TEACHERS' MAIN CHALLENGES ENCOUNTERED DURING THE ONLINE LESSONS AFTER THE CLOSURE OF SCHOOLS DUE TO THE COVID 19 PANDEMIC

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STATEMENT OF AUTHENTICITY

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ABSTRACT

The pandemic, which struck the entire world , prompted changes in teaching and learning process which required new approaches. Most of the world's enrolled students are unable to attend school in person due to Covid-19-related school closures. In Azerbaijan, there aren't adequate study on the issues that teachers face while teaching online. Our research study investigates a novel topic in the field of Azerbaijani educational research. The goal of the research is to learn about the major obstacles that public school teachers faced and how principals helped them throughout the school closures. The issues that teachers encountered in one public school in Baku and two public schools in separate regions are examined in this study. The researchers conducted interviews with teachers to learn about the kind of obstacles they faced, as well as the sources of assistance they received from their principals. The findings of this study show that teachers had access to the internet, on the other hand , cheating, parental assistance were frequent. Teaching challenges were also common, such as teachers lack ICT skills, digital equipment, direct interaction with students, and increased in teachers' workload. Furthermore, teachers received support from administrators in a variety of ways, including observing online lessons, organizing training, technical support, emotional support, connecting with third parties, and using alternative technologies and planning meetings for teaching reasons, according to the research. The findings of this study highlight the need for more research into teachers' main challenges while teaching online lessons after school closure during to the Covid-19 pandemic locked down , in order to give more empirical evidence for the ministry of education and other stakeholders in the field of education.

Keywords: online lesson, lockdown, teachers' challenges, principals' support, workshop.

CHAPTER 1. INTRODUCTION

1.0 Problem Statement

The first coronavirus (COVID-19) case was registered on February 28, 2020, in Azerbaijan, this led to the operational headquarters of the Republic of Azerbaijan's Cabinet of Ministers decision on the general safety precaution. They agreed to halt in-class (face-to-face) teaching and learning throughout all educational institutions in Azerbaijan in an effort to support the prevention of the virus from spreading across the nation. Azerbaijan's educational institutions have used online and hybrid learning and teaching approaches since then.

However, all stakeholders (teachers, students, and school administrators) in educational organizations faced various obstacles as a result of the new modes of learning and teaching (Mohan et al., 2020). Teachers experienced numerous challenges inhibiting online learning, according to early data obtained from a few school principals. Lack of prior experience, teaching online, assessment, transferring face-to-face classes to online mode, and applying various tactics to assist online learning were all issues that the teachers faced. Preliminary interviews with administrators also suggested that teachers struggled to engage children in the learning process. Teachers experienced anxiety, frustration, and low motivation as a result of their lack of prior experience teaching, learning, and managing in such unusual situations. Teachers in public schools were striving to solve difficulties and deliver high-quality education.

1.1 The Purpose of the Study

The study aimed to identify the teachers' primary issues during the online lessons after the closure of schools due to the Covid-19 pandemic to provide high-quality and

continuous education in Azerbaijani public schools. This study also attempts to find out about principal-teacher relationships and how much of support was provided by school principals during the online teaching and learning mode. Based on the purpose of our research, we developed the following research questions that we intended to respond to throughout the study.

1.2 Research Questions

1. What are the teachers' main challenges during the online lessons after the closure of schools due to the Covid-19 pandemic?

2. Do school principals support teachers during the pandemic? If yes, what kind of support do they provide?

1.3 The Significance of the Study

As mentioned earlier, in a response to the pandemic, all the educational settings had to switch to an online setting to keep the education process in progress (Burgess & Sievertsen, 2020). However, this shift caused a number of challenges, making to consider some support to facilitate the teaching and learning process (Sepulveda-Escobar & Morrison, 2020)

The present project's findings also highlight a number of concerns with the teaching and learning process that are common in all the schools studied. As a result of this, we anticipate that the final product (a workshop) will assist the teachers who participated in this project by providing online teaching skill training to help them stay on the forefront of contemporary teaching and overcome online teaching challenges.

1.4 Definitions of Terms or Concepts

Two important terms – *teacher's main challenges* and *principal's support* are used in this project.

1.4.1 Teacher's main challenges

The first term is mentioned by some scholars as difficulties encountered by teachers during the pandemic. They mostly lack collaboration or direct interaction, anxiety, lack of technology use skills, poor internet connection, adaptation, time management, inefficient technical support, planning of lessons, assessment, low-quality lessons because of increased workload, after lockdown shaping students' behavior in the classroom (Bozkurt & Sharma, 2020; Chaddha, 2020; Escobar & Morisson, 2020; Huber & Helm, 2020; Mohan et all., 2020).

1.4.2 Principal's support

The second term is defined as school leader's continuous support during crisis, observing main difficulties and providing support, convenient recommendations to cope with organizational behavior, prioritizing the health and well-being of students, managing emotional reactions of others, encouraging staff in their use of technology (Alsaleh, 2021; Brown et all., 2021; Scully et. All., 2021; Harris & Jones, 2020)

CHAPTER 2. LITERATURE REVIEW

2.0 Introduction

On December 31, 2019, Wuhan, China, announced the first Coronavirus case. After a few months, deadly pneumonia had spread all over the world according to World Health Organization, (WHO, 2020). By the spring of 2020, more than half of the world's population had been subjected to a strict lockdown. The unpredictability of the shutdown posed numerous issues in the economic, social, health, and educational areas (OECD, 2020). Thus, according to UNESCO (2020), the pandemic has affected more than 1.57 billion kids (over 90% of the world's total enrolled students) and at least 63 million teachers. The epidemic of Coronavirus 2019 has prompted significant adjustments in school systems around the world. Every country has shifted to online learning from face-to-face instruction. Various changes and difficulties arose as a result of the shifting process all across the globe. The major goal of this chapter is to review numerous studies that identified issues faced by teachers during online classes during the pandemic, as well as the function of school principals during this time. The literature will be reviewed in two subsections: "Challenges that Teachers Faced During Online Lessons following school closure due to the Covid-19 Pandemic" and "Principals' Support During the Pandemic," with the chapter ending with "Conclusion."

2.1 Challenges that Teachers Encountered During the Online Lessons After the Closure of Schools due to the Covid 19 pandemic

Although a number of recent studies found that the shifting process aided teachers and students in improving skills such as using online tools, planning online activities, and time management (Escobar & Morisson, 2020; Huber & Helm, 2020; Ilomaki & Lakkala,

2018), the majority of other studies focused on significant challenges. Escobar and Morisson (2020), for example, discovered that teachers in Chile also experienced challenges. On March the 15th, 2020, Chile's Ministry of Education announced that all school activities nationwide would be suspended, and that online education would be implemented. Findings as stated according to the participants' responses; firstly, there was lack of direct interactions with learners and the sudden change caused a lot of anxiety and also hindered students' motivation; secondly, the new method segregated students during online teaching and learning process because, some students could not afford new, updated laptops or phones with good internet in order to take online classes. Teachers should consider students' social backgrounds because not all of them could afford the learning materials required for online learning. Working from home in the new educational environment was difficult, and the extended working hours and lengthy periods of sitting in front of the computer caused health problems. Furthermore, because the majority of teachers are also parents, the preparation for teaching caused havoc in their homes. One of the biggest disadvantages is a lack of prior expertise in an online setting (Bozkurt & Sharma, 2020; Escobar & Morisson, 2020; Dyment & Dowling, 2018). Teachers' lack of competency in managing technology-based learning and instruction, according to the Department of Education and Skills (DES) (2015), creates significant difficulties during closures.

During Covid-19, Mohan et al. (2020) performed a survey in Ireland to determine the basic barriers faced by school leaders, teachers, and students. The first finding concerns the teaching staff's adaption process. The majority of the participants said they were having trouble adapting, and only 30% said they had "adapted extremely well." Instructors'

adaptation to distant education is influenced by a number of factors, including teaching experience, communication with other teachers in the school, and CPD before and before the lockdown. Uncertainty about state exams, time management, a lack of confidence in using ICT, ineffective technical support, difficulty working at home, insufficient home internet speed, difficulty adapting lesson plans, and identifying students' needs were among the issues teachers in Ireland faced, according to the survey. The survey results in Dublin were also mentioned by Mohan et al. (2020). The majority of respondents stated that there is a lack of connection between teachers and students, and that distance learning is too overwhelming. Teachers were incapable of helping students who were persistently silent. In a new context, for instance, if a student always uses his or her body language or grimace to signal whether he or she comprehend the taught concept, teachers struggled to figure it out. Furthermore, students tended to keep their cameras and microphones off during the online lesson. Online teaching is more challenging than traditional classrooms, according to other researchers Delcker and Ifenthaler (2021), because it is largely "teacher-centered". Teachers were forced to talk more during online lessons since they could barely elicit response from pupils. Huber and Helm (2020) argue that teamwork is one of the most important traits for teachers and students to deal with stress at school. In an online situation, however, a lack of collaboration with other users would cause a lot of stress. As a result, participants stated that they were under a lot of stress during that time. According to UNESCO, the Kuwaiti Ministry of Education has endeavored for the past 18 years to produce efficient online learning but has failed to establish an organized framework for the long-term sustainability of formal education during the epidemic. The following are the issues that led to the failure of continuing education in Kuwait during the spread of

COVID-19. According to Kuwaiti education scholars' observations and comments on the challenging situation at school during the pandemic, Kuwait's Ministry of Education. There are two issues that have been recognized as reasons why they are unable to ensure proper learning for students. The lack of digital infrastructure in Kuwaiti public schools is one of the issues. Kuwait's public schools do not have a digital infrastructure, and most schools do not have official websites or email addresses. However, teachers and school administrators are incompetent in communicating with parents or students via email or other digital platforms. Although fax communication is now replaced by the Internet, fax is the official means of communication between the Ministry of Education and schools in Kuwait. Researchers see another problem as the lack of decision-making of Ministry of Education. The Kuwaiti Ministry of Education has repeatedly announced and postponed the start of online education since the beginning of the pandemic. In the end, the Ministry of Education announced the end of the school year for grades 1-11 before the end of the remaining school year. The Ministry of Education has not consulted with the relevant bodies to make all these decisions. Thus, the Ministry of Education did not have a clear emergency plan for this pandemic. During the pandemic, the ministry made only contradictory and irresponsible decisions. The leaders of the Ministry of Education did not include experts and professionals in the decision-making process to support them (Alhouti, 2020).

Many resources have been invested in integrating technology into teaching throughout the last two decades, but the emergency situation resulting from the pandemic has shown that education systems around the world were not prepared to face the challenge of implementing online or blended learning in schools (Reimers & Schleicher, 2020).

Researchers have conducted a study on the challenges facing education in the United States during the pandemic. Due to the unexpected closure of schools in the United States, many teachers have switched to different formats for distance learning with limited training (Adams, 2020). According to a study conducted by Dyment and Downing (2018), teachers' responsibility of taking care of their kids at home while teaching online is one of the factors that have a negative impact on the quality teaching of them. However, online and blended courses can also be challenging for student teachers who often tend to feel isolated facing lower self-confidence and more pressure to increase their self-learning and independent workload (Dyment & Downing, 2018). This challenge, in turn, increases the workload of teachers and reduces the quality of lessons. There are enough teachers and researchers who teach in such difficult conditions. The Covid-19 pandemic has revealed that the world education system is not strongly organized against external threats (Bozkurt & Sharma, 2020). Some research has been conducted on education management during the pandemic in Afghanistan and Libya. One of the challenges of technology integration in the Afghani context is the local culture as well as the infrastructure, which brings a huge challenge during the Covid-19 crisis similar to Kuwaiti (Albouti, 2020; McMahon et al., 2020; Waseel & Yusof, 2019).

The most widely identified problems with online education are accessibility, affordability, agility, learning pedagogy and education policy (Albouti, 2020; Murgatrotd, 2020; McMahon et al., 2020; Waseel & Yusof, 2019). Many countries have serious problems with reliable internet connection and access to digital devices. In most developing countries, children from low-income families have difficulty accessing online education.

Online education poses an increased risk of screen time for the student. Online education is a challenge for students who collaborate with parents, especially primary year students.

2.2 Principals' Support During Online Lessons in the Pandemic

The key role of leaders in teacher's collaboration and engagement is an inevitable fact. The fact confirmed by Scully et al. (2021) "if a principal is effective at encouraging and supporting staff in their use of technology (role of the principal), is continuously exposed to innovative ideas and practices in relation to technology from their peers (networking) and is able to distribute responsibility for technology use" (p. 159). Alsaleh (2021) found out the role of the school leaders during the Covid-19. According to his research, respondents identified leaders' roles are supervision of online teaching, observation on main difficulties, providing trainings and support for teachers, and communication with stakeholders. Leaders also provide new ways to cope with organizational challenges, recommendations to enhance teaching quality and provide an ethical online learning environment. In this context, Brown et al. (2021) also stated that school leaders prioritized the health and well-being of students and teachers instead of the evaluation and planning of activities. Researchers also claimed that by using distributive leadership, leaders can support teachers and survive during the current crises. Harris and Jones (2020) discussed that school leaders manage the emotional reactions of others during crises including excitement, stress, anxiety, and frustration loss. Crisis and change management skills are essential for leaders during the pandemic. They are putting their own health and well-being in order to help others. Furthermore, principals are responsible to keep a balance to buy technological solutions to contemporary problems between pedagogy.

2.3 Summary

In summary, the Covid-19 pandemic had a negative impact not only on Azerbaijan's public schools, but also on the educational sectors of other countries throughout the world. Managing the teaching and learning process for teachers and students was difficulty during the epidemic, and it has been revealed that school principals and leadership in general have an invaluable role in combating the pandemic. Faced with the pandemic's issues, countries all over the world have conclude that all educators need to be regularly taught of using online platforms that can make teaching and learning accessible to everyone. Work is underway to rebuild high-speed internet and online platforms across the country. All these should be discussed at the state level, and politicians should always focus on addressing these issues. The data obtained during the study of the problems in the field of education during the pandemic show that most countries in the world were not prepared for the pandemic. The state should reconsider the issue of reorganizing ICT and allocating a budget for the development of effective education pedagogy so that education does not lag behind in emergencies such as pandemics.

CHAPTER 3. METHODOLOGY

3.0 Introduction

The project's purpose was to look into the major challenges that teachers faced during online classes in Azerbaijani public schools during the pandemic's school closure. Also, to find out how and what type of support school principals provided for teachers to help them during the online teaching and learning process. The research design, sample, instrumentation, data sources, data collection, data analysis, reliability, ethical considerations, and study limits are all covered in this chapter.

3.0 Research Design

This research is a qualitative study (Privitera & AD, 2018). This method brought us useful insights regarding exploring the participants' ideas, main problems, and thoughts. The exploratory nature of qualitative research helped us to explore the teachers' main challenges during online lessons in the pandemic and how the school principal supported the teachers (Schutt, 2014). Merriam and Tisdell (2016) added that qualitative design focuses on understanding of the aforementioned issues. Therefore, we used an exploratory nature of qualitative study in our research.

3.1 Target population and Sampling Method

Our target population were teachers and a principal from one of the public schools in Baku, and two principals from the regional public schools. The participants were chosen from the teachers to represent the familiar challenges to develop a complex view of phenomenon (Creswell et al., 2006).

In our research, we used one of the non-probability techniques- purposeful sampling. While using non-probability sampling techniques, the researcher did not know

how well the participants represent the target population. Instead of a large size of samples, the qualitative researcher used a smaller size of sampling and provided in-depth analysis in a detailed manner (Privitera & AD, 2018). We were interested in all challenges of teachers and their challenges may be varied according to their levels, grade, and subjects. Therefore, we have chosen a school principal and teachers from different grades. The sample size is clearly defined in Table 1.

Table 1 Participants of the Study

Participants of the Study	A Number of Participants
School principals	3
Primary School Teachers	6
Middle School Teachers	6
High School Teachers	6
Total Sample Size	21

3.2 Instrumentation and Sources of Data

We used an interview to collect data. Although certain questions based on research questions were intended to ensure the validity of the study interview process, new relevant questions might arise in the process based on the answers given by the respondents. That is, respondents were asked initial questions based on the research question in the interview process, and the process continued based on new questions that arise in accordance with the answers given. Thus, in our research, we used a semi-structured format of the interview. The semi-structured format allows individual participants to express themselves in unique ways (Merriam & Tisdell, 2015). Creswell (2014) emphasizes the importance of consistency in ensuring reliability in research. Therefore, when asking respondents about their challenges during the online lessons, special attention was paid to consistently describe their experiences.

3.3 Data Collection

After we defended our research proposal, we got permission from the Baku City Department of Education of the Republic of Azerbaijan to conduct our research at the school, then sent the invitation letter to the school principal. After getting approval from the school principal, we started recruiting our participants. The data collection process took a month. We contacted the teachers and principal who participated in the interview by mail and we scheduled an interview. In the process of data collection, interviews were used to obtain detailed information about the challenges faced by teachers during the pandemic. The interviews were conducted in one of the public schools in Baku and two regional schools. Respondents were purposefully selected from primary, middle and high school teachers to ensure diversity.

3.4 Data Analysis

Data analysis was in the form of data encoding in the interview transcript. We used "initial coding" during the first cycle encoding. The goal of "initial coding", particularly for grounded theory studies, is "to remain open to all possible theoretical directions indicated by your readings of the data" (Charmaz, 2006, p. 46). Axial coding was used during the second cycle encoding. "The purpose of axial coding is to strategically reassemble data that were "split" or "fractured" during the initial coding process" (Strauss & Corbin, 1998, p. 124). Grouping similarly encoded data categorized our data and reduced the number of primary codes which we created when re-labeling. During this time cycle, the code will be sharpened to achieve the best adaptation (Saldana, 2009). In the initial coding process, we provided the extraction of basic data from some type of respondent's interview transcript. During axial coding, we could perform a more in-depth

analysis based on the initial coding database. Statistical information was collected from the coding process to make conclusions and comparisons.

3.5 Trustworthiness

A "Member check" was used to make sure that the research fully reflects the truth. We asked our interviewees to check the transcripts to ensure the accuracy of the information they provided through the interview transcripts. This assisted us to investigate whether the information is accurate. The accuracy of the data in the study was guaranteed by the respondent's own verification (Merriam & Tisdell, 2016).

3.6 Ethical Issues

"Ethical dilemmas in qualitative research are likely to arise, mainly due to the dissemination of information" (Merriam & Tisdell, 2016, p.261). As mentioned in the research question, the question of whether the principal's support to teachers was also touched upon. We assured our respondents that anonymity will be fully warranted and the information we obtain will only be used for research and will not be shared with outsiders. Thus, the information obtained in the research process was used only for academic purposes.

3.7 Study Limitations

The research had some limitations. They are the following:

i. One of the limitations was that to conduct the interviews with the regional teachers, we used online platforms (Zoom and Whatsapp). Since they were experiencing the connection problem, it was time consuming, and it was difficult to hear the participants' answers. That created a challenge for us while collecting the data.

ii. Some teachers were reluctant to share actual organizational-based issues or shortcomings of the principal's support, because of the principal's possible negative reactions toward themselves.

CHAPTER 4. FINDINGS

4.0 Introduction

The purpose of this Capstone project was to determine the major challenges that students had while taking online classes after schools were closed due to the Covid-19 outbreak. The study also looked into how school principals in Azerbaijani public schools supported teachers.

Interviews with primary, middle, and high school teachers were conducted. According to the findings the challenges faced by teachers during the online lessons varied relating to the students' grade levels.

Children in primary school were more prone to be distracted, according to the responses of primary school teachers. The distortion of children' handwriting was the most common complaint among primary school teachers. Online lessons were a challenge for teachers at a period when fundamental writing and reading abilities were being cultivated.

Middle and high school teachers, on the other hand, saw that kids were more likely to cheat. They played games or found another activity to do in front of the Screen during the lesson. High school students, in particular, who were working with tutors to prepare for the state exam, were more likely to make excuses not to participate in online classes. As a result, high school teachers lamented about low attendance.

Based on the purpose of our research, we developed the following research questions that we targeted to respond throughout the study:

1. What are the teachers' main challenges during the online lessons after the closure of schools due to the Covid-19 pandemic?

2. Do school principals support teachers during the pandemic? If yes, what kind of support do they provide?

This chapter presents the following sections:

➢ Research Context

➢ Theme 1- The Teachers' Challenges

➢ Theme 2- The Principals' Support

➢ Final Product

4.1 Research Context – Schools

Three public schools were randomly selected to respond to the research questions. One is in Baku, and the other two are in the Fuzuli region's Mingachevir and Mollamaharramli villages. To maintain anonymity, the schools have been given names that correspond to the districts and cities in which they are located: Baku School, Mingachevir School, and Fuzuli School. Considering that maintaining participants' names confidential provides privacy for all participants, builds trust, and keeps ethical standards and the honesty of the qualitative research (Baez, 2002). Baku School has students (n= 1353) in 1-11th grades and teachers(n=94) teaching different subjects according to the national curriculum. Students (n=493) of the school are primary school students and(n= 860) are middle school and high school students. Teachers (n=19) teach in primary school and(n= 75) in middle and high school. The pedagogical staff of Mingachevir school consists of(n= 33) people. The Mingachevir school is general secondary school, meaning that the school serves only the students of 1-9th grades. Teachers (n=21) teach in primary school and teachers (n=12) are middle school teacher. There are students (n=144), students (n= 51) study in primary school and (n=93) students are in middle and high school. The students (n=53) studying at Mollamaharramli village school of Fuzuli region. Due to the small number of students, 1st and 3rd grades pupils were combined in one class, 2nd and 4th grades

in one class and they have been taught by the same teacher. So, in general, there are (n=16) students in the primary school and (n=31) students are studying in the 5th -9th grades and (n=6) students in the 10th -11th grades. The pedagogical staff of the school consists of (n=16) teachers. The teachers (n=13) are teaching the upper grades and (n= 3) in the primary school. There are (n=2) teachers on maternity leave during online classes. One of them has already resumed back to work, while the other is still on maternity leave (See Table 2).

Table 2.School demographics

Category	Levels	Baku School	Mingachevir School	Fuzuli School
Teachers	Primary	19	12	3
	Middle	45	21	13
	High	30	-	13
Students	Primary	493	51	16
	Middle	610	93	31
	High	250	-	6

As mentioned earlier in chapter 3, to respond to the research questions, semi-structured interviews were conducted among teachers and principals. Based on the data analysis, the following themes were revealed:

- Teachers' challenges
- Principals' support

The data analysis shows that the teachers' main challenges are the following: 1. Internet connection; 2. Lack of ICT skills; 3. Lack of digital devices; 4. Increased workload of teachers; 5. Lack of direct interaction with students, 6. Cheating and parental intervention. These challenges are the subthemes of the findings (See Table 3).

4.2 Theme 1: Teachers' Challenges

Subtheme 1. Internet Connection Challenges

The findings revealed that the teachers from the three schools (i.e., Baku, Mingachevir, and Fuzuli) had the same problems though they were in different regions and city. The most common problem was the connection problem causing the following challenges:

4.2.1 Delays Regarding the Timely Implementation of Curriculum

The teachers indicated that connection problem led to the waste of their class time, resulting in delays regarding the timely implementation of curriculum. One of the teachers shared:

[Onlayn dərs zamanı internet problemləri ilə əlaqədar olaraq şagirdlər məni yaxşı eşitmirdi. Dərsləri planlaşdırdığım kimi çatdıra bilmirdim, internet problemləri mənə mane olurdu. Bizim əsas problemimiz internet idi] (Mingəçevir məktəbi, Ibtidai sinif müəllimi).

[During the online class, the students could not hear me well due to the problems related to the Internet. I couldn't deliver the classes as I had planned, it was interrupted due to internet problems. Our main problem was internet] (Mingechevir School, Primary Year Teacher).

Teachers touched upon the internet issues from the several points such as explaining the same content again and again:

[Müəllimlərin internetlə bağli problemləri çox olurdu. Bu səbəbdən dərs proqramını çox hallarda yerine tam yetirməkdə çətinlik çəkirdilər] (Mingəçevir Məktəbi, direktor).

[Teachers had many troubles with the Internet. For this reason, they often struggling with implementing the curriculum] (Mingachevir School, principal).

[Səslər gedib-gəlirdi, stabil deyildi. Əgər hər hansı şagird məni eşitmirdisə, mən həmin şagirdə yenidən eyni mövzunu izah etməli olurdum. Və digər şagirdlər məni gözləyirdi. Bu həqiqətən bizim dərsimizin vaxtın alırdı] (Mingəçevir məktəbi, İbtidai sinif müəllimi).

[The sound was coming and going, it was not stable. If anyone could not hear me well, I was obliged to explain the same content again for this student. And other students were waiting for me. It really took our lesson time] (Mingachevir School, Primary Year Teacher).

Not only regional schools, but also Baku School teachers shared their concerns regarding internet:

[Bəzən bir neçə saat internet olmurdu, bəzən tamamilə zəif olurdu. Mən şagirdlərimlə bölüşmək üçün Whatsapp və Teams qruplarına bəzi materiallar göndərirdim] (Bakı məktəbi, Yuxarı sinif müəllimi).

[Sometimes the internet was down for a few hours, sometimes it was completely weak. I was adding some materials to "Whatsapp" and Teams groups to share with my students] (Baku School, Middle Year Teacher).

4.3 Attendance Problem

Also, because of the connection problem, the attendance was low among the students. The problem was faced by teachers of three schools in different rates. One of the teachers' shared:

[İnternet problemləri ilə əlaqədar olaraq şagirdlərin dərsə davamiyyəti aşağı idi. Online dərslərə şagirdlərin hamısı qoşula bilmirdi. Ona görə də, bəzi şagirdlər dərslərdən geri qaldılar. Misal üçün, dərsə qoşulmayan şagirdə zəng edib nəyə görə dərsə qoşulmadığını soruşanda cavab həmişə eyni olurdu ki, bizim internetimiz yoxdur] (Füzuli Məktəbi, Orta təhsil müəllimi).

[Attendance of students was low because of internet problems. Not all students in a class could join online lessons. Therefore, some students left behind from the lessons… For example, we called a student who did not attend the lesson and we asked, "why don't you attend classes?" And the respond was always the same: We didn't have internet] (Fuzuli School, Middle Year Teacher

In comparison with Baku School, regional schoolteachers were complaining more about poor internet connection and its effect on the quality of their lessons. Primary Year Teachers stated that online lessons affected students' handwriting, progress, and perception of lessons. Findings show that each region has internet connection challenges during online lessons.

Interviewing the teachers helped us better understand the problems they were facing during the online teaching. Since the classes were 30 minutes due to the Ministry of Education regulations, the teachers had difficulties in adjusting the 45-minute classes to the short period of time. As a result, the teachers had some delays in presenting the topics and materials to support the students' learning. Moreover, the poor connection caused the low level of attendance in the studied schools. Thus, majority of students were lagging behind.

4.4 Subtheme 2. Lack of ICT Skills

Absence of Basic ICT Skills

Most of the teachers said that they do not have enough prior experience to use electronic devices and teaching online by using them. All principals of the schools indicated

that their teachers had troubles of using computers and other devices to conduct online lessons. Before pandemic they had not used computers, phones to teach students. They used phones for only to communicate with each other, or computers to watch videos. Not only teachers, but also principals talked about teachers' poor ICT skills and its effects on online lessons. The Mingechevir School's principal added:

[Bizim müəllimlərin İKT bacarıqları çox zəif idi. Onlar Teams və Zoom vasitəsilə onlayn dərslərin keçilməsində çətinlik çəkirdilər. Biz həmin müəllimləri öyrətməyə çalışırdıq] (Mingəçevir məktəbi, direktor).

[Our teachers' ICT skills were very poor. They were struggling with using Teams or Zoom to deliver online lessons. We tried to teach those teachers] (Mingechevir School, principal).

Moreover, the Fuzuli School's principal claimed that:

[Bəzi müəllimlər hətta kompüteri yandırıb-söndürməyi bacarmırdı. Həmin müəllimlərin əksəriyyəti 40 yaşdan yuxarı müəllimlər idi] (Fizuli məktəbi, direktor).

[Some teachers did not know how to open and close computers. Those teachers are mostly more than 40 years old] (Fuzuli School, Principal).

One of the experienced teachers explained ICT skills challenges with these words:

[Bir müəllim olaraq, mən üz-üzə öyrətməyə üstünlük verirəm. Buna səbəblərdən biri o ola bilər ki, bizim onlayn dərs keçməklə əlaqəli kifayət qədər təcrübəmiz yoxdur və kompüterdən kifayət qədər yaxşı istifadə edə bilmirik] (Bakı məktəbi, Yuxarı sinif müəllimi).

[As a teacher, I prefer face-to-face teaching. One reason for this may be that we do not have enough experience with online teaching and detailed use of computers] (Baku School, Middle Year Teacher).

Mentioned facts proved that the lack of teachers' prior ICT skills made many troubles for them during the online lessons. Not having ICT skills limited using online tools and platforms and it strongly affected quality of online lessons.

4.5 Unable to Use New Online Platforms

Because of the lack of ICT skills of teachers, while using new online platforms, zoom" and "Teams", teachers were struggling with many difficulties. According to the interviewee's answers, Baku, Mingachevir, and Fuzuli schools' teachers encountered by the same difficulties. One of the principals indicated that:

[Müəllimlərin IKT bacarıqları zəif idi. Teams ve ya Zoom dan istifadə edərkən çətinliklər olurdu. Çalışdıq həmin müəllimləri öyrədək] (Mingəçevir məktəbi, direktor).

[Teachers had poor ICT skills. There were difficulties when using Teams or Zoom. We tried to teach those teachers] (Mingachevir School, director).

4.5.1 Subtheme 3. Lack of Digital Devices

Some Teachers and Students Don't Have Laptops or Phones to Join Lessons

Because of financial conditions, some families (both teachers and students) did not have enough devices (i.e., phones, computers, or tablets) that could support the teaching and learning process. For example, teachers and school principals shared that in some of the families several siblings were using one device to join the classes, creating some problems both for teachers and students. Thus, it was impossible to join all the lessons regularly. Considering these difficulties, the teachers had to schedule their classes in a way (i.e., having mostly online classes) to support their students. The challenge was mentioned by almost all three schoolteachers. One of the teachers argued that:

[Çünki əksər ailələrdə bir valideynin telefonu ilə 2 və ya 3 uşaq növbə ilə dərslərə qoşulurdu. Bu zaman şagirdi əlavə saxlayıb, 30 dəqiqə ərzində yerinə yetirməyə vaxt çatmayan tapşırığın icrasına cəlb etmək mümkün olmurdu. Çünki bacı və ya qardaşının telefonfan istifadə etmək növbəsi olurdu] (Fuzuli School, Primary Year Teacher).

[Because in most families, 2 or 3 children took turns joining classes by their parent's phone. In this case, it was not possible to involve students to extra lessons which were not completed for 30 minutes. Because it was the sister's turn to use the telephone] (Fuzuli School, Primary Year Teacher).

Some Schools Don't Have Computers to Provide Training Sessions or Lessons

Only Fuzuli school's principal mentioned that they did not have enough devices to conduct trainings and lessons at schools to help teachers. He added:

[Bizim məktəbdə informatika dərsləri üçün kompüter otaqları yoxdur.Məktəbdə bir kompüter var, o da mənim otağımdadır. İnternet problemleri ilə əlaqədar Nazirliyə etdiyimiz müraciətdən sonra bizə data kart verilən zaman da mən onu öz otagimda qoyub, zərurii xəbərlərin müəllimlərə çatdırılmasını təmin edirdim] (Füzuli məktəbi, direktor).

[Our school does not have computer rooms for ICT lessons. There was only one computer at the school, and it was in my room. When we were given a data card after our appeal to the Ministry of Education due to the Internet problems, I left it in my room and ensured that the necessary information was delivered to teachers] (Fuzuli school, director).

4.6 Subtheme 4. Increased Teachers' Workload

In addition to the lack of devices, the teachers shared that their teaching load increased since the start of the pandemic. This problem was common for the three public schools. Here is the extra work the teachers were supposed to do to support the teaching and learning process:

Providing Extra Lessons for Students Who Were Unable to Attend Lessons Due to Certain Reason

Some participants from three schools responded that they were trying to conduct make-up classes via "Whatsapp" to help the students involve in teaching and learning process, which in result had extra work for the teachers.

Regional schoolteachers also agreed that online lessons make their work difficult. The Primary year teacher added:

[WhatsApp vasitəsilə səsli mesaj şəklində dərsə qatıla bilməyən digər şagirdlərlə materialları yenidən müzakirə edirdik... Onların suallarını cavablandırırdım] (Füzuli məktəbi, yuxarı sinif müəllimi).

[We re-discussed the materials with the rest of the students who couldn't join lessons in the form of a voice message via WhatsApp…I answered their questions] (Fuzuli School, Middle Year Teacher).

4.6.2 Making Video Presentations for Students Who Lag Behind

Teachers from only Baku School noted that they were looking for different ways to keep students behind. The most effective was to take videos of the lessons and send them to students via WhatsApp. Because the students learned the lesson by watching the video explanations over and over again. And although these processes took extra time from the teacher, they helped the students a lot. Teachers mostly agreed that shifting from face-to-face teaching to online lessons obviously increased their workload. One of the teachers shared the experience:

[Həm internet problemi, həm də qoşulmaq üçün vasitə olmaması ilə əlaqədar olaraq onlayn dərslər zamanı bütün sinif dərsdə iştirak edə bilmirdi. Mən əlavə olaraq yeni dərsin

videosunu çəkib whatsapp qruplarında şagirdlərimə göndərirdim. Mən əlavə olaraq yenidən izahlar verirdim. Bunlar mənim iş yükümü həddindən çox artırırdı] (Bakı məktəbi, ibtidai sinif müəllimi).

[Since the whole class could not attend online classes due to the lack of both internet and connection devices. I additionally shot a video of the new lesson and posted it to my students' "Whatsapp" group. I was giving additional explanations again. These activities extremely increased my workload] (Baku School, Primary Year Teacher).

Mingachevir School's teacher added:

[Uşaqların çoxu dərsə qoşula bilmirdi. 14 Uşaqdan 6-7 si qoşulurdu. Dərsdən sonra məni eşidə bilməyən uşaqlara dərsi da yenidən izah etməli olurdum] (Mingəçevir məktəbi, İbtidai sinif müəlliməsi).

[Most of the students could not join the online lessons. 6-7 Out of 14 students joined. After class, I had to re-explain the lesson to students who could not hear me] (Mingachevir School, Primary school teacher).

4.7 Contacting parents and students out of work hours

This challenge is a common problem in all three schools. There were various problems during the online classes. Parents were also concerned and often contacted the teacher and addressed questions of various content. In addition, teachers called parents. In particular, due to attendance problems, teachers contacted parents and determined the reason for the student's absence. Therefore, teachers expressed their concerns about the need for being available during the whole day to answer students and parents' questions. One of the teachers explained:

[İnternet səbəbiylə dərsə qoşula bilməyən tələbələrə mümkün qədər əlavə vaxt ayırırdım. "WhatsApp" vasitəsilə canlı əlaqə yaratdım…. Həmişə onlara xatırlatmışam ki,

günün istənilən vaxtı mənimlə əlaqə saxlaya bilərlər. Nə zaman kömək istəyirdilərsə, suallarını cavablandırırdım və ətraflı izahat verirdim] (Bakı məktəbi, orta məktəb müəllimi).

[I spend as much as extra time with students who could not join the class due to the Internet. I created a live connection via "WhatsApp" …. I have always reminded them that they have the opportunity to contact me at any time of the day. Whenever they asked for help, I answered their questions and gave a detailed explanation] (Baku School, High School Teacher).

Another teacher proved that:

[Dərslərə qoşula bilməyən tələbələr videolarını çəkirdilər və materialları başa düşdüklərini göstərmək üçün mənə göndərirdilər. Bu da iş vaxtımı artırırdı. İşə daha çox vaxt ayırmalı olurdum] (Mingəçevir məktəbi, İbtidai sinif müəllimi).

[Students who could not join lessons recorded their videos and sent me to show their understanding of materials. This also increased my working hours. I had to spend more time on work] (Mingechevir School, Primary Year Teacher).

[Hər kəs üçün çətin bir dönəm idi. Valideynlər də uşaqların geriləməsindən çox narahat idilər. Xüsusən ibtidai sinifdə oxuyan şagirdlərin valideynləri çox narahat idilər. Çünki uşaqlar məktəbdə qazandıqları elementar davranış qaydalarını belə unudurdular. Və valideynləri deyirdi ki, uşaqları evdən dərsə cəlb etmək onlar üçün mümkünsüzdür. Beləliklə dərsdən sonra da bu şəkildə telefon danışıqlarına vaxt ayırmalı olurdum] (Füzuli Məktəbi, İbtidai sinif müəllimi).

[It was a difficult time for everyone. Parents were also very worried about their children's backwardness. Parents of primary school students were especially worried. Because the children had forgotten the basic rules of behavior they had learned at school. And their

parents said that it was impossible for them to take their children to school from home. So, after school, I had to spend time on the phone in this way] (Fuzuli School, Primary school teacher).

4.8 Subtheme 5. Lack of Direct Interaction with Students

Teachers believed that the absence of direct interaction with students also affected students' psychology and behavior. They are staying behind in discipline and psychological aid from teachers. In these cases, it is difficult to manage these students' behavior in front of the screen. Finally, most of the teachers believed that online lessons had detrimental impacts on student-teacher relationship.

4.8.1 Lack of Eye Contact Unable to Observe Students Reaction

One of the Mingachevir teachers touched upon the lack of eye contact challenge during the online lessons:

[Ənənəvi dərslərdə uşaqlarla göz kontaktı qura bilirdik. Məsələn, mən tarix müəllimiyəm.Ənənəvi dərslər zamanı uşaqların mənim danışdıqlarım barədə nə fikirdə olduqlarını və onların reaksiyalarını görə bilirdim. Göz kontaktı vasitəsilə mən əmin olurdum ki, tarixi uşağa aşılaya bilirəm. Online dərslər zamanı isə bundan məhrum olurduq və bu bizim işimizi çox çətinləşdirirdi] (Mingəçevir məktəbi, yuxarı sinif müəllimi).

[In traditional classes, we could make eye contact with students. For example, I am a history teacher. During traditional classes, I could see how the children felt about what I was saying and how they reacted. Through eye contact, I was convinced that I could instill history in a student. During online classes, we were deprived of this, which made our work very difficult] (Mingachevir School, Middle School teacher).

4.8.2 Damaging Teacher-Student Relationship

Another important challenge category expressed by only primary year teacher of Fuzuli School with following sentences:

[Çünki dərsin əsas tələbi tədris mühitinin, dərs planlarının yerinə yetirilməsinə imkan verən yerdə şagirdlə müəllimin qarşılıqlı əlaqəsi olmalıdır. Çünki onlayn dərs zamanı şagird istər-istəməz evdə olur və özünü valideyn nəzarəti altında hiss edir, özünü tam ifadə etməkdə çətinlik çəkir] (Fuzuli Məktəbi, İbtidai sinif müəllimi).

[Because the main requirement of the lesson should be the interaction between the student and the teacher, in a place where the learning environment enables to implementation of lesson plans smoothly. Because during the online lesson, the student is at home involuntarily and feels under parental control, it is difficult for them to fully express themselves] (Fuzuli School, Primary Year Teacher).

4.8.3 Problems with Classroom Management (Having More Misbehaved Students)

Some of the three schoolteachers talked about the importance of direct interaction with students and without it they faced difficulties during the online lessons. One of the regional school's teachers explained:

[Üz-üzə ünsiyyət fərqlidir. Bu zaman şagird özünü daha məsuliyyətli və təmkinli hiss edir. İlk növbədə, davranış şəklinin düzgün olmasına, çalışıram, bundan razı qalanda isə onların biliklərini təkmilləşdirməyə çalışıram. Çünki uşaq məsuliyyətlə tərbiyə olunmasa, heç vaxt biliyə yiyələnə bilməz. İndi mən üzbəüz təhsilin tərəfdarıyam] (Fuzuli, Orta sinif müəllimi).

[Face-to-face communication is different. At this time, the student feels more responsible and restrained. First of all, I try to make my students well-behaved, and when I am

satisfied with that, I try to improve their knowledge. Because if the child is not trained in responsibility, he will never be able to acquire knowledge. Now I am a supporter of face-top-face education] (Fuzuli School, Middle School Teacher).

[İbtidai siniflərdə müəllim şagirdlərə daha yaxından və fərdi yanaşmalıdır. Amma biz bu imkanlardan məhrumuq. Evdən dərslər şagirdlərin sosiallaşmasına, canlı ünsiyyətinə də mane olurdu ki, bu da onların psixoloji vəziyyətinə mənfi təsir göstərirdi. Biz müəyyən mənada bilik verə bilirdik, amma bacarıq formalaşdıra və psixologiyalarına müsbət mənada təsir edə bilmirdik] (Bakı məktəbi, yuxarı sinif müəllimi).

[In the primary grades, the teacher must approach the students more closely and individually. But we are deprived of these opportunities. Lessons from home also hindered the socialization and live communication of students, which had a negative impact on their psychological state. We could give knowledge somewhere, but we could not form skills and affect their psychology] (Baku School, Middle Year Teacher).

4.9 Subtheme 6. Cheating and Parental Help

According to the teachers' answers, during the online lessons the rate of cheating cases have been increased. Students could easily use books, online resources, and other materials to find answers to assigned tasks. Moreover, parents' distraction was always inside online lessons. They were always at home and interrupt children's lessons.

4.9.1 Using Books and Other Tools During Assessment Processes

Moreover, cheating also very widespread during online lessons. The challenge was mentioned only Baku and Fuzuli schools' teachers. Especially in high school students were busy with their tutor lessons and tended to cheat during assessment processes. We may see the statement from the teacher's thoughts:

[Onlayn qiymətləndirmə zamanı xüsusilə yuxarı sinif şagirdlərinin İKT sahəsində daha yaxşı bacarıqları və köçürməyə meyilli olmaları müəyyən çətinliklər yaratmışdır. Cavabları bir-biri ilə bölüşmək üçün Whatsapp qruplarından istifadə edirdilər... Bu obyektiv qiymətləndirmə aparmağı çətinləşdirirdi. Bunun qarşısını almaq mümkün deyildi] (Bakı məktəbi, yuxarı sinif müəllimi).

[During the online assessment, especially the high school students' better ICT skills and their propensity to cheat created certain difficulties. They were using "Whatsapp" groups to share the answers with each other…it made difficult to have an objective assessment. It was impossible to prevent this] (Baku School, High School Teacher).

Moreover, students used books to cheat during online lessons, according to Baku and Fuzuli schools' teachers:

[Qiymətləndirmə zamanı sual-cavab edərkən uşağın cavablarından hiss edə bilirdim ki, o kitaba baxır yoxsa yox. Kitab cümlələrini üzündən oxuyan zaman cheating etdiyini müəyyənləşdirə bilirdim] (Fuzuli məktəbi, ibtidai sinif müəllimi).

[During the assessment, I could feel from the student's answers whether the students were looking at the book or not. When they read the sentences from the book, I could notice that they were cheating] (Fuzuli School, Primary School teacher).

4.9.2 Parent's Intervention

This challenge is common for three schools. Especially during assessment, parents intervene students and telling answers (whispering or different signs). One of the Primary year teachers from regional schools mentioned the problem in her response:

[Mən Teams platformasına tapşırıqları yükləyirdim və şifahi suallar verirdim, lakin valideynlər şagirdlərə kömək edirdilər] (Mingəçevir məktəbi, İbtidai sinif müəllimi).

[I uploaded tasks to the Teams platform and orally asked questions, but parents were helping students] (Mingechevir School, Primary Year Teacher).

Teachers said that parents wanted to help their kids, but they prevent our assessment and lesson processes. Another teacher has touched upon that:

[Bir çox ailələr şagirdin bilik və bacarıqlarının real qiymətləndirməsinin qarşısı tamamilə almışdı] (Fuzuli məktəbi, İbtidai sinif müəllimi).

[Many families completely prevented a real assessment of a student's knowledge and skills] (Baku School, Primary School Teacher).

According to the interviewees' responds, however they tried to prevent cheating and parental help, in general, they couldn't be successful. Such cases have negatively affected the quality of education.

4.10 Subtheme 7. Teaching Challenges

Managing The Class Time

In addition to the previously mentioned challenges, teachers also had some difficulties managing their time. Based on the data, the teachers were not able to adapt 45 minutes of face-to-face classes to 30 minutes of online classes. Therefore, they were lagging the curriculum.

[Onlayn dərslər zamanı şagirdlərlə yerinə yetirməyi nəzərdə tutduğum tapşırıqların əksəriyyətini yerinə yetirməyə vaxt kifayət etmirdi. Halbuki, ənənəvi dərs zamanı həmin tapşırıqları tamamlamaq asan olurdu və vaxt bizə kifayət edirdi] (Baku School, Middle Year teacher) (Bakı məktəbi, yuxarı sinif müəllimi).

[I didn't have enough time to complete most of the tasks I planned to do with students during online classes. However, during the traditional classes, it was easier to complete those tasks, and we had enough time] (Baku School, Middle Year teacher).

4.10.1 Using the Same Approach for the Online Class

Also, most of the teachers shared that they had a problem with the delivering the online instruction. Some of the respondents were thinking that the online setting requires a different approach. However, they did not know how to use an effective approach to help students learn.

[Düşünürəm ki, internet problemi və digər qeyd etdiyimiz problemlərlə yanaşı müəllimlərə çətinlik yaradan digər məsələ o idi ki, dövlət tərəfindən proqramda heç bir dəyişiklik olunmamışdı. Ənənəvi dərslər zamanı bir dərsin müddəti 45 dəqiqə olduğu zamana uyğun tərtib olunmuş proqramı müəllimlər 30 dəqiqəlik dərs müddətində çatdırmalı idilər] (Fuzuli məktəbi, yuxarı sinif müəllimi).

[I think that in addition to the internet problem, another problem for teachers was that the government did not make any changes to the lesson plan. During traditional classes, teachers had to deliver a lesson designed for 45 minutes during a 30-minute lesson] (Fuzuli School, Middle School teacher).

Moreover, Mingachevir school's teacher touched upon the following:

[Online dərslər zamanı bir dərsin müddəti 30 dəqiqə idi. Bu çox az müddət idi. İnternet problemi olurdu. İnternet kəsilirdi və yenidən qoşulurduq. Bu şəkildə onsuz da dərsin vaxtından gedirdi. Bundan əlavə, qalan o vaxt ərzində biz ənənəvi dərslər zamanı 45 dəqiqəyə çətinliklə tamamladığımız materialı çatdırmalı idik. Bu demək olar ki,mümkünsüz olurdu] (Mingachevir School, Middle School Teacher).

[During online classes, the duration of one lesson was 30 minutes. It was a very short time, with internet problem. The internet was cut off and we reconnected, and we were wasting lesson time. In addition, during the rest of the time, we had to deliver material that we had

troubles to complete in 45 minutes during traditional lessons. It was almost impossible]
(Mingachevir School, Middle School Teacher).

Analyzing the data, we can assume that the teachers were mostly using the same
strategy to conduct the 30 minutes' class. To be specific, they were mostly engaging the
students to respond the questions based on the presented topic. In doing so, the classes were
monotone, leading to discouraging the students' learning.

The analysis shows that the teachers were not well-prepared to conduct online classes.
They had often some difficulties conducting online lessons. This is also the common problem
for all three schools.

Table 3. Teachers' Challenges

Subthemes: Challenges	Baku	Mingachevir	Fuzuli
Internet connection	-Delays regarding the timely implementation of curriculum -Attendance problem	-Wasting lesson time as a result of connection problems. -Delays regarding the timely implementation of curriculum -Attendance problem	-Wasting lesson time as a result of connection problems. -Delays regarding the timely implementation of curriculum -Attendance problem
Lack of ICT skills	Absence of basic ICT skills. -Unable to use new online platforms	Absence of basic ICT skills. -Unable to use new online platforms	Absence of basic ICT skills. -Unable to use new online platforms
Lack of digital devices	-Some teachers and students do not have laptops or phones to join lessons.	-Some teachers and students do not have laptops or phones to join lessons.	-Some teachers and students do not have laptops or phones to join lessons. -Some schools do not have computers to provide training sessions or lessons

Increased teachers' workload	-Providing extra lessons for students who were unable to attend lessons due to certain reason. -Making video presentations via "WhatsApp" for students who lag behind. -Contact with parents and students out of work hours	-Providing extra lessons for students who were unable to attend lessons due to certain reason. -Contact with parents and students out of work hours	-Providing extra lessons for students who were unable to attend lessons due to certain reason. -Contact with parents and students out of work hours
Lack of direct interaction with students	-Problems with classroom management (having more misbehaved students)	-Lack of eye contact, unable to observe students' reactions. -Problems with classroom management (having more misbehaved students)	-Damaging teacher-student relationship. -Problems with classroom management (having more misbehaved students)
Cheating and parental help	-Using books and other tools during assessment processes. -Especially during assessment, parents intervene students and telling answers (whispering or different signs);	-Using books and other tools during assessment processes. -Especially during assessment, parents intervene students and telling answers (whispering or different signs)	-Using books and other tools during assessment processes. -Especially during assessment, parents intervene students and telling answers (whispering or different signs)
Teaching challenges	-Using the same teaching approach in online classes. -Not managing time during the online classes	-Using the same teaching approach in online classes. -Not managing time during the online classes	-Using the same teaching approach in online classes. -Not managing time during the online classes

4.10.2 Theme 2. Principals' Support During the Online Lessons

The second question in our study seeks answers about the support and forms that teachers receive from the school principal in online lessons. According to the interviews, the principals tried to find a way out of the situation in different challenges and to support teachers in various ways during online classes (See Table 2). In this regard, within the findings several sub-themes are formed related to the sources and forms of the support that provided by principals to teachers: 1. Observing online lessons; 2. Organizing training and technical support; 3. Communication with Third party; 4. Providing new ways to cope with challenges; 5. Emotional support (See Table 4).

4.10.3 Subtheme 1: Supervision of Online Lessons

During the lockdown, principals had great responsibilities as leaders in online classes. It was not easy for the principals themselves to cope with unexpected difficulties as well. However, as leaders, they did their best to overcome difficulties and support teachers. When we conducted the interview, teachers also noted that their leaders always supported them. However, in order to find out more about their support and to determine the direction of their assistance, we asked the principals questions about their support for their teachers in accordance with our second research question.

4.10.4 Instructional Problems

All three school principals noted that they observed the progress of online classes to the maximum and identified shortcomings. As a principal shared here:

[Onlayn dərslər zamanı bacardığım qədər dərslərə qoşulub çətinlikləri müşahidə edirdim] (Baki məktəbi, direktor).

[During the online classes, I joined the classes as much as I could and observed the difficulties] (Baku School, Principal).

[Mən özüm də online dərslərə qoşulub nəzarət edirdim. Bu vasitə ilə bir çox problemin də şahidi olurdum] (Fuzuli School, director).

[I also supervised online classes. While doing this, I observed many problems] (Fuzuli School, director).

4.10.5 Meetings with Teachers to Help Them Use the New Platforms (Teams and Zoom)

All three school leaders emphasized their efforts to come together as much as possible to ensure the advancement of teachers on the new platforms. The opinion of the director of Mingachevir school is as follows:

[Onlayn dərslər zamanı məktəb direktoru kimi digər müəllimlərin də onlayn dərslərinə qoşulub dərsləri müşahidə edirdim. Dərsləri Teams proqramına yükləmək və həftəlik dərslər qurmaq üçün müəllimlərlə birgə işlədik] (Bakı məktəbi, direktor).

[As a school principal during the online lessons, I joined other teachers' online classes as well, and observed lessons. We worked with teachers to upload lessons to the Teams program and set up weekly classes] (Baku School, principal).

4.10.6 Visiting Classes Made Students Attend the Classes Regularly and Feel Responsible.

In addition, principals said that each teacher was warned to let students know that the principal could join the lesson at any time during this period. It increased students' attendance rate and made them feel more responsible during the online lessons. Only one of the Fuzuli school's teachers shared:

[Xüsusən də yuxarı sinifləri dərsə cəlb etmək çətin olurdu. Bəzilərinin həqiqətən internet problemi olurdu. Bəziləri isə bəhanələr edirdi. Yuxarı siniflərdə bəzən elə hallar olurdu ki, şagird dərsə qoşulsa da, ekranda paralel şəkildə oyun oynayırdı və ya başqa bir şeylə məşğul olurdu. Direktorumuz bu məsələdə bizə dəstək olurdu. O dərsin istənilən vaxtında gözlənilmədən dərsə qoşulurdu. Direktorun hər an dərsə qoşula biləcəyini bildikləri üçün uşaqlar davamiyyəti artırdılar. Bundan əlavə direktorumuz dərsə qoşulanda mənim verdiyim suala cavab vermək üçün özü uşaqları seçirdi və çağırırdı. Beləliklə uşaqlar diqqətini dərsə cəmləşdirməli olurdu] (Füzuli məktəbi, yuxarı sinif müəllimi).

[It was especially difficult to involve the high school students in the lessons. Some of them really had an internet problem. Some made excuses. In high school, some students were joining online lessons and played games or something else at the same time. Our director supported us in this matter. He joined lessons unexpectedly at any time. It increased students' attendance rate because they knew that the principal could join the online class at any time. In addition, when our principal joined the class, he would select and invite the children to answer my question. Thus, the children had to focus on the lesson] (Fuzuli School, high school teacher).

4.10.7 Subtheme 2: Organizing Trainings and Technical Support

Interview data shows that, among each principal's responses, the majority of teachers reported that poor ICT skills created problems in transitioning to online classes and provided various support by principals to address their weaknesses.

Organization of Trainings by Inviting External Specialists

Baku School's principal stated that:

[İlk növbədə İKT bacarığı olmayan müəllimlərimiz üçün kurslar yaratdıq. Başqa məktəblərdən təcrübəli müəllimlər dəvət etdik və onlar müəllimlərimizə İKT-dən necə istifadə etmək barədə təlim keçirdilər] (Bakı Məktəbi, direktor).

[First of all, we created courses for our teachers who do not have ICT skills. We invited experienced teachers from other schools, and they trained our teachers on how to use ICT] (Baku School, principal).

[Bizim informatika müəllimimiz kömək etdi. Bundan əlavə, Bakıdan gələn tanış müəllimlərlə əlaqə saxladıq, onlardan öyrəndik, müəllimlərimizlə də paylaşdıq] (Mingəçevir məktəbi, direktor).

[Our computer science teacher helped. Besides that, we communicated with familiar teachers from Baku, learned from them, and shared with our teachers as well] (Mingachevir School, principal).

4.10.8 Providing Devices, Megabytes and Data Cards for Teachers

Fuzuli School's principal mentioned his help by the following responds:

[Əgər kiminsə interneti yoxdursa, biz ona meqabayt, data kartı təşkil etdik. Distant təhsil zamanı təhsilin keyfiyyəti üçün müsabiqə təşkil etdim və 2021-ci ilin son zəngində müsabiqənin qaliblərini müəyyənləşdirdik və nominasiyalar üzrə sertifikatlar təqdim etdim. Müəllimlərimi şəxsən mükafatlandırdım, onlara cəsarət verdim və təşəkkür etdim,] (Mingəçevir məktəbi, direktor).

[If someone did not have internet, we arranged for him a megabyte, a data card. I organized a competition for the quality of education during distance education, and in the last call of 2021, we determined the winners of the competition and presented certificates

for nominations. I personally rewarded, thanked, and encouraged my teachers]
(Mingachevir School, principal).

During the lockdown, the organization of online classes was required by the state
as a solution to education lag. The efforts of most of the teachers without basic ICT skills
to adapt to the situation were commendable.

4.10. 9 Subtheme 3: Communication with Third Party

Principals used the third parties' support to assist teachers. This helped teachers to
increase their ICT skills and personal development.

Communication with Stakeholders (Ministry of Education, Baku Education

Department)

Principals stated that they were in constant contact with the Ministry of Education,
the Baku City Education Department, and the District Education Department to support
their teachers in overcoming difficulties and to keep abreast of innovations. They also
interacted with other school principals and exchanged experiences.

[Nazirlikdən tərəfindən bizə data kart verildi və mən onu məktəbdəki kabinetimdə
qoyub lazımi məlumatların müəllimlərə çatdırılmasını təmin etdim. Digər şəhər və rayon
məktəblərinin müəllimlərinin təcrübələri haqqında məlumat topladım və uğurlu olanları
məktəbimizdə tətbiq etməyə çalışdım] (Füzuli məktəbi, direktor).

[We were given a data card from the ministry, and I left it in my office at the school
and ensured that the necessary information was delivered to the teachers. I collected
information about the experiences of teachers of other city and district schools and tried to
apply the successful ones in our school] (Fuzuli School, principal).

[Müəllimlərimiz Bakı Şəhər Təhsil idarəsinin, Təhsil Nazirliyinin təşkil etdiyi kurslarda iştirak etdiler. Yaxsi imtahan veren muellimlere noutbuk hədiyye olundu ki, motivasiya olsun ve diger muellimler de bu telimlere qoşulsunlar] (Baku School, principal).

[Our teachers participated in courses organized by the Baku City Education Department and the Ministry of Education. Teachers who passed the exam were given a laptop to motivate them, and other teachers joined the training] (Baku School, principal).

Collaboration with Other Schools' Principals and Teachers (with the purpose to share the experience)

Fuzuli and Mingachevir Schools' asked help and used experience from other schools' principals and teachers. The schools' principals added:

[Hamimiz birgə həll etdik. Informatika müəllimimiz kömək edirdi. Və ya o olmasa, Bakidan olan taniş müəllimlərlə komunikasiya qurduq, onlardan öyrənib müəllimlərimizlə paylaşdıq] (Mingachevir School, principal).

[We all solved it together. Our ICT teacher helped us. Or if not, we communicated with familiar teachers from Baku, learned from them, and shared with our teachers] (Mingachevir School, principal).

[Digər şəhər ve rayon məktəblərinin direktorları ilə əlaqə saxlayırdım və həmin direktorlar öz müəllimlərinin təcrübələrini bizimlə bölüşürdü. Məsələn, qiymətləndirmənin təşkili ilə bağlı onların təcrübələrini öyrəndik və biz də eyni qayda ilə təşkil etdik] (Füzuli məktəbi, direktor).

[I kept in touch with the principals of other city and district schools, and those principals shared their teachers' experiences with us. For example, we studied their

experience in organizing assessments, and we organized them in the same way] (Fuzuli school, director).

4.11 Subtheme 4: Using Alternative Tools and Organizing Meeting for Teaching Purposes

Principals worked with the teachers to find alternative ways to adapt to the unpredicted situations that took place during the lockdown so that there would be no delays in education.

Using "WhatsApp" instead of "Teams" and "Zoom"

Fuzuli and Baku Schools' principals talked about in case of any difficulties using teaching platforms (Teams and Zoom), teachers were advised to use "WhatsApp" to be on the track:

[Rayon Təhsil Şöbəsinin icazəsi ilə sosial məsafəni qoruyaraq 5-6 məzun (10-11) şagird üçün üzbəüz dərslər təşkil etdik. Dərslər üçün "Whatsapp" qrupları yaratdım, qruplara da qoşuldum və onlara nəzarət etdim. Kənd yerlərində "Whatsapp" qruplarının belə olması bir yenilik idi.Mən bunu ona görə etdim ki, müəllimlər digər platformalardan istifadə qaydalarını öyrənənə qədər dərslərdə geriləmələr olmasın.] (Füzuli məktəbi, direktor).

[With the permission of the District Education Department, we organized face-to-face classes for 5-6 graduates (10-11) students while maintaining social distance. I created "Whatsapp" groups for classes, joined and supervised groups as well. It was a novelty that "Whatsapp" groups were like this in the countryside. I did this so that there would be no delays in the lessons until teachers learned how to use other platforms.] (Fuzuli School, principal).

[Şəhər məktəbində hər sinifdə "Whatsapp" qruplarının olması yeni olmasa da, platformalardan istifadə edə bilməyən müəllimlərə tapşırmışam ki, həm müəllimlər, həm də tələbələr yeni platformalardan istifadəyə uyğunlaşana qədər "Whatsapp" qruplarında istifadəni təşkil etsinlər] (Bakı Məktəbi, direktor).

[Although it is not new for every classroom in a city school to have "Whatsapp" groups, I have instructed teachers who cannot use the platforms to organize the use of Whatsapp groups until both teachers and students adapt to the use of the new platforms.] (Baku School, principal).

4.11.1 Following the Lockdown Rules, Having Face-to-Face Meetings in Urgent Situations

Principals of Fuzuli and Baku schools expressed their support for teachers in various ways to cope with the difficulties and find a way out of the situation. Here are some excerpts from their thoughts:

[Pandemiyanın çətin vaxtına baxmayaraq, müəllimlərin çətin vəziyyətindən çıxış yolu tapmaq və şagirdlərin dərsdən yayınmaması üçün şagirdləri dərsə cəlb etmək üçün maksimum 5 nəfər olmaq şərtilə məktəbə topladıq və biz problemləri həll etdi] (Mingəçevir məktəbi, direktor).

[Despite the difficult time of the pandemic, we gathered a maximum of 5 teachers at the school to find a way out of the difficult situation of the teachers and to include the students in the lessons so that the students do not miss the lessons, and we solved the problems] (Mingachevir School, principal).

4.12 Subtheme 5: Emotional Support

During the lockdown, teachers struggled to cope with a difficult profession as a teacher. At that time, the emotional support of principals was very important in terms of

their encouragement. It is commendable that all three interviewed principals mentioned that they made a special effort to provide emotional support to teachers.

4.12.1 Having Both Individual and Group Conversations with Teachers

All three principals noted that they provided support in different ways to encourage teachers to show their full potential and provide emotional support to convince them that they could do better. They expressed their emotional support in this way:

[Əslində belə bir situasiyanın yaşanacağını və belə çətinliklərlə qarşılaşacağımızı heç birimiz təsəvvür etmirdik. Lakin bir rəhbər kimi məcbur idim ki, ruhdan düşməyim. Və müəllimlərlə tez-tez online iclaslar etməyə çalışırdım. Onlara çətinliklərin öhtəsindən gələ bilmək potensialında olduqlarını deyirdim. Deyirdim ki, onlarda ruh düşgünlüyü olduğunu şagirdlər qətiyyət hiss etməməlidir. Bundan əlavə tez-tez müəllimlərə zənglər edirdim və çətinliklərinin olub-olmadığını öyrənirdim] (Bakı məktəbi, direktor).

[In fact, none of us imagined that such a situation would occur and that we would face such difficulties. But as a leader, I did not have a chance to get discouraged. And I often tried to have online meetings with teachers. I told them that they had the potential to overcome difficulties. I told the students that they should not feel discouraged. In addition, I often called teachers and found out if they had any problems] (Baku school, principal).

[Müəllimlərlə tez-tez kiçik qruplar şəklində toplaşırdıq. Problemlərin həlli istiqamətində fikirlər yürüdürdük] (Mingachevir məktəbi, direktor).

[We often met with teachers in small groups. We were thinking about solving problems] (Mingachevir School, principal).

[Müəllimlərlə daim əlaqədə olmağa çalışırdım. Onlara hər zaman deyirdim ki, çətinlikləri olanda mənə müraciət etməkdən çəkinməsinlər. Müəllimlər hər zaman qeyd edirdi ki, dəstəyi hiss etmələri onlara motivasiyadır.] (Fuzuli məktəbi, direktor).

[I always tried to keep in touch with teachers. I told them not to hesitate to contact me in case of difficulties. Teachers always said that it made them feel motivated] (Fuzuli School, principal).

4.12.2 Rewarding Teachers' Effort

Baku and Fuzuli schools' principals touched upon rewarding teachers' effort to enhance their motivation in challenging time:

[Müəllimlərimiz Bakı Şəhəri üzrə Təhsil İdarəsi və Təhsil Nazirliyinin təşkil etdiyi kurslarda iştirak ediblər. Yaxşı imtahan verən müəllimləri motivasiya etmək üçün onlara kompüterlər hədiyyə olundu və digər müəllimlər də təlimdə iştirak etdilər] (Bakı məktəbi, direktor).

[Our teachers attended the courses organized by the Baku City Education Department and the Ministry of Education. Teachers who gave a good exam were given computers to motivate themselves and other teachers participated in the training] (Baku School, principal).

[Distant təhsil zamanı "Təhsil keyfiyyəti" müsabiqəsini təşkil etdim. 2021-ci ildə buraxılış günü müsabiqənin qaliblərini müəyyən etdik və nominasiyalar üzrə sertifikatlar təqdim etdik. Şəxsən mən onların hamısını mükafatlandırdım, təşəkkür etdim və həvəsləndirdim] (Füzuli məktəbi, direktor).

[During distance education, I organized the "Quality of Education" competition. On the day of graduation in 2021, we determined the winners of the competition and

presented certificates in the nominations. Personally, I rewarded, thanked and encouraged all of them] (Fuzuli School, principal).

Table 4. Principals' Support

Subtheme: Principals' Support	Baku	Mingachevir	Fuzuli
Observing online lessons	-To find out instructional problems. - Visiting classes made students attend the classes regularly and feel responsible.	-To find out instructional problems. -Visiting classes made students attend the classes regularly and feel responsible.	-To find out instructional problems. -Having meetings with teachers to help them use the new platforms (Teams and Zoom)
Organizing trainings and technical support	-Organization of trainings by inviting external specialists. -Using ICT teachers' support.	-Using ICT teachers' support.	-Providing devices, megabytes and data cards for teachers**.**
Communication with Third party	-Communication with stakeholders (Ministry of Education, Baku Education Department) as a result of communications, the sessions were held to support teachers.	- Communication with stakeholders. -Collaboration with other schools' principals and teachers (with the purpose to share the experiences);	-Collaboration with other schools' principals and teachers (with the purpose to share the experiences);
Using alternative tools and organizing meetings for teaching purposes	-In case of any difficulties using teaching platforms (Teams and Zoom), the teachers were advised to use "WhatsApp" to be on the track.	-In case of any difficulties using teaching platforms (Teams and Zoom), the teachers were advised to use "WhatsApp" to be on the track.	-In case of any difficulties using teaching platforms (Teams and Zoom), the teachers were advised to use "WhatsApp" to be on the track.

		-Following the lockdown rules, having face-to-face meetings in urgent situations.	-Following the lockdown rules, having face-to-face meetings in urgent situations.
Emotional support	-Having both individual and group conversations with teachers to motivate them in challenging times. -Rewarding teachers' effort (with certificates so on).	-Having both individual and group conversations with teachers to motivate them in challenging times.	-Having both individual and group conversations with teachers to motivate them in challenging times. -Rewarding teachers' effort (with certificates).

4.13 Final Product: Professional Development Workshop

The goal of this workshop is to provide some basic knowledge on how to effectively conduct online classes.

Target Audience

The target audience for this workshop is the teachers and principals who have participated in this study. Since the workshop is going to be held online the participation of other teachers who teach in the same school, will be encouraged. Duration of the workshop: 90 minutes.

Objectives

At the end of this workshop, the participants will be able to:

- To identify a variety of functions of online education platform - "Teams"

- To identify a variety of online tools to engage the students.

Workshop Outline

Introduction

Brainstorming teachers' challenges (10 minutes): To involve the teachers who did not participate in the capstone project. In doing so, we will get more teachers' ideas based on their challenges.

Presentation of the project (15 minutes): To present the problem statement, purpose, research questions, and the findings of the study.

Guest speaker (30 minutes): We will invite an ICT specialist who is going to provide a short presentation on how to use the functions of "Teams" to conduct effective online classes.

A Demo lesson (20 minutes): Demonstrating a sample lesson related to the usage of "Teams" will be 20 minutes.

Reflecting on the overall workshop (15 minutes): A final reflection will be held to determine how useful the workshop is for the participants.

Workshop Planning

The presenters will develop a workshop plan that will include all points regarding attendance and engagement:

Topic - Professional Development Workshop

Presenters and guest speaker - The researchers of this capstone project and one guest speaker - an ICT specialist who will explain to teachers details of functions of "Teams".

Target audience - This workshop will be organized online. Teachers who participated in the interview process will be invited. Participation of other teachers who teach in the same school will be encouraged.

Date and time for the event - It will be held on the weekend at 2 or 3 pm. Hence, teachers and principals will have more free time to involve themselves and will not be overloaded with additional work throughout working days.

Length of the Workshop - The duration of the workshop will be approximately 90 minutes.

 Final email invitation - The reminder and invitation will be sent via email 20 minutes earlier to the workshop.

Joining the workshop - The presenters will join the platform- "Teams" 30 minutes prior to the workshop time. This will give enough time to do one last sound and presentation check, and organize multiple presenters.

Check recording status - The workshop will be recorded to share the content with the teachers who are not available to join.

Audience

The target audience of this workshop is interviewed teachers from three public schools and principals and the same schools' teachers as well:

They are teaching different subject areas at public schools.

Except for one teacher who had experience in online teaching prior to the pandemic (via Skype), other participants did not have any experience.

Content and Delivery

Considerations for developing content include:

Format - The content format will have PowerPoint presentations and some questions for lively discussion, but depending on the activities, there will be application sharing.

Length – As the focus of this workshop will be up to 90 minutes. Presenters will spend 5 minutes on welcoming the participants. Presentation of the project will be demonstrated in 20 minutes -Purpose, problem statement, research questions, and findings of the study. Hosts will spend on average between one and two minutes per slide, so a 10-slide presentation will often last between 20 minutes. The guest speaker will explain the detailed functions of "Teams" in 30 minutes. A demo lesson related to the usage of "Teams" will be 20 minutes. 15 minutes will be spent on lively discussion based on reflection on the overall workshop.

Resources - Computers or smartphones that were uploaded "Teams" beforehand. Copybooks, pen, and pencils. A good internet connection is intended for the quality of the workshop.

Promotion

We sent emails to three schools' principals regarding our online workshop invitation with a participation link. The principals will be asked to send the invitations to

teachers via email. Three days before the workshop, we will send them a kind reminder about our workshop.

Logistics

As presenters of the workshop, we will join the link we sent to the participants 30 minutes ago. We will upload the presentation. This step will help us to fix the problem in advance if there is any problem in the link or system.

Budget

The workshop will not be financially supported by any state body. It does not require high amount of expenditure. Teachers will use computers or devices to join the online workshop.

CHAPTER 5. CONCLUSION

5.1 Conclusion

The global coronavirus pandemic has caused a lot of problems in many areas, as well as in education. During the pandemic, the main concern of everyone at the national level was the future of education. To overcome these difficulties, the Ministry of Education took various steps and conducted various studies to identify problems and find solutions. Challenges faced by teachers during online lessons during the lockdown included internet connection, lack of ICT skills, lack of digital devices, the increased workload of teachers, lack of direct interaction with students, cheating, and parental intervention. School leaders supported teachers in solving all these problems. Based on the data we collected from our research on school leaders' support the identified types of support include observing online lessons, organizing training and technical support, communicating with Third-party, providing new ways to cope with challenges, and emotional support. Teachers' perseverance in overcoming difficulties once again proved the supremacy of the teaching profession. School leaders also played a crucial role in this process. Professional management skills helped principals find an alternative way out of a difficult situation.

Predictions about the pandemic depict that similar virus are likely to exist in the uncertain future. Therefore, the issue of taking certain steps to take precautions against such cases, especially in the field of education, should always be at the center of attention. The challenges that we encountered during online classes proved that both educators and students must have digital skills. Therefore, the lack of such skills limits access to high technology and modern applications and creates serious barriers to education and activity.

In this regard, one of the main activities should be to expand the scope of activities aimed at building digital skills.

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APPENDIXES

Appendix A: Interview Protocol for Participants

Hello! We, Nazrin Dadashova and Narmin Azizova are the students in Master of Arts in Educational Management at ADA University. We are conducting research on Challenges that Teachers Encountered During Online Lessons following school closure due to the Covid 19 Pandemic for our Capstone project. This interview will help us explore teachers' challenges and principals' support during online lessons. Anything you tell us is confidential. Nothing you say will be personally attributed to you in any reports that result from this interview process. Your participation in this individual interview is totally voluntary.

Appendix B: Interview Questions for Teachers

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1. Please introduce yourself.
2. How long have you been teaching at this school?
3. Had you had any experience teaching online before the pandemic?
4. Which online platforms did you use to teach your students?
5. How were you assessing the students during the online classes? Did you have any difficulties while assessing them? Could you provide any specific examples?
6. Did you have any difficulties while planning your online classes? For example, were you able to manage all the planned activities during the online classes? Could you provide any specific examples?
7. Did teaching at home create any difficulties for you? If so, could you provide any specific examples?
8. Did you have any problems engaging your students in the learning process during the online classes? If so, please provide some specific examples.
9. Did you have any cheating cases? If so, how were you trying to prevent students from cheating during online lessons?
10. Did students always keep their cameras open? How did you motivate students to keep their cameras on?
11. Since the classes were online, I guess you might experience some connection problems. How did this affect your classes?
12. What about students? If they had problems with the connection and were missing the class, how were they able to grasp the newly taught class.
13. What about planning online classes? Were you spending more time planning the online classes? If so, why do you think it was taking more time than the traditional face-to-face classes?
14. How was your students' attendance during online lessons during the pandemic?
15. How did you make sure your students have perceived their lessons in online mode?
16. Do you think that we can fully replace offline teaching with online?

Appendix C Interview Questions for Principals

1. Please introduce yourself.
2. How long have you led this school?
3. Were you being informed about your teachers' concerns while they were having their online classes?
4. What kinds of difficulties did your teachers have? Could you provide some specific examples of their difficulties?
5. How did your teachers cope with those problems?
6. How did you support them to solve the problems? Could you share how you supported your teachers to overcome any specific problem?
7. Were the teachers demotivated? If so, how were you supporting them? Could you provide any specific examples?
8. Were teachers supported with the online training on how to use the teaching platforms? If so, do you think that those training sessions were helpful for them to teach their online classes?