

A phenomenological study of first-grade teachers' lived experiences of major challenges facing online education

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Abstract

Recruiting a qualitative phenomenological approach, the present study aimed to reflect on the first-grade teachers' lived experiences of the major challenges facing online education in Iran's primary schools in the academic year 2020-21. The total number of participants was 10 first-grade teachers working in primary schools in the city of Yazd, Iran, selected using the purposive sampling method. The data collection tool was also a semi-structured interview, whose outcomes were analyzed via the interpretative phenomenological analysis (IPA) developed by Smith et al. (1997). To determine the validity of the data obtained, the opinions of some qualitative researchers and participants, were exploited. Coding was further performed and then compared by the researcher and one other expert in qualitative research. Ultimately, the first-grade teachers' lived experiences of online education were delineated and developed into 7 main themes and 30 sub-themes. Accordingly, the main themes of "evaluation", "uncertainties and limitations", "emerging issues", and "interactions", were established with reference to the first research question, focused on the online education challenges perceived by these teachers. Then, the main themes of "creative adaptability" and "production and exploitation" were created in response to the second research question about teachers' strategies adopted to cope with online education challenges. The main theme of "experience formation grounds", comprised of the sub-themes of "specific grounds" and "general grounds", was further achieved concerning the third research question, namely, the grounds of teachers' experience formation.

KEYWORDS: Teachers, Online Education, First-Grade, Qualitative Approach, Phenomenological Study.

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1. Introduction

Information and communication technology have wrought irreversible changes in our society today (Franco, 2022). These developments have also led to the development of new approaches in educational systems. Virtual education is one of these approaches that information and communication technology has an important role in creating and expanding it. Accordingly, online education has grown significantly in recent years (Chingos & Schwerdt, 2014). Internet access has currently provided many individuals and

communities with a great opportunity for learning development, particularly instruction tailored to learners' needs and interests as well as distance education. The use of online education is growing rapidly around the world (Macdonald & Poniatowskab, 2011). The internet here represents a means of guiding learners and teachers during educational processes (Tarus et al., 2015). Since internet use has made online education possible, some distinctive features have been created to encourage individuals to practice this mode of instruction. Unlike teacher-centered education, traditional methods are not utilized in online education and the learning environment has become of utmost importance (Kisanga & Ireson, 2015). Nevertheless, most educational centers are not making efforts to augment the effectiveness and efficiency of instruction through new technologies and the internet (Miliszewska & Rhema, 2010). Given the advantages of online education, the demands for this flexible instructional delivery system have multiplied (Zameer, 2010).

Despite online education's long-standing significance, recent societal changes have increased its popularity and

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necessity (Han et al., 2022). With the help of the Internet and information technology, teachers and students can overcome time and space constraints to learn and acquire knowledge in a more flexible and diverse way (Li & Zhang, 2020). Online education can also make extensive use of educational resources, as well as establish a system for automatically recording each student's learning progress, attendance status and personal information, to facilitate teacher management in the classroom. Despite its advantages, sometimes online education does not go as expected and faces various obstacles. For example, hardware equipment is not enough for online learning, the operating system is faulty, and the student's self-control is weak. The burden of teacher training is also heavy, and parental supervision is becoming more important (Fu & Zhou, 2020).

Coronavirus has been spreading worldwide since late 2019. In light of COVID-19's highly contagious nature, the rapid spread of the disease within a short period has disrupted people's work, lives, and educational environments globally (Cui et al., 2023). The first case of this pandemic was reported in the city of Wuhan, China, in December 2019, and a new virus called COVID-19 was declared as an infectious agent in early January 2020. According to the World Health Organization (WHO) projections, the prevalence rate of this disease is still redoubling, and it will turn into the third leading cause of death in the world by 2030. This pandemic with its own complexity as well as multidimensionality and adverse effects has also brought about significant costs and burdens in health-related, socioeconomic, and educational domains for individuals, communities, and healthcare systems (WHO, 2020). People have been forced to change many aspects of their lives due to the COVID-19 pandemic (Fujs et al., 2022). As the epidemic spread, many governments imposed severe restrictions to prevent it from spreading. The traditional teaching method, in which students were required to attend class and the teacher had to guide them, also needed to be changed (Joseph & Edmund, 2020). Eventually, taking into account many factors, different types of schools in different countries decided to suspend school to prevent the risk of this disease for many students and other people (Jordan et al., 2020). Online education has become an alternative way to engage students worldwide (Zhu et al., 2022).

Considering the impacts of stay-at-home orders and school closures (Brazendale et al., 2017), some important decisions have been thus far made in different countries for the continuation of teaching and learning processes, including online education. This mode of instruction along with distance learning has been also the basis of education in Iran. Online education had never been experienced in primary schools in this country and its occurrence in higher education had been previously very limited. Since online education was implemented, especially in primary schools in Iran for almost the first time on a large scale, it faced some major

challenges, of importance to primary school students, mainly first-graders, because of the unique developmental characteristics of this age group and the significance of learning in the first years of schooling.

Therefore, the present study aimed to reflect on the first-grade teachers' lived experiences of online education challenges using a qualitative phenomenological approach. Three research questions were accordingly addressed:

1. What are the advantages, disadvantages, and efficiency of online education for first-graders from the teachers' lived experiences?
2. What strategies can be practiced maximizing the advantages and minimize the disadvantages of online education?
3. What are the main grounds of teachers' lived experiences of online education?

2. Methods

2.1 Research Design

A qualitative approach is often adopted to describe situations and events and pay much attention to their details. Moreover, there are attempts to discover the interpretations by study participants regarding giving meanings to different situations. It is also assumed that social interactions can be a complex whole and relationships can be further understood via inductive methods (Strauss & Corbin, 2008). According to the main objective of the present study, a qualitative phenomenological approach was recruited as a strategy to discover the lived experiences of the participants and provide rich descriptions of how such experiences were made available to the researchers (Smith et al., 1997). Some tools were further provided for interpreting the lived experiences of the study participants. This process was also completed with in-depth and precise reflections as well as the use of rich descriptive language (Ajjawi & Higgs, 2007). In this study, there were more attempts to explore first-grade teachers' lived experiences of online education as a phenomenon.

2.2 Participants

The target group in this study included female first-grade teachers working in primary schools in the city of Yazd, Iran, using online education in the academic year 2020-21. The sampling method was also of purposive type and 10 first-grade teachers participated in the study. The sample size was also determined based on theoretical saturation, that is, no new data were added to the previous ones as data collection continued (Streubert & Carpenter, 2003). The sampling was also performed until no new data was included and no new themes were obtained. Accordingly, 10 first-grade teachers were interviewed. Of note, the data were saturated after the completion of seven interviews, but such interviews continued up to 10 cases for further assurance. Table 1 presents the participants' demographic characteristics.

2.3 Data Collection Tool

A semi-structured interview was implemented in this study as the main data collection tool. To prepare the questions, the domestic and international backgrounds in relation to the research topic were first examined. After obtaining comprehensive information and backgrounds in this regard, the interview questions were designed to reflect on the first-grade teachers' lived experiences of online education. In order to ensure the content validity of the semi-structured interview form, the questions were also reviewed by three experts in this field.

2.4 Data Collection

First, a call was published in some virtual groups and among first-grade teachers and they were invited to participate in this study. After explaining the purpose of the study to the volunteers, the time and manner of the interview were further decided. Due to the COVID-19 pandemic outbreak, these interviews were conducted online. All the interview meetings were also recorded upon the consent of the participants, and then each interview was transcribed verbatim and the necessary points were documented. Following each interview, the implementation process, weaknesses, strengths, and some noticeable items were identified, for further consideration in the next meetings as well as the subsequent interviews. The participants were also become informed of research ethics, and finally, signed an informed consent form.

2.5 Data Analysis

In this study, the interpretative phenomenological analysis (IPA) as a qualitative thematic approach

developed by Smith et al. (1997) was used to analyze the data, in which three stages of data generation, data analysis, and case integration had been proposed (Smith et al., 2009). In this qualitative research, the criteria of credibility (namely, internal validity), transferability (or external validity), dependability (i.e., reliability), and confirmability (viz. objectivity) were taken into account. Authenticity was another criterion for evaluation purposes in this qualitative research (Lincoln & Guba, 1986). To increase the credibility of the data in this study, long-term involvement, no jumps to early conclusions with insufficient observations, constructive discussion about the findings with unbiased and honest colleagues, progressive thinking, i.e., monitoring the developed structures and documenting the change process from the beginning to the end of the study, member checking, the participants' confirmation of data analysis findings, and the researcher's self-review were thus considered effective in the process of data collection and analysis. Besides, the transferability in this study was fulfilled through the development and rich description of the dataset during the data collection and the use of special coding methods. In the present study, all the interviews were conducted over a period of 45 minutes to an hour, and they were recorded and then transcribed verbatim to achieve dependability. Coding was also done and compared by a researcher and one other expert in qualitative research. Moreover, the review and adaptation of the opinions of some qualitative researchers, including the study supervisor and participants, were exploited. The reliability of the researcher analysis and peer review by another researcher working in the field related to the research subject was also obtained based on the Miles and Huberman formula (2016) by 0.91.

Name	Age	Marital status	Level of education	Field of study	Teaching experience	Number of children	History of first-grade teaching experience	Type of employment
A	35	Married	Master's degree	Education	7	2	5	Permanent
B	40	Single	Bachelor's degree	Education	14	-	6	Permanent
C	38	Married	Associate's degree	Education	12	-	10	Permanent
D	37	Married	Master's degree	Education	5	3	4	Contractual
E	30	Married	Master's degree	Education	3	1	3	Severance pay
F	33	Married	Bachelor's degree	Education	8	1	8	Contractual
G	42	Married	Master's degree	Education	16	3	10	Permanent
H	30	Married	Bachelor's degree	Education	5	2	5	Limited-term
I	37	Single	Master's degree	Education	10	-	8	Contractual
J	28	Married	Bachelor's degree	Education	3	-	3	Limited-term

Table 1 - Study participants' demographic characteristics.

3. Results

In the present study, the interviews were first transcribed verbatim and read repeatedly. Then, the sub-categories were identified and labeled. Afterward, the main categories were organized and clustered in the sense that general categories could be extracted by continuing to compare them and to take account of the differences and similarities of the sub-categories. Accordingly, a total number of 1060 open codes and finally seven clusters (namely, main themes) and 30 categories (viz. sub-themes) were extracted. The results obtained according to the research questions addressed are listed below. The outcomes of the first research question are also reported in Table 2.

MAIN THEMES	SUB-THEMES
EVALUATION	EVALUATION
	FEEDBACK
	ASSURANCE OF LEARNING
UNCERTAINTIES AND LIMITATIONS	DIAGNOSIS OF LEARNING DISABILITIES
	SKILLS TRAINING
	EDUCATIONAL ACTIVITIES
	ATTENDANCE (OR CHECK-IN)
	HOMEWORK ASSIGNMENTS AND THEIR REVIEW
	MOTIVATION
EMERGING ISSUES	CONCERNS
	BRINGING WORK PROBLEMS HOME
INTERACTIONS	TEACHER-PARENT RELATIONSHIPS
	STUDENT-STUDENT RELATIONSHIPS
	TEACHER-OFFICIAL RELATIONSHIPS
	PARENT-PARENT RELATIONSHIPS
	TEACHER-STUDENT RELATIONSHIPS

Table 2 - The results of the first research question.

Research question 1: What are the advantages, disadvantages, and efficiency of online education for first-graders from the teachers' lived experiences?

The first sub-theme is "evaluation". In this sense, much of the evaluation for first-graders can occur during the learning process, wherein teachers can observe and correct their mistakes through constant presence. As well, first-graders are still learning how to hold a pencil and the basic movements that need to be carefully corrected by teachers, which becomes more difficult for them in online education. Evaluation can be thus done merely by sending videos and audios, whose reviews are demanding and time-consuming. In this regard, Participant E stated that:

"Evaluation is of utmost importance for first-graders. I need to understand whether such students have gained a correct understanding of the concepts of first, non-first, middle, and last and so on or not, which can be based on some signs, but once again, much more care should be taken. If a student understands the first signs during the first sessions, they will not be encountered by a strange problem.

Now, that is why we have to be more obsessed with evaluation once online education occurs. For this reason, I use live video calls."

Feedback, as one of the sub-themes of evaluation, should also include a positive approach to provide strengths and weaknesses as well as solutions in order to deal with some limitations. Here, verbal and non-verbal feedback is not fully applicable without face-to-face interactions. In addition, giving feedback through the constant use of messages, images, audios, and videos seems difficult among teachers and often monotonous for students. In this regard, Participant G reiterated that:

"At the same time, feedback will be also verbal, or I will focus on the positive points and problems using voice messages. I will try to explain the solutions that need to be corrected. But, I think it is much harder than in-person education."

Due to the difficulties mentioned in the evaluation and feedback sub-themes, even with the help and involvement of parents and others around, assurance of learning in students can be easier said than done for teachers. For example, Participant H said that:

"In cyberspace and during online education, I asked all parents to send me a short video of how to hold a pencil and write the subtitles until their end for the assurance of learning in students, but the fact was that I was in doubt about this type of learning. I think some students may pick up the pencil correctly the moment they are filming but not later."

As highlighted in the lived experiences of the first-grade teachers, the second main theme is "uncertainties and limitations". In this respect, many of the problems that can be identified or addressed in in-person education are thus difficult to achieve during online education or fail to provide teachers with enough certainty to identify, act, and wrap up. The diagnosis of learning disabilities during preschool and primary school years, especially in lower grades, can be thus very important for the prevention and treatment of subsequent problems. Nevertheless, it does not happen properly in online education due to the lack of face-to-face interaction between teachers and students, as well as the negligence of small weaknesses and parental involvement in teaching or getting help from others to do homework assignments. In this line, Participant A stated that:

"In face-to-face education, the symptoms of learning disabilities can be identified well, but this is not easily possible in online education."

Many teaching and homework assignment activities also deal with student skills training and aim to enhance motor skills, life skills, Problem-solving, working with tools, manual jobs, and the like. However, this arises as a limitation and even difficulty in online education. For example, Participant F added that:

“The results of group experiments in classrooms and exposure to the environment and laboratory equipment look very different, and home-based tests alone fulfilled with the help of parents and their results cannot replace them. I believe that students cannot learn about some concepts such as participation, cooperation, orderliness, and responsibility because they are no longer involved in laboratory settings.”

A large part of the educational activities and the cases related to their effectiveness are also associated with attendance, interactions with students, and objective observation of these activities and involvement in them. During online education, this possibility is far reduced and the efficacy of these activities by teachers and other relevant officials as well as their use by students can be affected. Accordingly, Participant B acknowledged that:

“As children attend schools, there is a great chance to participate in some ceremonies, visits, and field trips, but now none of these events is the case. Everything else has been also removed from schools and the education system. Everything is merely done online.”

In face-to-face education, attendance is also completely objective and controlled by teachers in person, but the system is not the same and new methods are being used for this purpose in online education, such as attendance (or check-in) links, sending voice messages to student groups, and other innovative tactics developed by teachers. Despite roll calls occurring at the beginning of each online session, students may not be present during the classes, and teachers may not get informed. For example, Participant C stated that:

“A student checks in the attendance link in the early hours, but it is not clear whether he or she is really present in the rest of the class or not.”

One of the major challenges of online education is how to give homework assignments to students, which are just comprised of a review of images, videos, and audios sent by students. Examining these cases accordingly requires much mental and physical energy, and even causes fatigue in teachers. Accordingly, Participant D said that:

“Some students have to send some images many times because of the poor quality of their cameras or even their carelessness while taking them.”

Decreased motivation for many reasons such as not attending school, not meeting classmates, difficulty in establishing proper emotional communication with teachers, the impossibility of active and objective participation by students in the teaching process and classrooms, as well as the lack of extracurricular activities and scientific excursions can also take place in

online education. In this respect, Participant I reiterated that:

“In the past, children used to make some handicrafts to learn each of the signs, and we used to place them in front of the classroom to teach about them. The students also had some rich backgrounds and they were motivated to learn more and more, but, now, I myself make some kinds of stuff and the students do not, unfortunately, get involved. In fact, the teacher’s work has doubled.”

The third main theme is emerging issues. In this sense, online education has led to the creation of new issues among teachers. Concerns and bringing work problems home are two sub-themes in this regard. New concerns have thus arisen with some modifications in teaching methods. Concerns about teachers’ job performance in an environment observed by many people and the possibility of publishing and sharing their activities on virtual networks via WhatsApp, Telegram, and Instagram apps, particularly if there are some defects or mistakes, is thus one of the important mental conflicts among teachers. In this regard, participant G stated that:

“I feel worried that once a time I may say something in the voice messages that is wrong. Many teachers have this concern.”

Almost all teaching activities should be done at home. Preparing teaching content and even teaching from home in the presence of others can thus have its own troubles. The presence of other members along with some household chores can accordingly interfere with teaching and increase teachers’ workload. In this regard, Participant E added that:

“When recording films at home, a state of siege must be announced both for me as a teacher and for the children, and I should always note that no one should have a word or watch TV, which often causes tension and conflicts between family members.”

The fourth main theme is interactions, as one of the key terms raised by teachers in connection with online education challenges. Teacher-parent interactions during this mode of instruction have also become much more difficult and they have even changed. However, parents, like teachers and others, have recently encountered online education and they have little information in this respect. According to Participant D:

“Parents, like us, are also teachers with their first experiences, and especially those who have not yet had schoolchildren, do not know what to do. The meeting of the parent-teacher association is not held in a way that online education can be well justified.”

Regarding student-student relationships, most students can learn a lot through interactions with their classmates and peers. Such a great opportunity is often lost without

their attendance at schools. In cyberspace, interactions do not also take place completely and literally. In this sense, Participant B said that:

“Previously, when attendance mattered, children could interact with teachers as well as other students. They could see each other’s activities in person, and this could fuel their enthusiasm for more learning.”

Following virtualization in education, the way teachers communicate with school officials has also changed. In online education, teachers more benefit from the supervisory control of officials due to the possibility of their membership in class groups. Beyond school officials, some education office authorities can also join class groups by chance or for other reasons in order to supervise and transfer experience and guidance. For example, Participant F maintained that:

“I once told one of the parents that her child had a speech problem and needed to visit a therapist, but she got upset, went to the education office, and reported that the teacher was strict and so on. After some time, the head of the educational group joined my online class for a week to see what was going on there.”

Parents are not also able to interact face-to-face in online education. In previous years, in parent-teacher association meetings, parents and teachers can get to know each other, talk, and share their lived experiences. Nevertheless, such relationships in online education have sharply declined. In this regard, Participant D declared that:

“Last year, I mean, every year we had a few meetings of the partner-teacher association, wherein parents used to convene, and teachers could talk about whatever they liked. Besides, parents themselves could talk with each other. I saw a lot of people consulting with each other or helping each other in some cases.”

The most challenging part of teachers’ lived experiences of online education is their interactions with students. The biggest negative experience and in fact the undesirable feature of this mode of instruction is the lack of face-to-face teacher-student relationships, as expressed by the first-grade teachers, wherein students have not yet gained enough experience of school, teacher, and education. Teaching the rules, reflecting on correct signs, and talking about many of the topics in the first-grade of primary school are thus best done through face-to-face interactions between teachers and students, which are not possible in online as much as face-to-face education. In this regard, Participant A affirmed that:

“One of the most important lessons in the first-grade of Persian language is in-person communication and seeing the teacher’s face and lips when demonstrating each sign, which is very important to recognize the differences

for some letters such as d, b, n, k, g. The same goes for teaching signs. It is crucial in face-to-face conversations and group discussions. The same goes for writing. Holding a pencil and controlling the movements of the child’s hand when writing is also of significance and should be directly supervised by teachers. None of these happens in online education. The main drawback is that teachers cannot interact with them in person.”

The results of the second research question are also presented in Table 3.

Research question 2: What strategies can be practiced to maximize the advantages and minimize the disadvantages of online education?

MAIN THEMES	SUB-THEMES
CREATIVE ADAPTABILITY	CREATIVITY
	ADAPTABILITY
PRODUCTION AND EXPLOITATION	CONTENT PRODUCTION
	READY-MADE CONTENT EXPLOITATION
	COLLEAGUE EXPERIENCE EXPLOITATION

Table 3 - Results of the second research question.

Online education has been further associated with some difficulties whose increase requires special arrangements by teachers in terms of instruction, homework assignment, and evaluation. Teachers should thus make use of creative methods to augment adaptability to online education. Creating new conditions also demands new strategies for their implementation. It is also necessary to devise and choose some solutions to better fulfill the responsibilities assigned. Many of the shortcomings, challenges, and weaknesses of online education also need to be addressed and compensated by some methods. Therefore, teachers should exploit the strategies appropriate to online education during their instruction, feedback provision, homework assignment reviews, roll calls, and other related issues, and this is of importance because there has been no online education background for first-graders in Iran. In this regard, Participant I added that:

“The power of using poetry and impromptu storytelling techniques to teach some concepts and working with software and content development is one of the positive experiences I have gained during online education.”

Facing this new situation, i.e., online education accordingly requires adaptability. This new experience has also changed some characteristics of individuals in accordance with this new environment. Teachers’ effective activity in cyberspace has further increased and they have become highly proficient in some areas such as content production, in which they had no experience before. In this regard, Participant C asserted that:

“I myself used to not be very active in cyberspace. Now, I feel less embarrassed and I work at ease. We often exchange ideas in partner groups, and I even send voice messages.”

The new mode of instruction necessitates appropriate content more than anything else to do the job well. Therefore, teachers have to produce educational content. This main theme consists of three sub-themes of content production, exploitation of ready-made content, and exploitation of colleague experiences. Due to the absence of teachers and students, all educational content, in fact, audios, images, and videos must be prepared beforehand. This content can be in the form of videos as well as various clips prepared and used by teachers. Much of the teachers’ time and energy are thus spent producing such content, which may empower many teachers in this field. In this sense, Participant H said that:

“As it was not possible to do all the experiments at home, I had to learn to work with different software and create relevant educational content.”

As content production is a specialized job and requires time and money, it is more cost-effective to use high-quality content developed by other colleagues, so most teachers try to use the best content produced with multiple searches but mere focus on the content they produce does not suffice. For example, participant J declared that:

“Some colleagues make good videos and clips and share them with the teacher group, and I use them.”

Teachers have also tried to use some strategies to increase their productivity and that of students in online education. In addition, content preparation in this mode of instruction has not been done before and they have little experience in this field. Content production also takes too much time. Therefore, teachers work together to provide the necessary tools, in a way to broaden their experience through substitution and benefit other colleagues’ experiences. In this line, Participant B stated that:

“I had to be more serious about using content production software and apps and try to learn to work with them and build much more content. One of my colleagues is very helpful in this domain.”

Table 4 shows the results of the third research question. *Research question 3: What are the main grounds of teachers’ lived experiences of online education?* Some factors have also led to the formation of the special experiences of online education among first-grade teachers, including specific and general ones, composed of their own sub-themes. In this sense, the general grounds consist of socio-cultural conditions, economic

issues, and obligations. Some areas are thus closely related to teachers and the characteristics of online education, forming some experiences in teachers. Such experiences are referred to as special experiences. These specific grounds also include infrastructures, rules and regulations, timing, emergence, education and culture-building, and flexibility.

MAIN THEMES		SUB-THEMES
EXPERIENCE FORMATION GROUNDS	SPECIFIC GROUNDS	INFRASTRUCTURES
		RULES AND REGULATIONS
		TIMING
		EMERGENCE
		EDUCATION AND CULTURE-BUILDING
		FLEXIBILITY
	GENERAL GROUNDS	SOCIO-CULTURAL CONDITIONS
		ECONOMIC ISSUES
		OBLIGATIONS

Table 4 - Results of the third research question.

The context of online education and the tools by which it takes place is thus of utmost importance. Online education accordingly requires basic facilities and infrastructures without which instruction will seem difficult or impossible. According to the first-grade teachers, lack of proper infrastructures such as high-speed internet, smartphones or personal computers, an interactive program dedicated to lower-grade students in primary schools, together with the inability of some students to have access to such facilities have thus far led to some problems in online education. Participant A stated that:

“Some students have a poor economic status and even do not have a smartphone at all to install the required programs and attend the online sessions.”

Since online education is still in its infancy in Iran and has become recently widespread, especially in primary schools due to the prevalence of COVID-19, rules and regulations in this area have not been so far established to facilitate education for teachers and students or prevent some possible problems. Accordingly, Participant E said that:

“There are no rules and regulations for online education in order to specify the rights of teachers and students. Now some students do not have a smartphone. What is the law in this regard for teachers? For some students, parents do not even feel responsible for whatever you practice. What is their duty? I think they may claim that the teacher did not act well.”

Timing is another sub-theme related to the formation of lived experiences. The amount of time devoted to education, more time to consolidate some concepts and teach them, or to prepare educational content and tools

can be thus cited as an experience in online education. In this line, Participant H affirmed that:

“In online education, we are constantly under the pressure of time. Previously, teaching and learning were in accordance with textbook planning during students’ attendance at schools and there was enough time, but more time needs to be spent in cyberspace.”

Online education had not been widely used around the world, especially in Iran, before the COVID-19 pandemic outbreak. Thus, many education systems, countries, schools, teachers, students, and parents currently have no previous or extensive experience in this field. This has accordingly created special conditions for first-graders, who have no experience of schooling and face-to-face interactions in addition to online education. For example, Participant E stated that:

“It is very difficult for me as a teacher who had no experience with online education at all. I have to spend a lot of time preparing some content. I do not know about the best method to teach and what to do. It is an experience I have never had before.”

Education and culture-building is another sub-theme. Teachers have no previous experience in online education. The education system has not had this experience so far, so teachers need to practice in this area to be able to provide their best teaching activities. One of the most important parts of online education is content production, which must be done with special tools, which requires specialized training for the majority of teachers. The culture of using online education and activities is also vital. Some students are afraid of being scorned once playing their videos and audios. This concern also goes for teachers. Therefore, culture-building in this field is of importance to create security and help use cyberspace for education in a proper manner. Lack of education and culture-building can thus lead to some special experiences among teachers and other users. For example, Participant C affirmed that:

“Another thing that exists in online education is that neither teachers nor students were previously seeking to laugh at unfortunate slips made by children in their relationships and they were not abused. Unfortunately, culture-building has not taken place in this respect in online education. There is a big concern, and it is now happening.”

Participant J also stated that:

“It is now essential for teachers to take in-service educational content production courses. Education office must also take training for this purpose into account.”

Flexibility in online education also allows students to view and save videos and educational content multiple

times and refer to them whenever they need. For example, Participant F said that:

“The good thing about videos is that students can watch them whenever they want, can even save them and access them forever, and that is very helpful if they need to repeat them.”

Some grounds according to the conditions of society have also led to the formation of some special experiences during teachers’ online educational activities. Socio-cultural conditions, economic issues, and obligations are some of the sub-themes in this regard.

From this perspective, socio-cultural conditions affect teachers’ methods and behaviors. This becomes even more important for female teachers, whose fear of misconduct and playing their videos or audios in cyberspace are among major concerns. For example, Participant D stated that:

“I am a female teacher, and if I want to record a video training exercise and some of the workouts that clearly show the limbs and perform them for my students, I will face many restrictions and abuse.”

Economic issues and insufficient financial resources are also effective in shaping the first-grade teachers’ lived experiences of online education. Students with low financial capacities are thus not able to provide some facilities for homeschooling, and as a result, the quality and quantity of education is impaired. In face-to-face education, it was possible to use school facilities, which is currently not possible for students during online education. For example, Participant A acknowledged that:

“Another very important issue is the economic problems and the lack of a smartphone for some students.”

The obligations of the conditions during the COVID-19 pandemic have also left the world with no choice but online education. The whole world has decided that social distancing should be intensified, and schools should be closed down to manage the disease. In this line, Participant F reiterated that:

“COVID-19 and the unchanging situation as well as the fact that children should not be at schools in these circumstances compelled us to keep to online education.”

4. Discussion

The main purpose of this study was to reflect on the first-grade teachers’ live experiences of online education challenges in the academic year 2020-21, which was examined in the form of three main questions. The main themes of “evaluation”, “uncertainties and limitations”, “emerging issues”, and “interactions” were thus

developed in response to the first research question regarding the online education challenges perceived by teachers. The main themes of “creative adaptability” and “production and exploitation” were further obtained in regard to the second research question about the teachers’ strategies adopted to cope with online education challenges. Moreover, the main theme of “experience formation grounds”, including the sub-themes of specific and general ones, were raised with reference to the third research question, namely, the teachers’ experience formation grounds.

The results related to evaluation in this study were thus consistent with the findings reported by Abbasi et al. (2012), Haji et al. (2021), Karimi (2021), Rezaei (2013), Belair (2012), and Yuan (2009), exploring online education challenges. Since the main objective of education is to promote the community, the teaching and learning process must be enriched; therefore, part of education development takes place through measurement and evaluation. Evaluation is an integral part of the education system and has a special place. In assessment, in addition to gathering information and evidence to measure the achievement of educational goals, conditions also occur to help reinforce and facilitate learning (Pavri, 2012). It also fosters responsible, responsive, committed, self-assessed, and critical thinking students (Shermis & Di Vesta, 2011). In virtual education, many of these goals cannot be achieved in practice, because e-learning limits the tools needed to achieve it and some necessary elements such as interaction in this training are lost. As conventional methods for evaluating the quality of teaching are no longer appropriate, it is imperative to develop methodologically sound evaluations (Liu et al., 2022).

Feedback was also another sub-theme of evaluation, whose impact had been so strong that it had been cited as a fundamental in learning and motivation among students. Organizing the learning process and increasing motivation are thus two important impressions of feedback. In the new evaluation system, not only the fulfillment of learning objectives is considered, but also the discovery of needs, explanation of objectives, identification of strengths and weaknesses, and continuous improvement and enrichment of learning by giving feedback. Feedback also paves the grounds for learners’ comprehensive growth by removing shortcomings (Pavri, 2012).

In virtual education, when evaluating, the student does not perceive some leverage to participate in the evaluation, and even some follow-ups do not work in this regard. As a result, the extent and quality of student participation in assessment is, also affected and the learning curve cannot be assured (Belair, 2012).

Regarding the diagnosis of learning disabilities, Mohammadi et al. (2012) had accordingly confirmed that it was not possible to reflect on learning speed and power in students specifically with high quality in online education. The first and most important practical method for diagnosing learning disabilities is student observation, which can appropriately provide

information about them in different situations and places.

In line with the theme of skill training, Muthuprasad et al. (2020) also stated that the possibility of practical experience for learners is reduced. This is especially true in relation to some courses and units where the practical aspect is more important, which has a greater impact on the quality of education.

In agreement with the sub-theme of educational activities, Kian (2014) had further maintained that instruction was one of the major challenges facing online education. In the virtual environment, there are no face-to-face interactions, and as a result, the possibility of modeling is diminished. For this reason, the grounds for education are not completely ready. These findings can be cited by respecting the aspects of educational activities in schools. Attendance was another sub-theme. In this context, some studies had reported disorders in students’ presence in classrooms and impossible supervision in online education (Haji et al., 2021; Karimi, 2021), which was somehow related to the issue of attendance or check-in. Discussing the readiness of students for online education is also one of the major challenges in this field. Entering online education as well as persisting and continuing activities in this type of education have been and are still controversial for students, i.e., the time a student exactly checks in and leaves the classroom is not always clear to teachers (Cavanaugh et al., 2004). In addition, many primary school students do not currently have strong learning knowledge and a clear understanding of this situation. Such lower-grade students often consider online classes as a hobby at home. Therefore, they do not feel obliged to attend the classes and have much absenteeism once there is no family supervision (Yuan et al., 2020). Regarding the theme of homework assignment presentation and reviews, Yuan (2009) had additionally shown that Assessing homework in web-based learning has its own difficulties and it is more difficult to give feedback to the student. Student fatigue and monotonous training and lack of parental supervision, some misconceptions about virtual education in the minds of parents and the difficulty for the teacher in reviewing homework and fatigue of the teacher’s eyes and hands are some of the factors that affect the quality of homework presentation and review.

Motivation was another sub-theme related to uncertainties and limitations. These findings were also consistent with the reports in the studies by Belair (2012) and Wahyuningsih (2020). In virtual education due to lack of proper attitude to this education, the novelty of this experience and the lack of skills of students and parents in this type of education as well as inexperience of the teacher, difficulty in resisting the temptation of online games and electronic products for students and reduced student participation in teaching. And student learning motivation decreases (Yuan et al, 2020).

With online education in the context of information and communication technology (ICT), teachers are scared of some activities in cyberspace, which can lead to derision

and damage to their reputations (Haji et al., 2021). Several factors thus contribute to job stress and burnout. High workload, poor work skills and performance, low pay, no social connections, discrimination in the workplace, and conflicts between individuals and workplace values are some of the factors that redouble job worries (Maslach, 2003). Work-family conflict has been further cited, particularly for women, as a cause of stress and fatigue. According to the listed factors, it can be argued that the teachers' workload increases by staying in and the need to do all educational activities at home, despite all their house chores. In addition, online education involves content preparation, which itself takes much time. Homework assignments that were previously reviewed in classrooms or during breaks, all must be done at home during online education.

The fourth main theme related to the first research question is interaction, whose findings were consistent with the reports by Belair (2012) and Rao (2012). The student's extensive interaction with the teacher prepares him or her fully to play a social role and to receive and present a successful behavioral model. It also acts as a very strong source of support. This interaction and the quality of their activities and educational experiences in this context, leads to student success outside and inside the school. The more positive and interactive this interaction is, the more important the teacher's educational role becomes (Hurst et al., 2013). Interaction between learners and each other is also very effective in students' learning. They encourage and facilitate each other's efforts to accomplish tasks and duties. Not only cooperation in this interaction but also positive interdependence with each other, progressive face-to-face interaction, learning social skills and other group processes are elements that enhance students' learning in the form of interaction (Asha & Al Haw, 2016). Because of COVID-19, traditional learning methods have been redefined, keeping kids at home, and engaging in online education (Alwadei & Alnanih, 2022). All through the interaction between teachers and students, the factors of interpersonal behavior bring positive effects. Creating and organizing groups and classes, how to get help from each other, how to interact and behave to achieve some goals, seeing teachers' behaviors and verbal encounters, and even learning from them to aid others, respond, and guide, as well as being sensitive to the needs of others and listening much more can thus result in the impact of the interaction. The interaction between students with their own different needs and abilities also paves the grounds for their cooperation and makes them better understood. Students with special characteristics, such as shyness during interactions, also learn about constructive behaviors and are further given a great opportunity to experience new situations. Rules and regulations, which are explicitly/implicitly defined in students' interaction and cooperation, can even have an educational aspect. Teachers using interactive approaches in teaching and classroom management can similarly shape students' learning behaviors more deeply, depending on their

commitment and expertise (Dxemidzic et al., 2019). Interaction between colleagues in the educational system correspondingly occurs in different manners. This type of communication can be simultaneous, asynchronous, textual, audio-based, or visual. The ease of establishing this interaction can thus boost the quality of education and the levels of motivation in teachers and students (Jolliffe, 2015). In online education, teacher-official interactions can also take a different form. In this sense, face-to-face communication decreases but it is facilitated due to the virtual communication platform. Likewise, some officials join class groups and get informed regarding educational activities. At the same time, teachers gain a valuable opportunity to communicate more closely with officials in cyberspace. The themes of creative adaptability and production and exploitation were further obtained in answer to the second research question. Teaching as one of the influential professions has been always an important platform for the emergence of professional and individual creativity, particularly by teachers who are more interested and motivated. Creativity in teaching, especially in situations wherein appropriate facilities and tools are not available and teachers cope with shortcomings and limitations in resources they need to do their professional work can be thus a very effective driving force and a tool in achieving educational goals and fulfilling learning practice (Henriksen & Mishra, 2013).

In new modes of instruction, teachers play a facilitating role in teaching and learning processes. The acceleration, facilitation, and consolidation of the learning process accordingly require different tools, but today, due to technological development as well as ICT, electronic content production has become one of the most powerful educational tools applied for this purpose. Using this content has also generated a new experience for teachers and students in classrooms. Besides, content has an informational function, so loads of information can be presented in various forms such as texts, images, and videos. These tools produce some situations. Electronic content can be also exploited to process information, build knowledge, and objectify student perceptions. It additionally allows communication between teachers and students despite the physical barriers of time and place (Hamdi & Hamtini, 2016). However, since content production is assumed as a specialized activity and many teachers lack experience in this field, and they have not been even obliged to work in this regard at a high level, many teachers use the content prepared and produced by other colleagues. The relationships between colleagues in the educational system can also enhance the quality of education and motivate teachers and students, especially in complicated and new situations (Jolliffe, 2015). Likewise, sharing experiences makes the emerging path easier and adds to the experience of teacher substitution. In response to the third research question, the main theme with two sub-themes was also developed. Here, experience formation grounds included two sub-themes

of specific and general grounds. These findings accordingly confirmed the reports by Childs et al. (2005), Rao (2012), Wahyuningsih (2020), and Akabayashi et al. (2023). A significant factor contributing to the digital divide during COVID-19 is ICT skills among students, which closely correlate with their socioeconomic status (van de Werfhorst et al., 2022). No internet access, especially in disadvantaged areas, and educational inequality have been thus reported as the challenges experienced by teachers in online education. Some families cannot even afford internet use. The slow speed of the internet is also one of the factors related to infrastructures, inducing problems for teachers and students. Improper access to the virtual network in different parts of Iran as well as the cost of the internet and its slow speed have been further reported as infrastructural and technical challenges. Iran's Ministry of Education operationalized the Shad Social Network (owned and administered by the Ministry of Education) in March 2020 (Bahmani et al., 2022). The policies of the ministry forced teachers across Iran to present their teaching only through Shad Social Network. However, according to teachers and parents, the program initially suffered a lot of issues like problems in sending voice messages and files (especially files with larger sizes and higher quality) and constant freezes, and this made education very challenging during the first year after the COVID-19 pandemic; however, over time when the program was updated, issues got alleviated, though it never fulfilled users' expectations of an efficient interactive program for effective virtual education. According to teachers, being forced to implement Shad Social Network and depriving them of using more interactive and efficient social networks and technologies were among the most significant challenges concerning virtual education.

As a result of the Covid-19 pandemic, distance education was observed to have negative effects on students' social literacy skills, but it can still provide valuable advantages (Alsubaie, 2022). The flexibility and freedom of action in virtual education and the creation of a new experience in education and training, the need to provide the necessary hardware to participate in virtual classes and low Internet speed are among the factors that have affected people's experience of virtual education. The possibility of holding classes at different times and places is an example of the flexibility of virtual education (Asmara & Wu, 2020).

The high costs associated with planning and facilitating online education, especially in virtual schools as well as access to facilities and the internet are thus among important issues (Barbour & Cooze, 2004). Discussing the culture of families in terms of the acceptance of online education is also of great magnitude. In various surveys, many parents and students do not want to educate their children virtually. Although the possibilities of this type of education have been improving, the opinions of families to use and replace traditional education have not changed and there is still not much desire to use it, as mentioned in different

surveys (Cavanaugh et al., 2004). Piskurich (2004) also cited the difficulties of this training, the lack of time, the lack of managerial support, the possibility of definitively creating a training process, limited understanding of the virtual learning environment and its problems, lack of necessary infrastructure, especially in homes, incorrect beliefs in virtual education, and the lack of access to the necessary technology in some areas.

On the subject of obligations, with the outbreak of the COVID-19 pandemic in China, many governments have further imposed severe restrictions to prevent its spread. Traditional education, in which students were required to attend classes and instructed by teachers, also needs some changes (Joseph & Edmund, 2020). Taking account of many factors, governments have decided to implement a school closure policy in order to prevent the risk of this disease for many students and other people (Jordan et al., 2020).

At the moment, in-person classes are resumed in Iran as the pandemic has subsided, though factors like air pollution in industrial hubs, floods, intense rain and snow, and the breakout of diseases like influenza and COVID-19 sometimes force schools to offer their education in an online mode. Experience gained through the education offered during the COVID-19 pandemic has increased the quality of virtual education during the present era, though some challenges like slow internet rates and infrastructure shortcomings still exist.

5. Implications

According to the findings of the present study, it is necessary to consider the limitations of online education facing teachers. In addition, families, students, and teachers need to be trained to make the best use of cyberspace and online education. In order to empower teachers to produce educational content, it is of utmost importance to hold training courses. Moreover, it is not possible to make the most of online education without creating technological and socio-cultural infrastructures. Considering the characteristics of the courses and the content that first-graders should learn as well as the significance of teacher-student interactions, it is also essential to design more interactive and comprehensive software for online education.

6. Limitations

The present study was obtained only from the data of some semi-structured interviews, as the only tool, with female first-grade teachers working in primary schools, so the lived experiences of other teachers in other grades, as well as the experiences of male counterparts, can be examined in further research.

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