if I was in my office. Our lessons were both taught as live lessons and recorded for students who could not attend live lessons. In addition, our office hours were also carried out online. We were trying to adapt the same things to distance education as we were doing during face-to-face education. The programs we used for the first time were taking their place on the screen of our computer as our biggest assistant with many features that we could not discover yet. For this reason, I was trying to discover technology-related applications through trial and error in order to improve myself after the classes. Under normal circumstances, trying to solve the situations I consulted with field experts on my own was a source of stress. However, as I could solve it, it turned into a feeling of happiness and self-confidence, increasing my motivation. Another situation that increased my motivation was the process of transitioning to distance education in a short time like a week. In this process, the sharing we made with my friends at the university was our most important feature that made us strong. We all became one for our students. Like the parts in a human body, our functions were different, but we were living like a whole body. We started distance education in as little as a week and managed to reach all our students. Thanks to these experiences, I remembered the beauty of cooperation again. It was a positive feeling for me to cooperate and feel part of the group and the process. The feeling of belonging has always influenced my motivation for my job. I loved and valued what I did. I wanted to be a teacher since I was a child. However, at the university level, I had the opportunity to do both research and the teaching profession. So my childhood dream came true with a bonus. During this period, I said "I am glad I chose this profession". Being at the university required continuous improvement. Progress required constant research and learning new things. The basic requirement of my profession also pointed to this aspect. It was fortunate for me that my profession coincided with my own desires. Because, in today's conditions, individuals can work in business areas they do not enjoy in order to gain profit. In this sense, both enjoying and gaining professionally represented luck like a four-leaf clover.

I was using the garden of my apartment to exercise during the pandemic process. Staying within the boundaries was psychologically good because I felt safe. On one of my exercise days, I found a kitten in the parking lot and a cat whose eyes were infected. His way of holding on to life, his lovingness despite everything, impressed me very much. He had to go to the vet for the treatment process. Unable to leave the house due to the pandemic under normal conditions, I set out every day to hope for a soul. I realized that holding a soul to life was more important than my anxiety. So I was able to overcome my anxiety about going out. That little friend reminded that it is a good thing to hope again in this process. Unfortunately, he lost an eye. However, he still had a second chance. If we did not meet, maybe he would lose his other eye. His energy, the love in his look, were good to my soul like medicine. I even thought this way. Perhaps it was my luck that we met, not his luck. Yes, I had him treated, he needed a vet, and I had the money to do that. Yet he treated me with his presence without spending a penny.

I normally did not value non-vital material things like clothes and goods. I cared more about the realm of the soul than the realm of objects. Because after death we will be remembered more by the soul we have than the objects we have. We were even getting immortal. However, this process has allowed us to reconsider what we need to value again. Actually the solution was simple. It was enough to be clean and tidy. I remembered that world-famous brands do not actually have a vital importance. Every time I woke up to a new day, I remembered it over and over again. I was not normally a labellist. There were many products on the market that could appeal to everyone's eyes and hearts. But these products only grabbed my attention as much as I needed them. During the pandemic process, I once again confirmed in my mind that these products are not real needs.

Me? A new Seçil (academic, psychological, sociological)

All these changes created a new "me" in the sociological and psychological environment we are in. My perspective, what I learned, reduced my anxiety and made me stronger psychologically. Being able to help more and making efforts to reach more people and animals both increased my motivation and turned me back to my self. With the effects of daily life, I had the opportunity to recreate everything I neglected, even if I do not forget.

4. Results

What did I notice in this process? I noticed that the more time I spent with myself, the more my earnings increased. As my perspective on life changed, I realized that I also reflected this on my environment. I realized that maybe life needs a

little slowdown. Of all the realizations, I realized myself again. There was one "me" in this world. That is why I realized that I have to take care of myself.

I remembered that the words I cannot succeed are just an escape, that no obstacle other than health can prevent achievement, that you can live by wearing the same clothes every day after being clean, and that being able to help, to feed a living thing can prevent anxiety or panic attacks, and also that life inside me can also beautify the outside that we have only one chance to live, and every breath we take is numbered.

What have I learned?

They are not over yet, just like this story....

5. Future Suggestions

The real truth is change itself. It is important to acknowledge this and be aware of change. It is essential to remember that change is two-dimensional. Positive changes are the beginning of development. However, it should not be forgotten that changes seen as negative can produce positive results over time.

The most important step supporting the scientific process is to make predictions about what could happen, based on what happened, and to make efforts to prove the predictions. All studies carried out using the scientific method, without leaving the light of science, without thinking of serving the interests of certain segments, will bear gold value in this process.

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CHAPTER 22

TEACHING WHILE STAYING AT HOME: EXPERIENCES ON DISTANCE EDUCATION DURING PANDEMIC

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1. Introduction

Viruses that can cause disease in humans and animals and have many types are called “Coronavirus”. These viruses, which usually cause colds in humans, can also cause loss of life. The SARS-CoV virus epidemic that started in Guangdong Province of China in 2002 has spread to 17 countries worldwide. In this epidemic, 8098 people were infected and 774 people died. The MERS-CoV virus epidemic, which started in Saudi Arabia in 2012, affected 27 countries worldwide, 861 out of 2499 people who were caught in the epidemic died (Stubinger & Schneider, 2020).

In the last days of 2019, it was noticed that there was a cluster of pneumonia cases admitted to the hospital in Wuhan, China’s Hubei Province. The first cases were epidemiologically related to an animal market in Wuhan. Three patients were admitted to a hospital in Wuhan with a diagnosis of severe pneumonia on 27 December 2019.

The first case was a 49-year-old woman who was a fish seller at the animal market in Wuhan. In this case, the disease manifested with fever, cough and chest tightness on December 23, 2019. After four days, fever subsided; cough and shortness of breath increased, and findings consistent with pneumonia were observed on thorax CT. The second patient was a 61-year-old male who frequently shopped at the animal market. In this case, fever and cough started on 20 December 2019. The patient was admitted to the hospital with respiratory distress one week later. He gradually worsened in the first two days in the hospital and was intubated and connected to a mechanical ventilator.

Samples taken from the first patients were tested for many known pathogens. A new Coronavirus (2019-nCoV) has been identified, which was 85 percent similar to the bat SARS-CoV virus. It has been found that the virus is transmitted by droplets and close contact. On January 1, 2020, the animal market in Wuhan, which was thought to be the origin of the virus, was closed.

November and December 2020, first news and cases about Covid-19 arised in Wuhan city of China. At these times, we only heard about the cases in other countries especially in China. The only thing we know was the fact that there is a new virus and it can be mortal. Until March 2020, we did not affected by Covid-19 in terms of diagnosis or prevalence of the disease. We were watching the news and there were Covid-19 cases in Turkey. However, the cases have not become a pandemic situation.

The Covid-19 outbreak, which occurred in Wuhan, China, was faced by all countries of the world after China, after a very short time it has become an epidemic. There are opinions that this epidemic is among the most severe events that affected the world after the Second World War (Gur, 2020). In such a short time, the Covid-19 epidemic, spreading over a very wide geography and seen even in tribes where human interaction is very limited, affects all aspects of people's lives on a global scale and causes changes in many areas.

Education systems around the world are facing an unprecedented challenge following mass school closures mandated to contain the spread of Covid-19 as part of public health efforts. Government agencies work with international organizations, private sector partners and civil society to provide distance education to ensure the continuity of curriculum-based study and learning for all. However, currently little is known how these strategies provide effective and equitable access to quality learning opportunities for all. The Covid-19 pandemic reveals that it is necessary to develop more innovative solutions in order to develop new ways of thinking about the future of education at the global level.

Although life has come to a standstill in many parts of the world due to Covid-19, developments in the use of different methods and practices to keep up with this new world order have been experienced very quickly. For example, during the epidemic period, people in China made all their grocery shopping over a phone application and the couriers left the products they bought in front of the customers' door. In addition, businesses have tried to run their business online through applications such as Zoom and Skype.

When Turkey and Cyprus Covid-19 case is detected, as in many points, various measures have been taken in the field of education. At this point, education

in schools was interrupted first, and then - after a very short time - decisions were made to carry out the education with distance education opportunities and then to complete it. Universities have started education by adapting to these decisions quickly through distance education centers.

In March 2020, first Covid-19 case in North Cyprus emerged. This case was a German female tourist who came to Cyprus for a trip. After the emergence of this case, quarantine process for direct-contact people was started. Then, our university decided to take a break in education for a week and other universities made a decision like this. A break for one week lasted for 20 days and lockdown period started because of the rapid increase in the number of Covid-19 cases. Then we started online education through UZEBIM system that we are familiar with. UZEBIM system is the distance education platform of our university. I was using this system before the pandemic process, so I know how to use the system. But, I was using only for submission of documents such as examples, sample works, and files and folders for homework and assignment submission for students.

After Covid-19, along with many other areas such as transportation, health, culture, food, tourism, finance, economy etc. one of the areas affected is education. The first measure taken all over the world in terms of education was the closure of schools and a suspension of education. However, as the effects of Covid-19 were understood, it was understood that just a break from education was not sufficient, and studies were carried out to conduct education with distance education opportunities.

The anxiety I felt in the first days of lockdown diminished after a few days, as the uncertainties disappeared regarding how we would continue education. At the beginning, we started to carry out our lectures both synchronously and asynchronously. Then, we started to carry out the lectures synchronously with live lessons through Google Meet platform. In this process, as the students who received education on the one hand, and we, as the academicians who provided education to students, were affected and tried to keep up with the situation. Students and academicians who faced these new tools and methods in such detail and frequently for the first time also faced various difficulties. In my opinion, there were especially problems with interaction with students, classroom management, evaluation methods, exams, homework and assignments in this online education process. Switching from traditional methods, face-to-face education to fully online and distance education has emerged as an important adaptation process for both students and teachers. We were staying at home and trying to teach at the same time. This was such a different, uncertain and adaptive process.

When the literature on distance education is examined, it is seen that there are different definitions and various studies mentioned about the advantages and disadvantages and the roles and responsibilities of the teacher in the distance education process. Distance education, in its broadest definition, is an education / teaching method where the teacher and the learner are located in different places and different time periods (Bozkurt, 2019).

Distance education is the use of internet technologies that provide the necessary opportunities to increase performance in the information process and it is a dynamic and individual education form based on cooperation. Distance education has brought innovation to the concept of learning with its “learn wherever, whenever and whatever you want” approach. It is an educational technique in which the instructor and the student are not physically present in the same environment, using the internet or intranet technologies (Elcil & Sahiner, 2013; Simonson, Zvacek & Smaldino, 2019; Kacan & Gelen, 2020).

O’Neil (2006) examined how distance education changes the role of teachers and the practices of education. It is stated that distance education has moved away from the role of the instructor as a mere distributor of knowledge, to the role of a guide that facilitates learning, and suggestions were made on how trainers will adapt to this new environment.

Experiencing such an adaptive process, the roles and responsibilities of teachers in online education process came into question for me as other academicians to provide effective education. Being successful in this process was very important for me because we cannot establish a face-to-face interaction with my students and this created a stressful and anxious situation. According to Themeli and Bougia (2016), the roles of students and teachers in distance education are as follows:

- Teachers should be aware of individual differences of their students,
- They need to have real and up-to-date information to support permanent learning,
- They should provide students with a research environment under a sense of self-control,
- They need to be able to prepare the materials based on the individual differences of the students,
- They need to be able to build new knowledge on prerequisite skills,
- They need to have technological and communicative skills,
- They need to be able to apply the learning process student-centered,

- They need to be able to create an interactive environment in order to provide learning responsibility in students,
- With the guidance of teachers, students should be able to improve themselves,
- They need to be able to create interactive groups for permanent learning,
- They should be able to provide a cooperative learning environment,
- They need to be able to give appropriate feedback by guiding students.

As mentioned above, trying to stay and teach home was added to these roles and responsibilities. In this process, both positive and negative experiences were happened.

2. The Purpose and Importance of the Experience Gained

We were trying to adapt to the process of staying at home and teaching at home at the same time. The two adaptation processes were difficult because we were anxious about our health and trying to protect themselves and our family from being infected from Covid-19. On the other hand, we were trying our best to provide effective education to our students. I think we have successfully completed this process by supporting each other with the comfort and self-confidence of my husband being an academic. In these times when we added our night to our day, we managed to communicate through both Whatsapp and e-mail as much as we could in order to reduce the anxiety of our students in the first days. I understood that I can carry out education activities efficiently with distance education. Learning to plan, organize and achieve time management were the most important positive experiences for me. After adapting to this new normal situation, we started to live in a more planned and organized manner. Time management was a big problem for me before the pandemic period and I realized that when I stayed and taught at home, I became more skilled on time management.

Furthermore, the improvement of my technology knowledge and skills was also a positive outcome for me in this process. For example, I learned to use different platforms functionally such as Google meet and Zoom. In addition, I also found the opportunity to participate into webinars, online seminars, conferences and online education to develop myself in terms of academic skills. It also provided a psychological relaxation for me for example, having lessons at the same time with husband. The relationship between me and my husband has strengthened in this way. We supported each other that allowed us to carry out our online education practices. I was missing my family very much and my husband tried to

calm me down indicating that this process will end and we will return to our old routine. This was a very advantageous situation for both of us. We understood that the world will not be the same again and adapted to this new normal situations.

3. Story Benefits and Challenges

There were benefits and challenges experienced in the distance education process in the pandemic period. Especially, turning the crisis situation into an opportunity was an important benefit. We had an important chance to finish our incomplete works including articles and proceedings and carry out and produce new research. Experiencing such benefits lead to a post-traumatic growth for us. The concept of post-traumatic development was introduced to point out that the state of post-traumatic fear and confusion may create a fertile ground where unexpected results can be observed in people recovering from traumatic situations, in which the main assumptions are seriously questioned, in short, to explain the positive reactions observed after trauma (Tedeschi & Calhoun, 2004; Infurna & Jayawickreme, 2019). After life events that involve high levels of stress and can result in crises, most people experience not only negative experiences but also positive changes. When we consider our situation, the pandemic period caused high levels of stress and this was a crises situation for us. However, me and my husband experienced posttraumatic growth indicating that we tried to benefit from this negative situation and experienced positive outcomes.

In addition to the benefits experienced in this process, there were challenges as well. Increased workload and increased number of working hours were a challenge for us. Preparing online lecture notes, carrying out live lessons and checking e-mails every time were very difficult. In terms of teaching practices, evaluation of students' performances, exams and assignments were a challenging process. The most disadvantageous aspect of accessing Whatsapp is that our personal phone numbers are given to students. In addition to checking e-mails, we tried to answer Whatsapp messages at the same time. We had to understand this situation with understanding, because both our students and we had entered an uncertain and difficult process.

End of social life was another challenging process. We were only going to markets, pharmacy and hospital. My husband was going to these places because he was trying to protect me from the virus since my immune system is not very good. This was called as "controlled social life" (Okuhara, Okada & Kiuchi, 2020). Social isolation, social relations and social routines have been changed and it is stated that nothing will be the same as before the pandemic period.

Disease outbreaks affect not only the physical health of individuals, but also the psychological health and well-being of the uninfected population. It is predicted that the psychological and emotional effects of the epidemic will be long-term. Covid-19 virus causes health problems in two ways. The first is the physical health problems directly caused by the virus, and the other is mental health problems such as anxiety, panic and anxiety associated with the epidemic. Covid-19 should not only be considered a medical health crisis, but also a mental health emergency. Infectious diseases affect not only the physical health of individuals, but also the psychological health and well-being of the entire population, whether infected or not. In the early days of the epidemic, the physical consequences of the virus attracted more attention and mental health consequences were not emphasized. However, even if the epidemic ends, its psychological effects will probably last for months or even years once we return to our normal lives (Sood, 2020).

The effects of the global Covid-19 epidemic process on human psychology include many individual differences. Throughout and after the global Covid-19 epidemic, which threatens the lives of individuals, stress-related and traumatic effects are likely to differ according to the social and cultural characteristics, socioeconomic conditions, psychological well-being and individual characteristics of the person. Variables such as the insufficiency of the basic needs of individuals such as security, shelter and nutrition during the coronavirus pandemic process, incomplete or misinformation about what happened, prolonging the quarantine period, lack of social support, experiencing financial losses in the epidemic, developing Covid-19 symptoms or contacting with coronavirus positive individuals, puts people in a more psychological position during the epidemic (Askin, Bozkurt & Zeybek, 2020).

4. Results

In conclusion, distance education practices and controlled social life are our new normal lives. In other words, distance education and controlled social life have become an indispensable part of our lives anymore. It can be inferred that we cannot avoid the use of technology and we need to learn more about how we can benefit more from technology.

5. Future Suggestions

When an evaluation is made in general, it can be said that the viewpoint of the academicians towards the administration of the courses with distance education is negative. At this point, what needs to be done is to choose blended education

methods that adopt both traditional and distance education methods. Because it is obvious that it will be very difficult to carry out educational activities without using information technology products. In addition, since the students addressed are more familiar with the digital world, the use of appropriate technological tools and equipment in the educational processes may increase students' interest and motivation towards the lessons.

When academicians' perspectives on technology, systems and applications of distance education systems used in universities during the Covid-19 pandemic period and their self-efficacy in the distance education system are evaluated, it has been considered that the distance education centers of universities provide technical support to academicians, organize trainings on the use of these systems after Covid-19, and academics do not have too many problems with the use of distance education systems. In addition, it was concluded that the academicians participating in the research did not have any problems in preparing resources and activities related to their courses and uploading them to the system.

All individuals from different ages and different occupational groups need to be aware and skilled on crisis intervention and management when they faced with unpredicted life events such as pandemics. Individuals need to realize that always a back up plan is needed. Being open to innovations is also another individual characteristic to be able to cope with such situations. Further research is needed to make an inference on what are the health, social, economic, psychological and emotional outcomes of pandemic process on humans and what precautions can be taken for the existing pandemic situation and possible similar situations in the future.

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CHAPTER 23

TRANSITION FROM MUSEUM EDUCATION PRACTICES TO VIRTUAL APPLICATIONS DURING THE PANDEMIC

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1. Introduction

The Covid-19 outbreak, which affected the whole world, first appeared in Wuhan, China in December 2019, and quickly spread rapidly in Thailand, Japan, Korea, the United States, Singapore and Europe (Aristovnik, Kerzic, Ravselj, Tomazevec & Umek, 2020; Karakaş, 2020; Senthilkumar & Krishnakumari, 2020). This deadly virus, which brings the lives of individuals to a halt, has created serious threats both on human health and in many areas in many countries. What happened during the pandemic caused feeling negative emotions such as anxiety, guilt, denial, fear, loss of freedom and anger in individuals, and the mental health of individuals was directly influenced by this situation (Çapcıoğlu, 2020; Kaya, 2020).

However, the Covid-19 with the highest rate of spread has also affected the economic, political and social structures of countries negatively, and some vital measures have been taken in social life (Emin, 2020; Kaya, 2020). In this context, countries brought up quarantine, curfews, isolation, social distance and the obligation to wear a mask in order to reduce the risk of transmission of the virus (Bozkurt, 2020, Arın Ensarioğlu, 2020). Many measures have been taken in many countries by adhering to these restrictions. For example, In Hubei province, where the virus first appeared in China, 60 million people were quarantined and workplaces, schools, places of worship, public transportation systems and many institutions were closed (Technological Thinking Center, 2020). Travel and commercial activities have been restricted in order to prevent the spread of the virus in the United States. It has been announced in the country press that only travel for basic

necessities and medicine purchases are in service at hospitals and taking care of elderly, disabled or serious patients will be allowed. It has also been reported that restaurants can only serve as delivery (İlhan, 2020). In England, where the virus spreads rapidly, working from home has been encouraged, pubs and bars have been decided to close at 10 a.m., rules such as not gathering more than 6 people at home or other places, and using masks in public transportation have been implemented (BBC NEW, 2020). In Turkey, the epidemic has been tried to be prevented by temporarily suspending the activities of businesses and social areas such as restaurants, cafes, children's playgrounds, leisure venues, the beach promenade, picnic areas and so on (Eryüzlü, 2020). In addition, when the world-wide is examined, it is understood that the operation of many sectors has been turned into the principle of distance working or home office (Tuna & Türkmenbaş, 2020).

At this point, it should be noted that education systems, which constitute the basic building block of societies, have been significantly affected by all these negativities. All these negativities have caused education systems to change in turn (Diaz, Caminero, Lloret, Gonzales & Castillo, 2020). According to the United Nations Educational, Scientific and Cultural Organization (UNESCO) statement in May 2020, a total of 1.2 billion students in countries affected by the epidemic have suspended face-to-face education (UNESCO, 2020a). This ratio, which corresponds to 91% of the total student population in the world (Emin, 2020), has caused the cessation of education in all educational institutions. In a short time, countries started to look for ways to continue their education and training in educational institutions. In this context, "Distance Education" has been the starting point of many countries, allowing all courses to be conducted online from home (Bozkurt, 2020; Diaz, Caminero, Lloret, Gonzales & Castillo, 2020; UNESCO, 2020a). During the pandemic, distance education was first put into practice in China, Italy, South Korea, France, Portugal, Saudi Arabia, Mexico and the USA. Since the outbreak of the virus and the closure of schools on March 11, all classes in Turkey have been carried out with distant learning (Emin, 2020). Putting educational activities into practice at almost all levels during the pandemic process has also accelerated the integration of technology into education, causing questioning of traditional education understanding. This condition once again demonstrated the importance of the digital infrastructure, and enabled digitalisation in education quickly (Karakaş, 2020). Although there have been problems such as "teachers and students' lack of knowledge about technology", "internet infrastructure deficiencies", "the difficulty of integrating the content of the curriculum into distant learning", "lack of communication", distant learning has facilitated the realisation of many courses online (Senthilkumar & Krishnakumari, 2020). In this

context, when a general evaluation is made, it is understood that distant learning provides significant advantages in matters such as making education sustainable, maintaining education independent of place and time, ensuring the integration of technological Web tools into education, making the course contents in important educational institutions of the world accessible to many users, and making the time spent at home productive in cases where face-to-face education is not possible (Emin, 2020 ; Koçoğlu, 2020; Kurnaz & Serçemeli, 2020).

The practice of distant learning in many countries has raised the question of which video conferencing platforms will be used in the learning-teaching process. At this point, when the literature was reviewed, it was seen that countries prefer to use video conferencing platforms such as Slack and Google Meet, EduPage, Easy Class, Webex Blackboard, Remind, Microsoft Team, Zoom with which they can do video conferencing; they can conduct lessons live or asynchronously, and they can hold larger meetings (Babu & Kalaiyarasan, 2020; Basilaia & Kvavadze, 2020; Senthilkumar & Krishnakumari, 2020; Shahzad, Hassan, Aremu, Hussain & Lodhi, 2020). In this difficult process where the virus has spread, it has been an important issue that many educators question how the course contents can be done through these platforms via online learning.

Bozkurt (2020) argued that technology and pedagogy should be combined for a meaningful purpose and thus an effective and efficient learning process can be created. In addition, Bozkurt (2020) emphasized the support of the lessons with offline activities and materials, the realization of the synchronous content as well as the asynchronous presentations with a balanced instructional design. Aristovnik et al, (2020) argued that the courses conducted with distant learning through platforms should be designed in a way that encourages active participation of students. In addition, they argued that question activities, group work, readings and quiz activities should be done to students during the teaching of the lessons, and it is important to make the learning-teaching process interactive with different web tools.

Regarding the information given, it can be said that many variables should be considered during the teaching of both theoretical and applied courses with distance education. In this context, it is seen that conducting the “Museum Education Practices” course with distant learning during the pandemic creates some difficulties, especially since the course includes applied activities. At this point, it is understood that virtual museum applications are very important in both eliminating most of these difficulties and maintaining the functions of museums (Kahn, 2020; UNESCO, 2020b).

2. The Purpose and Importance of the Experience Gained

The pandemic which pushes education and training to seek solutions as in many areas has made it compulsory to teach courses by distance education. This situation forced educators to look for different perspectives in teaching of both theoretical and practical courses.

Many educators have gained different life experiences while teaching. The main purpose of addressing this subject as a book chapter is to convey the experiences gained while teaching courses of museum education practices with virtual museum environments during the pandemic. It is thought that mentioning “Museum Education Practices” before the Pandemic is important in understanding the importance of the subject.

It is stated in the literature that museums have become one of the most important educational venues preferred by educators in recent years. Along with the education in museums in research, it is mentioned that the artefacts can be introduced to the students and the motivation and interest of the students can be increased (Çalışkan, Onal & Yazıcı, 2016; Kaschak, 2014; Ozturk, 2017). In addition to this, it is also emphasized in studies that museum education practices can be effective in gaining long term learning by interacting with real objects, analyzing the differences and similarities between today's objects and objects used in the past, creating historical consciousness and gaining cultural awareness (Akman, Ozen Altınkaynak, Erturk Kara & Can Gul, 2015; Marcus, 2007; Onder, Abacı & Kamaraj, 2009).

It is seen that museum education, which can be very effective for students to learn by doing and experiencing, was applied in three stages before the pandemic (Okvuran, 2012). Before the museum education, it has been noted in researches that museums and artefacts that have suitable conditions to achieve the learning outcomes determined in line with the curriculum are selected and the necessary permissions are obtained for education (Behrendt & Franklin, 2014; Meydan & Akkuş, 2014). However, in the studies, it is also stated that designing preparatory activities that will ensure the readiness of students, preparing practises on this subject and developing teaching materials are among the important activities (Ay & Fidan, 2014; İlhan Çakır, Artar, Okvuran & Karadeniz, 2011). During the museum education, learning activities like rescue excavation, museum hunt activity, completing the clue papers, animating the production stages of the artefacts with drama technique, discussing the features of the artefacts by creating a platform, designing activities with the station technique, creating exhibitions, designing posters, creating stories, etc. are highlighted (Humberstone) & Stan, 2011; İlhan

& others, 2011). After the museum, which constitutes the third stage, it is emphasized that the practices and activities carried out in the museum are reinforced by using modern evaluation techniques such as process-oriented evaluation, peer evaluation, evaluation with checklists, opinion taking, evaluation with graded scoring tools, and composition printing (Turnbull, 2012; Fagerstam, 2014).

As can be understood, museum education practices taught in an environment where learning by doing and experiencing has become obligatory to be carried out remotely with the pandemic. At this point, how the museum education practices course can be conducted appears as an important issue that needs to be addressed. It should be noted that the way to make the teaching of the course possible is through virtual museum applications. For this reason, the educational experiences conveyed in the prepared book section are extremely important.

3. Story Benefits and Challenges

It is extremely important to share the experiences while performing virtual applications in the teaching of the museum education practices course. Firstly, virtual museum applications offered by museums for visitors and educators during the pandemic period will be mentioned.

During the meeting between UNESCO and the International Council of Museums (ICOM) to evaluate the impact of Covid-19 on Museums, it was reported that more than 85 thousand museums were closed due to the epidemic (Tarhan, 2020). Many museums faced challenges such as maintaining its collections, ensuring the safety and well-being of staff, dealing with financial problems and staying in touch with the community (UNESCO, 2020b). Museums struggling in such a challenging environment have begun to look for different ways to continue to serve.

Although it is not a new concept, it is seen that virtual museums started to come to the agenda more with the pandemic, and they reveal significant solutions in the sustainability of museum education (Piotr & Adamkiewicz, 2020; Spellerberg, 2020). During this time, in which museum visits were limited, collections in many countries were modelled in three dimensions using 360 degree panoramic photographs and transferred to digital media, thus enabling online access. In addition, digital projects were developed in the virtual environment, and activities such as screening programs, learning events, speeches, and work promotions were carried out (Kahn, 2020; Karagöz, 2020; Özden, 2020; Soley, 2020). Also, in some museums, Augmented Reality and mobile games applications have also started to be applied through virtual environments (McCoy, 2020).

Referring to virtual applications in Turkey, Culture and Tourism Ministry have started to transfer museums to virtual environment during the pandemic. The collections in Anatolian Civilizations Museum, Ankara Painting and Sculpture Museum, Antalya Museum, Bodrum Underwater Archeology Museum, Konya Mevlana Museum, Dolmabahçe Palace, Zeugma Mosaic Museum, Ephesus Museum and Göbeklitepe Ruins can be accessed via the website of the Ministry of Culture and Tourism. In addition, it has been observed that the exhibition titled “Artist and Time” in the Istanbul Modern Museum and the collections in the museum were brought together with the visitors in a virtual environment. Also, digital exhibitions and collections can be accessed through the Sakıp Sabancı Museum, Pera Museum, Arkas Art Center sites (Kalyoncuoğlu, 2020; Karagöz, 2020).

It is seen in overseas that the collections of many important museums around the world can be accessed virtually via the Google Arts & Culture application at <https://artsandculture.google.com/> . Thanks to this application, access to more than 500 museums and galleries is provided (Karagöz, 2020; Tarhan, 2020). Museums open to access include the Louvre Museum, Rijks Museum, Van Gogh Museum, National Gallery of Art, The British Museum, The Museum of Modern Art, Guggenheim Museum, The Metropolitan Museum of Art, Uffizi Gallery, Musee d’Orsay, The State Hermitage Museum, Kunsthistorisches Museum Wien, The State Tretyakov Gallery, Tate Museum, Los Angeles Country Museum of Art (LACMA) (Soley, 2020). Also, thanks to this application, searches can be made according to artists, art movements, countries and different time zones, and more than 2000 collections can be accessed. In addition, this application allows visitors to create their own museums and collections (Karagöz, 2020). In addition to these, you can reach the most famous museums of the world with 360 degree or 4K options via many channels on Youtube. For example, it is possible to watch the Louvre Museum in Paris with the Wanderlust Travel Videos 4K option, and to watch the Ancient City of Paestum with the the Prowalk Tours application, the Cairo Egyptian Museum and the Keops Ship with 4k / 60 fps option. It is possible to visit the Ambient Walking channel of the Washington Natural History Museum, the British Museum and the Louvre Museum in Abu Dhabi with Travel with Camera (Habertürk, 2020).

As can be understood, virtual museums that offer different teaching environments to both instructors and visitors enrich the teaching of the course of educational practices. In this context, it is believed that transferring the experiences and explaining the practices in the museum education practices lesson is important in understanding the importance of the subject.

The coronavirus has captured the whole world, making it compulsory for education to be carried out in digital environments. As in the teaching of many courses, some difficulties were encountered in teaching the “Museum Applications” course online with distance education. Finding solutions on how to do this course online was among the most important difficulties. The solution was quickly reached, and virtual museum environments were put into practice within the scope of the course. Necessary preparations were made before the lesson about the practises, and the lesson was tried to be conducted online. Some problems were encountered such as connection problems on internet networks, internet disconnection in the middle of the lesson, and a minority of students not being willing to participate in virtual applications. However, problems such as the inability of virtual museum applications to physically learn by doing and living, students not being able to motivate themselves towards the lesson due to the fact that they cannot be in the museum environment, not being able to gain museum education experience and social interaction were also experienced. Despite all the negativities experienced, virtual museum applications provided significant advantages in the teaching of the lesson, and had a positive effect on the transfer of the learning outcomes of the lesson to the student. Four different virtual applications were made within the scope of the museum education course.

In the first activities, the Google Arts & Culture application was introduced to the students. Using this application, the instructor showed how the artefacts in museums around the world can be accessed virtually (See Figure 1). In the next stage, questions were prepared for the collections in the Museum of Modern Art, National Gallery of Art, The Museum of Fin Arts, Vang Gogh Museum, Uffizi Gallery etc. by the instructor.

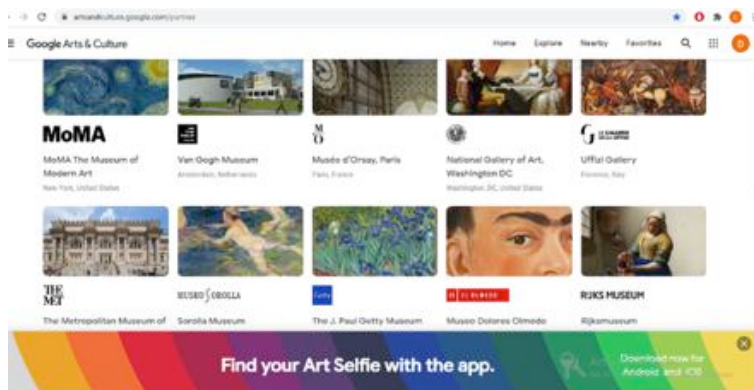


Figure 1. Google Arts & Culture Application

The students actively accessed the museum collections in virtual applications, answered the questions about the artefacts, and shared them on the discussion platforms. In this way, an interactive environment was created and the participation of students in the course was ensured. During the secondary activities, Wanderlust Travel Videos from YouTube channels was selected and the Louvre Museum in Paris was introduced to the students with the 4K option (See Figure 2). At the end of the video, the students were asked to create a report by asking questions about the exhibition of the collections in the museum, their conservation-restoration processes and their connections with the present.

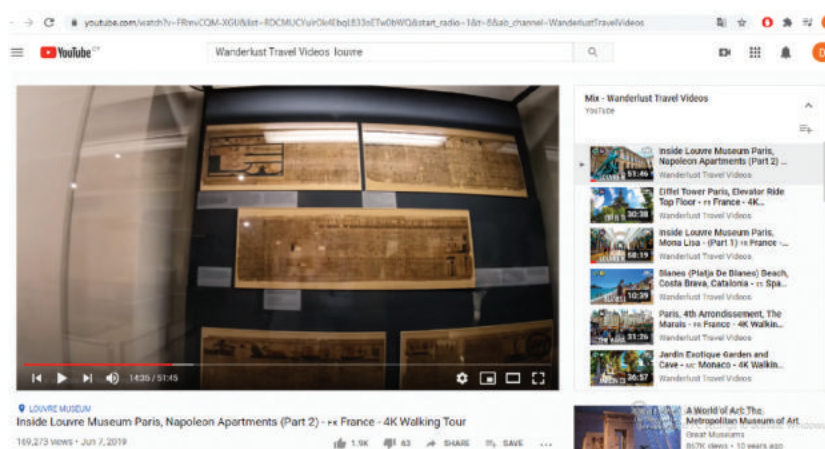


Figure 2. Wanderlust Travel Videos Application

Again, within the framework of the same activities, similar activities related to the Ambient Walking channel and the British Museum were applied to the Washington Natural History Museum with Travel with Camera (Figure 3-4)

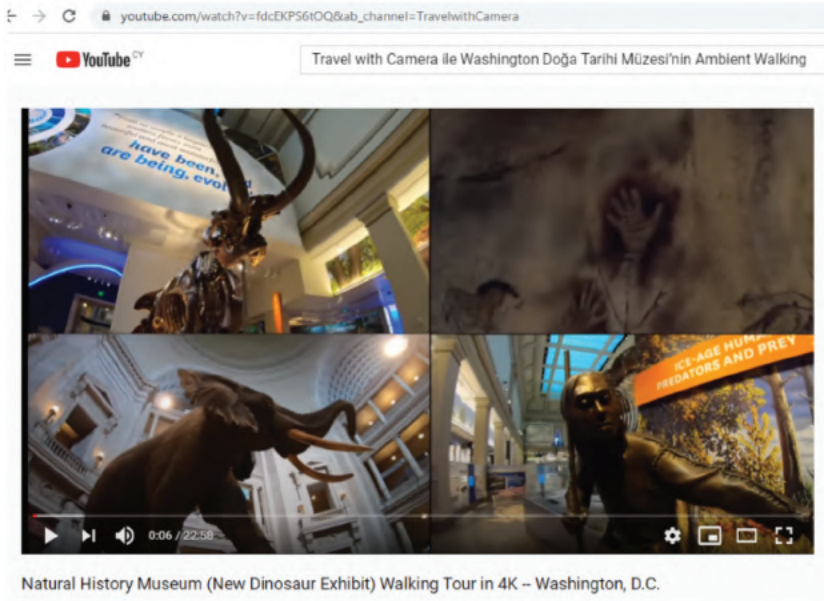


Figure 3. Museum with Travel with Camera Application

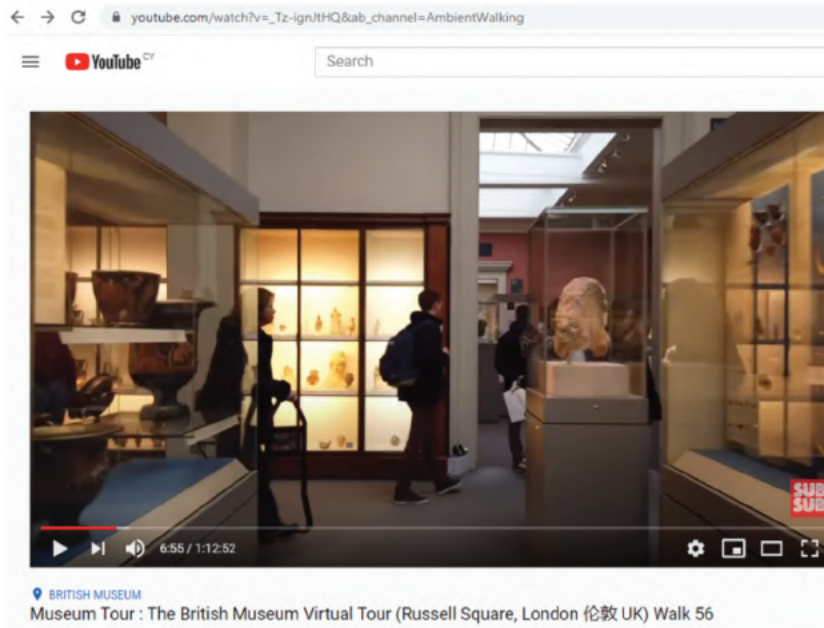


Figure 4. Ambient Walking Application

The students selected one of the virtual museums in Turkey and in the world using the research and discovery strategy, and did publicity by creating power point presentations (with google meet). At the end, the students identified a question about the museum's collection. Thus, by providing a discussion environment, questions were asked to the student who made the presentation.

During the fourth stage of the activities, students have designed some publicity to promote the collections in museums in Turkey and in the world. In the “Designing Information Cards” activity, students firstly chose an artefact from each museum. They designed and presented the activity by determining questions such as the production date of the work, where it was found, which period it belongs to, and where it was brought from (See Figure 5).

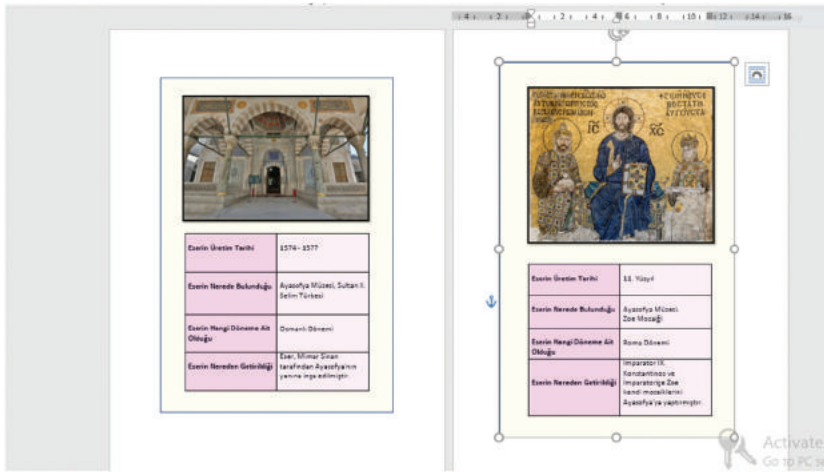


Figure 5. Information Card Sample

In the “Creating Discovery Log” activity, they again selected an artefact and created a design consisting of questions on the name of the artefact, the date of the artefact, for what purpose it was used in the past and today, and the similar and different aspects of the artefact with today's works (See Figure 6).

Figure 6. Discovery Log Sample

In the “Creating Clue Paper” activity, students identified some questions about the works. This design, in which the name of the work was brought from, in which city it was located, for what purpose it was used, and the likes and dislikes of the work, was presented during the lesson in the form of presentations (See Figure 7).

Figure 7. Clue Paper Sample

The students designed the activity called “Past, Present and Future of the Artefact” in order to establish relationships for the past, present and future use of the artefacts. In the activity, three artefacts were chosen and questions were raised about for what purpose the artefacts were used in the past, whether they are used today and how they will be used in the future (See Figure 8).

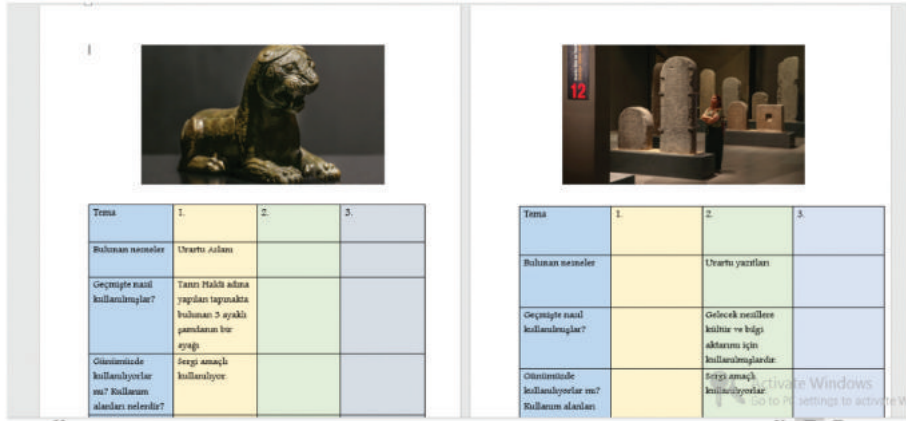


Figure 8. Past, Present and Future of the Artefact Sample

Finally, in the “Poster Design” activity, the students designed a poster that includes the introduction of the museum and introduces an artefact in the museum. They presented these posters with the Google meet application (See Figure 9).



Figure 9. Poster Sample

Thanks to the virtual applications and activities carried out in the museum education course, the students were able to get to know the museum collections closely and they actively designed projects and developed their research skills by making presentations.

4. Result

The negative effects of the pandemic have been recognised not as destructions and deaths, but also deterioration in education. Finding solutions to all problems from the home environment, taking on the role of spouse, the role of a parent and the educator at the same time created great difficulties. In such a period, it was not easy to find a way out to the subject of how to handle applied courses online. In this context, virtual museums have been the most important focus in conducting the museum applications course online. All museums around the world have been able to quickly seek ways to survive, bringing their museum collections to the virtual environment and making their collections accessible in a digital environment. In general, it can be said that using virtual environments within the scope of museum education increases the efficiency of the course. When questioning whether the learning outcomes of the course are fully fulfilled, it should be taken into account that there are some disadvantages. For example, the learning level obtained from the virtual applications and museum education practices course was not at the same level. The most important factor here is that the museum education practices course is carried out practically before the pandemic process and students performed activities by living and learning in museums. Not being able to see the artefacts in real, the students' inability to touch the artefacts, and the inability to feel the historical texture in the museum environment can be the reasons. In addition, internet network problems experienced while performing virtual applications and lack of motivation of some students were among the negativities experienced in the museum education course during the pandemic.

Nevertheless, despite all the negativities, it was observed that virtual museum applications made significant contributions to the teaching of the lesson and facilitated learning. The learning outcomes obtained at the end of the course also revealed that students acquired positive skills with virtual applications. Thanks to virtual applications, students learned how to use information technologies and what kind of applications they can use. It has been observed that students who have little knowledge of technology are willing to use virtual museum applications in the process, and they can realize applications. It has been exciting for students to be able to access museum collections of many countries around the world with just one click, especially with the Google Arts & Culture application. They had the opportunity to get to know not only the museums in their own countries but also many museums around the world. Watching documentaries on museum visits on YouTube channels has been very informative for students. During the lesson, designing activities (clue paper, discovery log, information cards, past, present and future of the artefact, poster) promoting the collections in virtual museums deve-

loped students' high-level thinking skills such as research, presentation, critical and critical thinking, and questioning.

5. Future Suggestions

It has been observed that virtual museum applications have accelerated with the pandemic. It is suggested that virtual applications should be increased not only in Turkey but also in North Cyprus considering that many museums have transferred their collections to online with solution-oriented approach. This practice started in Turkey; however, it is limited to some museums. It is observed that these practices have not yet been initiated in the TRNC. All museums around the world can only survive in such a challenging period by digitalizing the museum collections. Thus, it is recommended that all museums around the world realize virtual applications. However, it is thought that Augmented Reality and mobile game applications, which have just started to be implemented in some museums, can also be used worldwide. In this way, an interactive learning environment in which both adults and children can participate can be created. In addition, it is believed that documentary broadcasts about museum visits can be delivered to wider audiences through YouTube channels. Therefore, YouTube channels can be reproduced and documentary promotions of more museums can be made.

In addition to the above recommendations, suggestions can be added to conduct the museum education course with virtual applications. Students can create their own galleries and museums with the Google Arts & Culture application and make their presentations with google meet. Thus, students' motivation and interest towards the lesson can be increased. Besides this, the activities that students have created for the promotion of virtual museums can be increased. Additional activities such as museum hunting, creative drama, date log, poster work can be designed.

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CHAPTER 24

TRAVELING THE SPRINGS OF THE WORLD WITH A CLOUD IN DIGITAL EDUCATION

Nazmiye HAZAR - Near East University

The cloud in this story was a school that we have never read in any story, heavier than we have seen in any cartoons, and safe enough that no virus or bomb can spoil the climate of the cloud. All digital resources that we use during the pandemic period in all simultaneous, semi-synchronous or asynchronous processes that enable our homes to become a school for us for the first time and prevent the waste of time, and all domestic and national resources that serve us in education, as well as global Endless thanks to all available resources.

As a child, I thought that the color of the clouds hanging in the air because of their lightness in the sky was blue, gray, or white. However, as I grew older, I realized that nothing was as it seemed to us. I learned as I read why the clouds weigh tons and remain in the air with a miraculous force, why their color is white or darkened in what cases. Sometimes, when I was sitting, looking at the sky, the clouds that were playing with me with my perception patterns in mysterious ways that added color to my dream world were like children who could not stand still from time to time. Just like the clouds in the new world where our data sources are kept safe. When we said that everything would deteriorate and upload our information to a cloud, who knows why this cloud was a virtual cloud, the power of clouds that did not crash to the ground despite the weight of tons of moisture? In June March 2020, as a matter of fact, you will read about the changes that exist in my education and training life in the environment where I isolated myself and my family at home because of the covid19 epidemic.

In 2008, I graduated from the TRNC Atatürk Teacher Academy. Although we are a society that has not learned to be humble and value ourselves when someone tells us that we are successful, I will not be very humble to our university and

teachers who deserve praise in this process. Our teachers may be modest in this direction, but I would like to point out in advance that I cannot be modest towards them because they are the pioneers of the reform movement in education in the TRNC. What you are reading here is not about praising an institution in accordance with its interests, nor about being a party to a group of people and discriminating them. It is a value written sincerely and sincerely with the belief that an educator who cares about knowledge, interest and seeing value adds value to our country with the belief that these values are the foundations of teaching manner and roots as a result of the attitudes and behaviors he sees from his colleagues such as himself.

And who was I? As a Turkish Cypriot, I am one of the teachers who successfully completed the teaching exams in 2008 and was eligible to be among the teachers who worked in public primary schools. Since 2008, I have been working as a teacher in the Primary Education Department of the Ministry of education and culture of the TRNC, still serving my country. During my professional life, I had the opportunity to provide education to children at the preschool and primary level. In addition to classroom teaching, I also had the opportunity to teach courses such as painting, music, educational activities and social skills as a branch teacher. As I teach all children at the primary school level, including the 4-year-old and the main class, I am someone who has learned by living the development and needs of children of this age. In fact, I am a teacher who has been able to observe what these children at the primary level are subjected to in educational settings, what needs they have and what solutions can be offered to these needs, the difference of each class, as well as the difference of each school. I am an educator who has acquired the ability to both observe and interpret what special problems can be, such as the common problems of schools. Of course, the impact of my professional development efforts on my acquisition of these skills is many. I have always tried to be a teacher who regularly and disciplined attended the courses organized by the TRNC Ministry of Education and Culture on professional development. I also strive to devote time and contribute to social responsibility projects organized by non-governmental organizations, universities, trade unions or associations that exist in our country. Frankly, as a teacher, I have never missed opportunities to be in all educational settings that can contribute to my professional development. In addition, I successfully completed my master's degree in educational management, supervision and Economics and Planning at Near East University in order to satisfy my professional hunger. During the graduate process, the University made an incredible contribution to me. Then I decided to fill the process with a PhD adventure. I am still continuing my education and training as a doctoral student

in educational management, supervision, Economics and Planning at the Near East University.

In March 2020, as in other countries, our country has entered the process of combating an infectious disease. Many jobs were closed, many people were unemployed, and we were a country where there were even hunger-related problems. Educational institutions had become a dead entity in a way. I did not know how to carry out education and training activities as a doctoral student in this process, nor did I know how to continue education with our own students as a state teacher affiliated with the TRNC Ministry of Education and culture. I have no idea what to do about how the university can conduct courses, but before the end of March, our teachers namely who are professors. Dr. Zehra Altınay, Prof. Dr. Fahriye Altınay and Assoc. Dr. Umut Akcil was constantly communicating with us and guiding us on what to do. In order to make sense of the distance education process, the teachers of the Faculty of Education of the Near East University have taught us as a team by living the example of teamwork. Our teachers were very patient, especially about integrating students into Distance Education. They knew how to continue the online course process and made us feel that they were the foundation for the process. I believe that preliminary preparation, infrastructure, and high technological competence of educators also have a significant impact on the success of this process. But when we look at our TRNC Ministry of Education and culture, for months, unfortunately, in addition to infrastructure deficiencies, we have faced constant uncertainties. From March to June, the education services of our country's public schools in the pandemic period were not suitable for either developed countries or modern approaches to education. In this context, if we think in terms of competition, the quality and quality characteristics of private schools have made a big difference to public schools in order to provide students educational services.

Now, as both an educator and a person who has experienced the student process, I want to share with you a number of things that have made a positive impact and mark on me during the pandemic period. First, I can point out that the positive traces of my view of Near East University have increased even more. Because I had friends, students, relatives who somehow went through this process like me at different universities, and I felt lucky that I didn't encounter the problems they were complaining about. Near East University used high quality products in technological resources both synchronously and asynchronously in distance education process. In this sense, the Near East University, as a university that prepared with a huge team related to distance education during the pandemic, looks like it will be remembered by its positive aspects because it has achieved what many universities

have not achieved in history today. As a doctoral student who is primarily engaged in the teaching profession, I have experienced the value of the planning process in the advantages of being able to follow all my courses, course notes, and assignments to the planning processes via my own username Moodle from the school's web page. In addition to the fact that our live lessons took place over Google Meet during the course hours set every week during the pandemic, our course records were sent to our e-mails by our respective teachers for our friends who could not attend these courses, which made the student and all participants feel the value given to the education. In fact, both live course records and course tools related to the audit dimension of this work, as well as loading student outputs on the Moodle are evidences that our university conducts modern approaches to education in accordance with the era. In this sense, I know a debt of gratitude to Prof. Dr. Zehra Altınay, Prof. Dr. Fahriye Altınay and Assoc. and Dr. Umut Akcil.

In addition to teaching the subjects related to the courses, different types of teaching methods and techniques were applied on the basis of application. I believe that we have also gained some experience with classroom management in the Online environment. Our Professor Fahriye applied teaching methods and techniques called 6 Hat discussion method every week in a determined manner to give us the opportunity to apply a number of things against impossibilities in negative situations to change it to positive. I can say that it gives me incredible courage. In addition, all our teachers have successfully applied question and answer techniques, discussion techniques, brainstorming, learning by doing - living, showing and acting techniques within the scope of their courses. Our teachers have shared lecture notes about the topics in the course content they will give during the semester and have added willingness to participate in the courses more disciplined because of the preliminary preparation related to the planning dimension of the teaching process. Although I have many books about scientific research methods, the slides that our teacher Umut used in teaching us were a facilitating element in our understanding of the subjects. They were able to instantly return the questions asked by students with the competence of field knowledge they have. In short, our teachers gave them feedback on situations that stuck with or did not understand, and made everyone who attended the lesson feel that they valued and that they did not neglect any of the students, as well as the courtesy of performing the task assigned to them was related to field information. Although we had knowledge of a number of issues, they made us feel that they always looked at us through the eyes of the team and treated us as a whole when we did not feel confident about the use of resources related to technology.

In this process, our teachers, as a society, mental health is in a process of fear and anxiety, and those who have pessimistic attitudes about the future, almost as if they were giving us therapy in the name of healing. While many of my friends were tired of staying at home, depressed and crying, I wasn't like them. Because during our teachers' class hours, we all gathered in a center, thanks to the internet from different environments. We had the opportunity to see each other face-to-face, and the voice of all of us was almost a hope for each other.

The economic crisis has made our society and people around very concerned, while businesses have been closed in the north of the island. Although businesses have the capital to produce, the importance of Human Resources has shown itself due to the corona virus. As for this pandemic, which is not yet known how long it will continue, we have been exposed to a threat to the world that puts their lives and health at risk in every area where people can be collective. As a citizen, I saw that during the pandemic, the TRNC state was finally able to enter the process of comparing itself with the world. We know that there are many universities in this country that serve students from many countries of the world, including those who have come to the north of the island. As Turkish Cypriots, we can see that there is no obstacle to our teachers participating in universities in our country having the potential to compete in the world, being hardworking and successful. We should be able to see that universities can address reality more real in competition, such as the opportunities offered to individuals working in other private sectors on behalf of the business sector, and we should be able to express that there are many injustices in the differences between the public and businesses in particular. I think that the nature of forcing opportunities and boundaries in order to survive private enterprises should be considered as a deficiency that the profit calculations of supply and demand related to satisfying the customer are planned with visible goals and stages in public business centers. As a parent and an educator in public schools was almost bankrupt due to the lack of existing resources and infrastructure training (teaching the teachers who do) and was not used to the need for correct training process and monitor only the economic dimension that is being wasted in a formation that cannot be the cause of development and change.

In the theoretical knowledge of modern educational approaches of universities, we have found that the process expressed in papers or words is sufficient to make it feel alive by actually doing the process. In this sense, it can be considered as a need to use all schools associated with the TRNC Primary Education Department before the scientific council related to drawing directions and road maps in the dimension of guidance from universities or our academic teachers in universities. I even think that every university needs school districts and education-

nal processes that universities use in projects in teacher and student education, as well as the fact that these students or teachers can be models for schools related to innovations and developments are positive stimuli.

In addition, training and the constraints of communication and interaction in the social environment of the internet and socialization process of the elimination of technological tools and equipment we have seen the importance of the effectiveness in ensuring the integrity of the community. In this sense, it can be considered as a requirement that the ministries that exist in accordance with the TRNC Constitution, both the Ministry of education, health and all other ministries, of course, examine the modeling of Information Technology and human resources investments and projects of universities. He can point out that making adaptations from the immediate environment and cultures in the business culture is an important element in the continuation of compliance and sustainability of business-related processes. Taking new modeling from applied centers will have a positive impact on socialization and community inner peace in terms of reflecting. Especially in the awareness of citizenship related to environmental education, TRNC citizens will also contribute to the value of their country.

On the social field of online education and digital education is an important element of social learning that even in actual size, from advertising, television, and interactive computer based training materials outside of the movie theater with our students in teaching practices, we were faced with the fact that we can offer.

While many teachers related to the teaching profession have concerns about losing their profession; we have remained out of these negative attitudes because with the encouragement of our teachers, we experienced the process of following innovations in the form of a team while sharing our presentations. We have learned that training related to developing, sharing and presenting skills related to computer programs in teaching tools is an important element of the synchronous (simultaneous) process.

In short, although I could not see spring, my view of the world with a cloud; my view of education and my view of the future of my country could change so much. We had the opportunity to experience virtual classrooms, a virtual learning environment, and many aspects of virtual resources that benefit people. I am sure that every child and every family will have a cloud adventure through the teacher, which will contribute greatly to both the rise of the positivist aspect of human thoughts and the deep taste of the love of the country in the dimension of dedication. Every school must have a cloud like Near East University.

CHAPTER 25

WHY WERE WE NOT SUCCESSFUL ENOUGH IN ONLINE EDUCATION? WHAT SHOULD UNIVERSITIES DO?

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1. Introduction

Life has been affected in all fields due to COVID-19 virus in the world and Turkey. The process is as follows (Woldometer, 2020; TÜBİTAK 2020; T.C. Ministry of Health 2020):

- December 1, 2019: covid-19 appeared in Wuhan, the capital of China's Hubei region
- January 9, 2020: first death case
- March 11, 2020: global epidemic (pandemic) declared by covid-19 world health organization
- 13 March 2020: Europe became the epicenter of the crisis
- 16 March 2020: schools went on vacation
- 16 March 2020: theater, cinema, restaurant, coffee shop, internet cafe and indoor playgrounds were closed
- March 21, 2020: Curfew declared for those 65 and over and those with chronic diseases
- 16 October 2020: due to virus around the World
 - 39.418.121 confirmed cases
 - 29.511.135 improvements
 - 1.106.128 deaths

- 16 October 2020: due to virus in Turkey
 - 343.955 confirmed cases
 - 301.098 (87,53%) improvements
 - 9.153 (2,66%) deaths

As of November 2020, the number of cases is increasing tremendously all over the world. It is seen that studies on this subject have not yet yielded enough positive results. Extraordinary measures have taken all over the world, especially in European countries.

This process has left different marks in everyone's lives. As part of my job, quick decisions had to be made, as the university was fully transitioning to distance education. It has not been easy to design and implement a system that serves an average of 2,000 people under normal conditions and suddenly serves around 90,000 students. For this reason, the administration, which could not afford such a large number, first preferred a different kind of software, but after a short time it was decided to use the software we used again for different reasons. I would like to share with you what happened in this painful, difficult, stressful process in this study.

This process can be perceived as the restructuring story of an institution that tries to survive with its own means, keeps all its data in its own systems and ensures it is under its control.

It is certain that user stories will be intense in distance education. However, I believe the technical story of presenting the distance education system to the users is also interesting and important. These services are not easy for users, I believe users should also understand and know this process.

As a result, an infrastructure that manages the distance education process with its own resources was put into service at the extraordinary level at Dokuz Eylül University. It is certain that it is as important and necessary to manage the platform where the instructor and the student are confronted, as well as the establishment of the platform, and to solve user problems quickly.

2. The Purpose and Importance of the Experience Gained

The information presented in this study serves two purposes;

a) In an extraordinary situation, it answers the questions of what to do, how to do it in order to establish a successful structure in case of transition to the distance education system.

b) While normal life continues, it reveals what state and foundation universities need to establish a platform for distance education and all kinds of private and public institutions that need the same education platform should do.

An institution has to go through a configuration by taking into account the technical structure of the infrastructure and the use of the system within its own structure, taking into account the user side.

Digital Transformation in education, which no one has been able to do for many years as someone who accepts the logic of “Every crisis creates its own opportunity”, has been realized in 1 month, albeit difficult, thanks to COVID’19.

I am a person who has been personally involved in all stages of Distance Education for more than 15 years and has been working on Disaster / Crisis Management since 1999. I would like to share with you what happened at universities during this process, my observations as a result of my mini research and my suggestions for the future.

- Universities in Turkey with the decision of YÖK (Higher Education), it was decided to continue their education as of March 23, 2020 via Distance Education System.
- The vast majority has mobilized all possible means to adapt to the suddenly coming Distance Education process.
- To make their infrastructures stronger, universities embarked on a structuring as quickly as possible.
- While some universities invest heavily in their infrastructures, others think that this process is temporary and made a transition plan to short-term distance education.
- Very few universities were able to use the Learning Management System (LMS) they use for their Distance Education.
- It was possible to use open source and special free software as well as commercial software.
- Although it is a priority for universities to obtain and use the required LMS, it has come to the fore to use video display software for live broadcasting.
- Open education in Turkey with the support of HEC School went to the course materials to meet an important requirement, leading to the use of all of Turkey.

- Open source course materials were downloaded to computers, but unfortunately faculty members did not use them properly.
- YÖK tried to direct the Distance Education process in Universities with circulars it published from time to time.
- Universities made an effort to adapt to YÖK circulars as quickly as possible. Because education competed with time.
- Universities trying to overcome the 2019-2020 Spring term without any trouble as much as possible naturally chose to solve the emerging problems instantly.
- All kinds of decisions likely to be in favor of students were tried to be taken, especially in the measurement and evaluation processes. Faculty members have made their best efforts to complete the process in a more effective, healthy and equitable manner.

In the light of all these facts, I especially emphasized the following issues in July 2020;

- As is the case with many issues, developments related to COVID 19 will most likely not be limited to the 2019-2020 Spring period and unfortunately, in the education process.
- Developments strengthen the possibility of providing education-training activities with distance education in the 2020-2021 Fall term.
- Harvard and Cambridge Universities, one of the most prestigious universities in the world, announced to the world that all courses will be given through the distance education system in the 2020-2021 academic cycle. It is predicted that other universities will use the same education method for the next year.
- Who can guarantee that this process will not continue in the 2020-2021 Spring term?

In the light of these evaluations, I think our universities should consider the following issues in order to be prepared for the new term / terms:

- Universities caught unprepared due to compulsory and sudden transition to Distance Education in March 2020, have to improve both their infrastructure and superstructure for new periods.
- In the new period, they must be ready to continue distance education without any excuse.

- They should choose the most appropriate LMS or develop the existing one.
- The selection / preference of a LMS suitable within the scope of KVKK (Personal Data Protection Law) should be at the forefront.
- The web conference software suitable for the LMS used should be decided.
- It should be decided how the measurement and evaluation systems will be made.
- By establishing Universities Measurement and Evaluation centers as suggested by YÖK, it should be clearly stated what and how will be done.
- Universities should determine the infrastructure needs for the future by reporting the number of existing programs on the basis of Faculties, Vocational Schools and Institutes, the number of courses offered in each program, the number of students who can take each course and the number of academic staff.
- Possible number of servers needed for LMS
- Number of servers that may be required for virtual classroom / video conferencing
- Database server
- Load balancing servers for LMS
- Load balancing servers for virtual classroom / video conferencing
- Fast, powerful, large and redundant data storage units
- Increasing the switches (switches) used by universities in their local networks by 10 Gbit ports
- Backup servers
- High capacity network storage servers
- Increase of line capacities (fiber infrastructure)

Although such details are not clear, they should be determined in a realistic way for a possible structure.

- It emphasizes that the necessary care should be taken to give education-training focused on digital in the next period.
- Universities should provide enough training about the LMS and web conference systems they prefer and use. This process has shown that

both instructors and students are unfortunately unable to use the distance education tools they have to use effectively and accurately.

- Serial trainings should be organized in this regard, in which faculty members can find answers to all their questions.
- Trainings that will take into account the issues emphasized by YÖK regarding measurement and evaluation through LMS used by the university should be given especially.
- Education should be given by considering departments / fields on “content preparation” which is the biggest problem of lecturers.
- Universities that do not have a LMS system that they use or have yet have to decide one way or another:
 - Using a LMS system written by them but purchasing or using the video conferencing service for free
 - To establish a new LMS and video conference system within its own structure
 - Purchasing purely commercial products with outsourcing service
 - To be a member of a third party system, to use the system only with the fee of providing service for the hardware
 - Participating in Anadolu University’s MERGEN project through the BTK (Information Technologies Authority).
- Which one to decide on this issue is a very important decision-making process. In this preference;
 - Cost
 - Number of students
 - Technical infrastructure

elements as well as technical personnel are significantly effective.

- Will be able to meet the Distance Education criteria of YÖK;
 - Data security is ensured
 - All modules that instructors and students will need
 - It can use the features that each unit will need for measurement and evaluation.
 - All kinds of retrospective reporting can be received

It should be known that a system should be established.

Probably the biggest problem of universities in this process is the virtual classroom environment where students and instructors meet instantly Anwar, K. & Adnan, M. (2020). Universities are the most technically challenging virtual classroom platforms.

Since establishing and managing a virtual classroom platform is a very technical issue, some universities had to meet the virtual classroom systems, which are expressed as live broadcasts, even though they had written their own Learning Management Systems (LMS).

In the integration and use of externally purchased / rented virtual classroom applications to the LMS, the number of courses offered at the same time, the pricing made depending on the limitations of the number of students who can attend each course at the same time, and the uninterrupted service expectation in the infrastructure bring important decisions that universities need to take in the light of the experience gained.

It should be known that universities that establish and manage virtual classroom applications within their own organization must configure servers according to the number of instant users and review their plans according to the number of courses that can be opened at the same time and the number of students who have to enter this course.

Turkish Republic the Cyber Security Department of the Presidency Digital Transformation Office issued a circular on July 7, 2020, number 1142, on the use of Foreign Origin Video Conference Applications. Paying attention to the compliance with the Personal Data Protection Law (KVKK) in foreign-origin virtual classroom / video conference applications, it is stated that care should be taken regarding where these servers are located and where the data is stored.

It will be an indispensable element for successful universities in this process to continue their education with a LMS that they will support in the digital environment in normal times.

3. Story Benefits and Challenges

Pandemic is a disaster. The concept of Disaster Management comes to the fore in our country only with natural events such as floods and earthquakes. Since the developments regarding the epidemic COVID 19 cannot be predicted, it is more dangerous than other disasters and it is also difficult to take precautions. In earthquakes, it is possible to plan all kinds of resources (manpower, cash, technical

equipment, etc.) needed by making damage assessments in general because it is possible to see the current situation and list the actions that can be done. What to do when and what to do can be planned in line with the possibilities available. It seems that everything written, or spoken will not make sense until the vaccine is found.

All sectors were affected during the pandemic process, but there is no other sector that touches people as much as education, directly affecting millions of people and their families indirectly. The economy can recover with new measures after a while, but it will carry the disruptions and difficulties that will arise in the education of millions of students that will affect our future to different dimensions.

Both the Ministry of National Education and the Higher Education Institution made extraordinary efforts in this process to ensure that the education in the fields they are responsible for is carried out as healthy as possible. Keeping up with such a rapid transformation in a short time is not an easy process to plan.

During the pandemic process, that is, in the Spring Term of 2019-2020, the Ministry of Education states that 4 million students could not be reached at all.

Distance education is not an education system to be frightened. On the contrary, when used correctly, it is a healthier and more effective method than face-to-face training in some areas.

- How effective training should be given to trainers
- How to prepare correct and effective training materials
- Instructors should be taught in detail measurement and evaluation methods suitable for their lessons.
- How and in what way the trainees can take live lessons and receive training
- What to do for homework, how to answer
- How they can efficiently benefit from the prepared course videos and other course materials
- How to contact instructors when needed
- Students are adequately informed about measurement and evaluation
- If necessary, why and how to use inter-student chat environments

It can be said that it will be very useful if it is explained in detail, clearly and clearly as possible

Distance education is a planned, contemporary and innovative education system where students and trainers come together in a virtual environment, independent of time and space, using today's computer and communication technologies.

Although the systemic transformation in education was as successful as possible with a sudden and rapid decision, there is a fact that everyone accepts that, unfortunately, distance education was not efficient enough. Especially in universities, a significant part of the academic staff did not have enough education about what to do in distance education and how they should give education, although they did not have to transfer their knowledge completely. Although it is thought differently, distance education is a student-centered system; it allows the student to fulfill the student processes at any time and place, even if the student and the instructors are not physically in the same environment. It ensures equal opportunity in education, increases the sense of responsibility, and enables especially those who have to work and physically disabled people to receive education. While it enables the person to access information easily and quickly, it allows him to adjust his speed depending on his learning ability. In addition to these, it only needs technological infrastructure facilities by eliminating expenses such as nutrition, accommodation, transportation, physical space and infrastructure.

Although technology provides all opportunities for the student to receive a quality education, the problem is how the instructors will provide these trainings to the student. The Ministry of National Education (MEB) formed well planned studies in order to produce course resources / materials in well-equipped studios where it has established special teams. It is certain that more effective work will be done day by day.

However, the subject of this article is more about what the lecturers at universities should do in preparing educational materials rather than what they do. Because while the MEB can use all the training materials prepared by Turkey should provide every teacher in every class at the university to prepare itself as a special case and find a way to give students the quality education that targets using the system.

Even though the components are defined in different ways in the distance education system, where all kinds of education can be given very effectively by using the opportunities provided by technology, the basic components of the student-oriented system in this study are listed as follows:

- Learning Management System
 1. Course Content
 2. Resources
 3. Exams
 4. Homework
 5. Messages
 6. Chat
- In addition to the indispensable mandatory modules above, optional modules can be added as follows:
 7. Forum
 8. Announcements
 9. Statistics
 10. Course Schedule
 11. Course Information
 12. Calendar
 13. Course Schedule
 14. Virtual Classroom
 15. Creating Training Materials

In this study, course content and exams, which are mandatory modules in LMS, will be emphasized.

Learning Management System (LMS)

The software used for LMS, which is the main component of distance education, forms the backbone of the system. The first 6 items mentioned above should be perceived as indispensable mandatory modules for LMS software. Subsequent items can be used optionally.

Virtual Classroom

It means that the instructor and the students face each other instantly on the virtual platform. In other words, it is a new generation online virtual meeting tool that enables users in different venues to communicate over the Internet. Today, the most important factor that puts institutions into trouble in distance education is the conduct of live and interactive lessons. Because having tens / hundreds / thousands of people in the same course in the virtual environment at the same time

is limited by the possibilities of technology, no institution / software can perform at the desired level yet.

Depending on the server's RAM memory capacity, processor and switch structure and network bandwidth, there is a limit to how many people can be in an instant lesson rather than how many lessons are opened on a server at the same time. For this reason, the biggest investment of universities is to be on virtual classroom servers; otherwise it is inevitable that they will receive services for virtual classroom applications via servers located either at home or abroad.

In order for the virtual classroom applications to be effective and to keep the student awake during the course, the instructor should provide the student with the right to make presentations or talk, make mini-polls, and ask instant short questions during the live lesson. It should be possible for the live course recordings to be saved in the archive and watch the recordings again whenever they want.

The important point to be considered in virtual classroom applications is that the Presidency Digital Transformation Office issued a circular on July 7, 2020 recommends the use of domestic and national products as much as possible due to the data security problems of foreign software hosting their servers abroad.

Creating Training Materials

Creating Educational Materials, which is one of the main items of the Course Content component, is a task that the trainers will focus on and are their own responsibilities in order to operate the distance education system properly. Training materials to be created for a course can be listed as follows:

- Videos shot for every subject
- Text documents (must be PDF)
- Pictures-graphics
- Internet links (libraries, magazines, articles, videos, web pages, etc.)
- In the recorded lecture videos, it should be tested that the students have understood the subject they watched by asking questions suddenly between the subjects. In case of wrong answer to the question, it should be possible for the video to go back to the topic.

5. Results

Distance education requires more effort than face-to-face training. It is certain that lecturers need to make great efforts to prepare effective course materials, but preparing such enriched materials is also the most important part of distance education.

The Higher Education Institution ensured the Establishment of Distance Education Application and Research Centers in each University. Thus, it would be possible to provide a healthier, more effective and efficient service.

Since quite a lot of universities look at the distance education process temporarily, they did not make a significant investment in this regard. As of November 2020, we have entered a period with an uncertain future. Even if normal education is started, I strongly recommend that universities establish their own distance education systems as soon as possible with the experiences they have gained here. The events that happened show that it is not clear what will happen when.

Universities, in particular, should always use the LMS platform in their regular education in order to increase the quality of education by turning digital transformation into an opportunity. It will be seen that the university model, which is open 24/7 in the virtual environment, brings success.

Universities that want to establish a distance education system within their own organization are required to do the procedures stated here. For this purpose, two structures different from each other but integrated with each other in terms of infrastructure should be established.

Learning Management System

If there is more than one LMS server according to the number of users, a load balancing system must be established in order to direct users quickly and accurately. Generally, the process can be solved with software placed in front of the servers. At Dokuz Eylül University, users are distributed by load balancing in front of 10 LMS servers. When the number of users increases, the number of LMS servers can be increased.

Virtual Classroom

Since the virtual classroom uses more internet bandwidth, CPU and RAM, it needs quite a lot of servers. Therefore, it is very important to manage a large number of servers. Currently, there is an open source Scalelite load balancing system in front of 100 BigBlueButton live lecture-virtual classroom servers used at Dokuz Eylül University. The number of presenters should increase depending on the increase in the number of live lessons and participants. An average of 250 people can attend the live class for each server.

6. Future Suggestions

In distance education, it is very important and necessary that the videos in which the lessons are taught in an accurate, effective and understandable way are created by the instructors. It cannot be said that live lessons that will be given only with the virtual classroom are sufficient for every course given in distance education. What should be done in this case? How should the video be shot?

- Projecting a simple PowerPoint presentation to the screen and shooting a video while talking behind it is not enough for an effective educational material.
- The videos need to be processed and enriched so that the course videos can be understood and attracted by the students.
- While shooting lecture videos, at least the presentations should be made interactive and animated as far as possible, away from monotony.
- Presentations should be supported with visuals such as pictures and graphics rather than just containing text.
- If necessary, a better understanding of the subject can be achieved with short videos in the presentation. So short videos can be used in the video.
- Each lesson has a different narrative feature. A graphic tablet for mathematics, statistics, painting, graphic design lessons will enable the instructor to draw comfortably on the ground. Making such lecture videos using a graphic tablet will ensure that the subject is explained interactively and that the student's interest is always on the screen.
- While the videos are being prepared, if they are as lively and interactive as possible with the first presentation, the videos may not need to be edited later.
- However, the course videos can be enriched as much as possible by using video editing programs such as Camtasia, Windows Movie Maker, Adobe Premier Pro, Vegas Pro, Final Cut, and they can be transformed into effective course materials.
- How a machine works, how a chemistry experiment is performed, how a patient is diagnosed, it can be combined with video editing software by taking videos in applied lessons, they can be re-voiced and made into an effective training video by rearranging. It is not enough to teach by speaking only in live lessons, it is very effective to play previously shot videos and make explanations on them.

- It may be sufficient for instructors to use their own computers and video recorders to shoot effective lecture videos.
- With simple green screen studios to be established on the basis of units (Faculty / School / Vocational School / Institute), the background of the videos taken by the lecturers in front of the curtain is made transparent and the relevant visuals can be conveyed in the background or next to the speaker in a very effective way.
- Using lightboard technology in which the lessons are taught by looking at the student's face by writing / drawing on transparent boards in mathematics, statistics and medical education will greatly increase the quality of the lessons.
- It has been observed that the live lectures and monotonous slide presentations to be given in front of the camera remove the student from the lesson and leave the lesson if it is not compulsory after a certain period of time. Live lessons must be supported with additional visuals such as pictures, graphics and videos.
- On May 6, 2020, YÖK sent a letter to universities about the different problems faced by disabled students during the global epidemic, where distance and digital education continues, with a series of measures and precautions that will raise awareness about providing distance education to disabled students.
- It was stated that necessary measures should be taken within the bounds of possibility in order to make distance education as accessible as possible to our disabled students.
- Although these measures are listed, unfortunately, it is known that the number of lecturers who take them into account and prepare materials is almost negligible.
- In order to contribute to this, units to prepare and support course material should be established on the basis of units. It may be possible for research assistants, who do not have a significant burden on them as of March 16, 2020, to provide significant support in this regard. It is possible for everyone to be trained in enriching educational materials.
- Providing the course contents in text for lessons with hearing impaired students, giving lectures in subtitles if possible, sending the course content to the student in text beforehand, making the lecturer visible on the screen as well as the lecture presentations for the students who can read

lips; taking care of the use of rich text formats that can be used by reader systems for visually impaired students in texts, using large font and contrast color in presentations, depicting visual contents, graphics and tables during lectures, depicting graphics especially in exams to take measures such as granting additional time according to the disability in the exams are among YÖK recommendations for our universities.

- There is a risk in every environment where technology is present, therefore, considering that the virtual classroom system may be interrupted or shut down at any time, videos and other materials should be uploaded to the system beforehand.
- When necessary, the continuation of the lessons should be ensured by using the Chat Room and Forms tools interactively.
- The most important factor that limits or limits Distance Education will be LIVE COURSES. Unless sufficient investment is made in appropriate technology, it is very difficult to maintain live lessons in a healthy way. Measures should be taken accordingly.
- Especially institutions with a large number of students and lecture potential should not have an expectation of doing each lecture as a long-term live lecture. The applicability of this is very poor for both the instructor and the student.
- It should be ensured that the Live lesson time is between 20-30 minutes for each 40 or 45-minute normal lesson, depending on the effectiveness of the lessons, if desired, these lessons should be held in block lessons of 60-75 minutes at a time.
- During the live lesson, it should be ensured that students keep their attention in the lesson with some small questionnaires and quizzes.
- You can use Camtasia software to create effective, meaningful, interactive and vibrant content.
- It is possible to develop any kind of content by using Xerte Online Content Development Editor, a web-based open source software.

In the future, even if not all educational institutions have a live course system, it will be inevitable to have a learning management system in which a 24/7 education platform will be open.

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CHAPTER 26

ELEARNING (A new way of education)

Sheetu KHANNA - Innocent Hearts School

ELearning

Learning is the process of acquiring new knowledge, skills, values and preference. During epidemic time, our education has been converted into e-learning. ELearning or electronic learning is the way of teaching learning and evaluation through digital resources. E-learning can also be termed as a network that transfers skills and knowledge to a large number of recipients at the same or different times. E-learning is mostly chosen means in the corporate sector, especially when training programs are conducted by MNCs for professionals by having seminars. The schools which use E-learning technologies are a step forward than traditional approach towards modernization. The use of e-learning is increasing day by day and it has become widespread in education. E-learning effectiveness is also measured based on the learning perceived by learners, their acquired skills and their competency. These three elements can be measured by comparing them with the previous learning, skills and competency. If there is an increase in these three elements, the e-learning program is said to be effective. The effectiveness of e-learning can also be measured based on the satisfaction of the learners. Formative and Summative Assessments help learners check their understanding of the subject-matter.

CATEGORIES OF ELEARNING:

Fundamentally, there are two categories of eLearning:

1. SYNCHRONOUS

Synchronous eLearning is real-time learning. In this, the learners and the teacher are online and interact at the same time from different locations. They deliver and receive the learning resources via mobile, video conference, Internet or chat. In this type of learning the participants can share their ideas during the session and interact with each other and they get detailed queries and solutions. Synchronous eLearning is gaining popularity because of improved technology and Internet bandwidth capabilities.

Learning from the sources of:

- Virtual Classroom
- Audio and Video Conferencing
- Chat
- Webinars
- Application Sharing
- Messaging instantly

2. ASYNCHRONOUS

Asynchronous eLearning is pause-and-resume kind of learning. In this type of eLearning the learner and the teacher cannot be online at same time. Asynchronous eLearning may use technologies such as email, blogs, discussion forums, eBook's CDs, DVDs, etc. Learners may learn at any time, download documents, and chat with teachers and also with co-learners. In fact, many learners prefer asynchronous instead of synchronous learning because learners can take online courses to learn at their preferable time by not effecting their daily commitments.

Learning from the sources of:

- Self-paced online courses
- Discussion forums & groups
- Message boards

THE IMPORTANT BENEFITS OF ELEARNING FOR STUDENTS

The advancement of technology has facilitated the learning process.

A lot of students both are using a wide array of e-learning tools and techniques for academic and non-academic learning purposes. Today's learners want relevant, mobile, self-paced, and personalized content. Teaching should be always

arranged according to Student's comfort and requirement, so let us discuss about benefits of eLearning:

- Mobility

Combining education with work or other activities can be often challenging for many. One of the factors that have brought so much appeal to learning methods influenced by technology is the mobility involved. ELearning gives students the chance to study at any place and at any time, accommodating their needs perfectly. Today's learners want a personalized, mobile approach in education, and that is exactly what this option provides.

- Quick Delivery of Lessons

ELearning is a way to provide quick delivery of lessons. As compared to traditional classroom teaching method, this mode has relatively quick delivery of content.

- Save time of students

Saves time as a student does not need to travel to the training venue. You can learn at the comfort of your own place.

- Scalability

ELearning helps in creating and communicating new training, policies, concepts, and ideas. Whether it is for formal education or entertainment, eLearning is very quick way of learning!

- Consistency

ELearning helps the educators to delivery their lectures whenever all learners receive the same type of training with this learning mode.

- Effectiveness of organization

ELearning has a positive influence on an organization's profitability. ELearning reduce the issue of attendance, delivery of notes etc.

- Lectures Can Be Taken Any Number Of Times

Unlike classroom teaching, with online learning you can access the content an unlimited number of times. This is especially required at the time of revision when preparing for an exam.

- Less Impact On Environment

ELearning protects the environment to a lot of extent. ELearning is highly eco-friendly way of learning.

- Discipline yourself

Treat the course like any other offline course you might have taken in your life. Make and follow a schedule. This will increase your chances of coming back to the course every day and not quitting mid-way.

- Schedule breaks

When you start the course, you might think that you'll be able to complete it in one or two sittings. Do not underestimate the rigour and set unachievable targets for yourself. This will only burn you out, not help learn or retain information properly and dissuade you from completing or participating in new courses.

- Take notes

Like in an offline course maintain notes. These help you focus during the course and make revision easier which will help retain the information and make it useful as you progress through your learning.

BEST PLATFORMS AVAILABLE

There are a wide range of online learning platforms available at the onset of a single click. It is very essential that one needs to acquire knowledge about the best courses and platforms availability, so as to provide learners with the best possible outcome. Here is the list of courses and platforms available for online learners.

1. FOR SCHOOL LEVEL EDUCATION:

- DIKSHA – This is an online platform for school education (Grade 1-12) in multiple Indian Languages. Free App is also available e- PATHSHALA - It has 1886 audios, 2000 videos, 696 e- ebooks (e- Pubs) and 504 Flip Books for classes 1st to 12th in different languages.

Key Highlights:

- Practice tests, exercises
- Completely free
- BYJU's: This is a great app for school students to study online with ease covering study material from primary to high school, with subjects such as Maths and Science. The platform hosts videos for kids to understand concepts in a fun and entertaining manner, including revision modules, and quizzes to facilitate retention creating a powerful learning environment at home. The course waiting for you. So, it is time to get engaged and pick up a skill while spending time at home.

Key Highlights:

- School + Competitive Preparation
- One-on-One mentoring, doubt resolution
- Practise sessions, exercises
- Scholarship program
- KHAN ACADEMY:

This is a wonderful e-learning platform that covering many subjects and providing methodical learning for children that they can put to test through quizzes and interactive exercises for enhancing maximum learning.

Key Highlights:

- Huge video library
- School + Competitive Preparation
- Practice tests, exercises
- Completely free
- VEDANTU LIVE LEARNING APP

Vedantu is currently offering free access to all of their live online classes. The premium content for Classes 1-12, CBSE, ICSE, Boards, KVPY, NTSE, IIT JEE & NEET, can also be accessed for free on the application.

Key Highlights:

- Free Live Classes, Premium Content
- School + Competitive
- Course Materials, In-class doubt solving.
- Co-curricular Courses
- EXTRAMARKS:

This is an e-learning platform that covering study material for both CBSE and ICSE exams. It enables the students to easily navigate their course and personalize their learning journey to learn at their own pace.

Key Highlights:

- Huge video library
- School + Competitive
- Preparation Practice

- Tests, exercises
- Completely free

2. TO DEVELOP SKILLS:

- NISHTHA

An integrated Teacher Training Portal and Moblie App and life-long learners, all disciplines, all popular form of access devices and learners are differently-abled. Website: This is a digital repository of a vast amount of academic content in different formats and provides interface support for leading Indian languages for all academic levels including researchers.

- UDEMY:

Udemy is one of the most well-known platforms for online courses with over 5000 courses having an impressive repertoire of skill-based courses. Whether you aspire to become a better writer, guitarist, and photographer or simply improve your handwriting – there is a course which is available for you.

- SKILLSHARE:

It is a platform to explore a wide range of creative courses and get working with hobbies. It offers videos from many well-known experts and has tremendous width in types of courses available.

From learning piano to calligraphy, think of a subject and find it on Skillshare.

3. FOR PROFESSIONAL DEVELOPMENT:

- EDX

Founded by Harvard University and MIT in 2012, edX is one of the largest MOOC providers and a leading e-learning provider, hosting courses from the world's leading institutions to benefit users across the world. The site boasts of more than 90 world- wide partners and covers a plethora of topics ranging from architecture, art and culture, biology and life sciences, to business and management, and math, medicine, music.

- COURSERA:

One of the leading names in online learning, each course is curated with experts from that field of study complete with online resources, videos, notes and a thriving online community to interact and share notes with while studying for a course. It also offers certificates on successful completion of courses.

- UDACITY

The leading platform is to pick up up-to-date, relevant and in- demand technology skills. What started as a free AI course has given way to a thriving ecosystem covering courses from autonomous systems to data sciences. The program is developed in a manner that even the busiest professionals can learn and advance with ease.

- UNACADEMY

Unacademy started as a youtube channel by the Gaurav Munjal. In 2015 Unacademy was officially registered as an education company in Bangalore. Unacademy Subscription is a paid learning service provided by Unacademy. The company currently provides preparation study material for students aspiring for civil services, bank jobs and other competitive exams in India.

- NATIONAL REPOSITORY OF OPEN EDUCATIONAL RESOURCES (NROER)

A portal equipped with best quality informational content on diverse topics in multiple languages a total of 14527 files including 401 collections, 2779 documents, 1345 interactive, 1664 audios, 2586 images and 6153 videos on different languages

- SWAYAM:

This is the national online education platform hosting 1900 courses covering both school (class IX to XII) And Higher Education (both UG and PG) in all subjects including engineering, humanities and social sciences, law and management courses.

MODES OF ELEARNING –

Online education is the best way to connect the student with their respective studies in toughest challenged time covid-19. Every school is trying to adopt best mode of e-learning according to the convenience of their students. Our teachers have adapted amazing online applications.

1. WHATSAPP GROUP: - This is a great application for school to study online with ease covering study material for preprimary and primary because the availability of pdf and videos stay with them and they can use according to the availability of time.

2. GOOGLE CLASSROOM: - This application has simplified teaching and learning process. In this we can add students directly, or share a code or link so the whole class can join and easily set up a class in minutes. We can easily communicate and automatically send updates.

3. **ADMISSION 24:** - This application is Live Virtual Classes for students and educator with unique feature of recording lectures for students during live class and is accessible up to 48 hrs. It is an online education hub which connect the teachers with their students.

4. **IRTUAL CLASSES:** - It is a direct face to face interaction through different apps like zoom, Google meet, Microsoft team etc. These are secure meeting with flawless video and audio, instant screen sharing, and cross-platform instant messaging. Theses apps help the teachers to create a bond with their students.

5. **EDUNEXT:** - This application is management software and school mobile app. School can create individual ID of every student with their name, photo, fee detail, marks, circular for their parents.

6. **GOOGLE FORM:** - This application is the best way to check the student's understanding with their content. Its quiz feature helps the teacher for assessment of their students.

7. **SNAP HOMEWORK:** - This Education App that allows teachers to instantly send homework news, notice or message to parents and students. Here, each student has its unique ID so that it becomes more secure app for students. We can schedule virtual classes through any app like zoom, Google meet etc. with the security feature that only the intimation of the start of virtual class is conveyed without sharing link.

DISADVANTAGES OF E-LEARNING:

We already analyzed the numerous benefits of E-Learning. Now, it is time to cover the opposite side of the coin. There are some major drawbacks to E-Learning, and these problems often get pushed aside in online discussions.

These are some disadvantages of E-Learning:

- **ONLINE STUDENT FEEDBACK IS LIMITED**

In traditional classrooms, teachers can give students immediate face-to-face feedback. Students who are experiencing problems in the curriculum can resolve them quickly and directly either during the lecture or during the dedicated office hours. Personalized feedback has a positive impact on students, as it makes learning processes easier, richer and more significant, all the while raising the motivation levels of the students.

- **E-LEARNING CAN CAUSE SOCIAL ISOLATION**

The E-Learning methods currently practiced in education tend to make participating students undergo contemplation, remoteness and a lack of interaction.

As a result, many of the students and teachers who inevitably spend much of their time online can start experiencing signs of social isolation, due to the lack of human communication in their lives.

- LACK OF SELF-MOTIVATION

Lack of self-motivation among students continues to be one of the primary reasons why students fail to complete online courses. In traditional classrooms, there are numerous factors which constantly push students towards their learning goals. Face-to-face communication with professors, peer-to-peer activities, and strict schedules all work in union to keep the students from falling off track during their studies.

- LACK OF COMMUNICATIONAL SKILL and STUDENTS DEVELOPMENT IN ONLINE

E-Learning methods are proven to be highly effective at improving the academic knowledge of the students. However, developing the communicational skills of the students is an area often neglected during online lessons. Due to the lack of face-to-face communication between peers, students and teachers in an online setting, the students might find that they are unable to work effectively in a team setting.

- CHEATING PREVENTION DURING ONLINE ASSESSMENTS IS COMPLICATED

One of the biggest disadvantages of E-Learning continues to be cheating through various methods. Compared to on-campus students, online students can cheat on assessments more easily as they take assessments in their own environment and while using their personal computer. The students cannot be directly observed during assessments without a video feed, making cheat detection during online assessments more complicated than for traditional testing procedures.

- ONLINE INSTRUCTORS TEND TO FOCUS ON THEORY RATHER THAN PRACTICE

Drawback of E-Learning is starting to be addressed and fixed by some of the more innovative online learning platforms; the problem has yet to disappear completely. The problem is that a large portion of E-Learning training providers choose to focus largely on developing theoretical knowledge, rather than practical skills. The reason for this is evident – theoretical lectures are considerably easier to implement in an online learning environment than practical lectures. After all, without face-to-face communication and physical classrooms to use as a workshop, implementing practical projects in an online course requires significantly more prior planning than theoretical training.

- E-LEARNING LACKS FACE-TO-FACE COMMUNICATION

The lack of face-to-face communication ties together with many of the previously mentioned disadvantages of online learning. A lack of any kind of face-to-face communication with the instructor inhibits student feedback, causes social isolation, and could cause students to feel a lack of pressure.

- E-LEARNING IS LIMITED TO CERTAIN DISCIPLINES

All educational disciplines are not created equal and not all study fields can be effectively used in e-learning. For now, at least. E- Learning tends to be more suitable for social science and humanities, rather than scientific fields such as medical science and engineering which require a certain degree of hands-on practical experience.

- ONLINE LEARNING IS INACCESSIBLE TO THE COMPUTER ILLITERATE POPULATION

Online education is easily accessible to most people. However, these statistics do not paint the whole picture. Despite the booming growth in technological capabilities, the rates of computer literacy are still far from perfect.

DIFFERENCE BETWEEN DISTANCE LEARNING AND ONLINE LEARNING

DISTANCE LEARNING

Distance learning is the 'traditional' self-study course, also known as a 'correspondence course'. Materials and learning resources are sent to students via post or email and students must complete the set tasks according to the course schedule.

On a distance learning course, often the only interaction with a tutor is when assignments are submitted for marking; it is also rare to interact with fellow students.

The difference between distance learning and online learning is that our learners also have the opportunity to discuss questions and chat with fellow students via online discussion forums, providing a valuable network of support and feedback. Our tutors also run regular live online Q&A that students are encouraged to attend, enabling them to communicate in real-time.

FUTURE OF EDUCATION

The future of education is all about strengthening and incorporating student-centric learning. In this endeavor, the onus is on teachers to adopt personalized learning and teaching patterns. Flexibility in learning is the keyword that governs the forthcoming tendency of imparting quality education to students through e-learning.

FINALLY, ONLINE EDUCATION IS HERE TO STAY - BOTH IN INDIA AND GLOBALLY - BECAUSE OF SEVEN FUNDAMENTAL BENEFITS:

- **COST SAVINGS ON PHYSICAL INFRASTRUCTURE**

By moving courses online, you save travel/ commute, the actual classroom and administrative infrarentals, and cost of lodging and boarding. Lower costs will also mean lower fees for learners.

- **PHYSICAL LIMITATION OF INFRASTRUCTURE:**

By moving courses online, you are no longer limited by 'sanctioned strength' or 'limited seats'. The ability to market your online courses and the credibility achieved of content and scoring systems determines the number of learners flocking to learn from a particular online training provider.

- **LOCAL VS GLOBAL:**

By moving courses online, you are no longer serving a limited local population of students but can cater to a global population of enrolled participants. Even in terms of faculty, you need not be limited by locally available expertise, but can use the best professionals from anywhere around the world.

- **ENVIRONMENTALLY BENEFICIAL:**

Without paper books and paper examinations, there is significant saving on paper, and that preserves the environment by not cutting down trees for its production.

- **TIME IS MONEY, I.E., INSTANT CONTENT, INSTANT RESULTS AND INSTANT READY-RETRIEVAL**

Online content can be created quicker when compared to publishing books or journals. Similarly, automated scoring systems are easy to implement for instant results, saving huge amounts of time waiting for traditional methods of declaring results after a long interval. Being online, the answer sheets can be retrieved at anytime from anywhere for either purpose of audit or re-evaluation.

- **BREAKS DOWN RED-TAPE:**

Online enrolments, training and assessments leave negligible room for red-tape, bureaucracy, favouritism and corruption.

- **FLEXIBLE VS REGIMENTED LEARNING SCHEDULES**

Studying online allows you to learn at your own pace rather than a regimented fixed set of books and a class timetable or schedule of learning.

CONCLUSION

Today, e-learning is adopted not only by students, but also by organizations that want to offer training for their mentors. E-learning is a priority for teachers that look forward to improve their skills. That is why online learning has become an important factor for education. These are only a few reasons to choose an online education, and why 90 percent of students today think that online learning is the safe or better than the traditional classroom experience.

Every student must assess their unique situation and decide according to their needs and goals, and while this alternative to traditional education is not for everyone, it is still a convenient option with virtually endless options for international students all over the world. However, the rapid progress in technology is the way to modify our ELearning system that is leading the teachers, students and school towards their objectives.

Overall, traditional learning is expensive, takes a long time and the results can vary. The importance of e-learning is now a given fact and it can offer an alternative that is much faster, cheaper and potentially better.



This book encapsulates 26 chapters in relation to online education. Authors shared their reflections and stories in Covid 19 pandemic time at all levels of education. We have a firm belief that authors and readers can find great insights on online education from different reflections and researches of chapters during Covid 19 pandemic time in relation to different subject fields.



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ISBN/BARKOD: 978-625-7676-07-6