The Parental Challenges in Online Learning during the Coronavirus (COVID-19) Pandemic in Lebanon

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Abstract: Disrupting the traditional methods of education during the COVID-19 pandemic led to a shift towards online learning platforms. This shift has been problematic and challenging for most Lebanese parents who have had to deal with the COVID-19 pandemic crisis in addition to different economic, political, and environmental problems. The purpose of this research is to explore the types of parental challenges in online learning during the COVID-19 pandemic in Lebanon. The study has been conducted on parents from a school in Beirut, and data has been collected using a mixed-methods design; the first instrument is an online survey and the second one is an online interview.55 parents were able to complete the survey, and 10 parents were able to do the interview. The findings of this study show that parents have an important role in the online teaching-learning process. This includes helping with assignments, contacting teachers when needed, following up with schedules, etc. In addition, it was clear that parents had a negative perspective of their children's' online learning experience which was due to many challenges in online education including electricity cut-offs, internet problems, inability to keep the child focused, having only one device at home, etc. The findings of this study may enhance the attitudes and perceptions of parents towards online education and can improve the quality of online education in Lebanon in the future.

Keywords: Online Education, Online Learning, Distance Education, Distance Learning, Coronavirus, COVID-19, Parents, Challenges, Difficulties, Educational System, Beirut, Lebanon, Internet, Electricity

1. Introduction

1.1 Background of the Study

Throughout the ages, crises have been proved to create great opportunities. The latest worldwide crisis, the COVID-19 pandemic, has created an opportunity for the Lebanese educational system to conduct online education, or online learning, which has not been incorporated in the system before. This opportunity was also associated with different challenges for parents, students, teachers, and school administrators (Anouti & ElRouadi, 2020).

Over the past few months, online education has become an alternative for face-to-face teaching due the COVID-19 pandemic which made the educational system witness the largest disruption in history. Approximately 1.6 billion students in around 190 countries were affected. The shutting down of schools and learning institutions has affected 94% of the world's students, up to 99% in low and lower-middle income countries (Education during COVID-19 and beyond, 2020).

In Lebanon, once the first positive coronavirus case was confirmed, and within a week, all educational institutions including day cares, schools, and universities were closed. Face-to-face teaching was not an option anymore, and alternative solutions were needed (Anouti & ElRouadi, 2020). However, the Lebanese educational system has already been struggling with the political and national problems, and in a country like Lebanon where resources are limited and curricula are rigidly time-dependent, the COVID-19 pandemic made the situation even worse especially after the October uprising(Bizri, Khachfe, Fares, & Musharrafieh, 2020). Consequently, disrupting the traditional methods of education has led to a shift towards online learning platforms. However, this shift has faced many challenges. With less support from schools, online education required parents to help teach (AlOmian, 2020).

1.2 Statement of the Problem

Even before this challenging pandemic started, many Lebanese parents have been facing different barriers to education. After the pandemic, they were obliged to take the role of teachers with limited access to basic household services such as electricity and low digital literacy (Anouti & ElRouadi, 2020). In addition, parents had to deal with the absence of technical conditions that the online education requires. Moreover, what makes the online education a challenging experience for parents is that the slow internet connection and the economic crisis that made it very difficult for parents to provide their children with the needed technical conditions (Atallah & BouMelhem, 2020).

1.3 Purpose of the Study

The purpose of this research was to explore the type of parental challenges in online learning during the COVID-19 pandemic in Lebanon.

1.4 Rationale of the Study

After looking for studies previously made in Lebanon, it was clear that many studies have been made to assess the beliefs and attitudes of teachers and students towards online learning or to assess the needs of teachers and students to help find solutions to their problems during the COVID-19 pandemic. However, the parental challenges in online

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learning during the COVID-19 pandemic were not addressed before. This means that more attention was needed to this topic, and therefore, more studies were needed in Lebanon to explore the COVID-19 pandemic and the types of challenges that are affecting parents. Finally, the researcher believed that it was important to obtain findings from parents' feedbacks to present solutions to enhance the online learning experience for students, parents, and schools.

1.5 Research Questions

The researcher aimed to explore the type of parental challenges in online learning during the COVID-19 pandemic in Lebanon by looking for answers to the following questions:

RQ1: To what extent do parents play a role in their children's online education?

RQ2: What is parents' perspective of their children's experience with online education?

RQ3: What types of challenges do parents face during their children's experience with online education?

1.6 Significance of the Study

Since online learning has become an important process for teaching and learning in most Lebanese educational institutions, it was important to identify the types of parental challenges in online learning in Lebanon during the COVID-19 pandemic when parents have become their own children's teachers. The findings of this study can improve the quality of online education in Lebanon in the future.

This study identified the types of parental challenges and the ways they have been affecting the perspectives of parents of their children's online learning experience. This can make it easier to find solutions for these challenges and enhance the parental experience with online learning which will be reflected on the performance of students. This research may also enhance the attitude and perception of parents towards online learning which will make it more welcomed in the Lebanese society. If this occurs, parents will deal with online learning with a positive attitude, and it will be accepted in the society. Finally, this may result in an increased integration of online learning in the Lebanese curriculum which may increase media knowledge and awareness among students.

1.7 Limitations

This study had several limitations. First, students and teachers who are directly involved in the teaching-learning process were excluded from the study. Second, a huge number of parents under study did not have faith in online learning which might have caused bias in the data collected. In addition, sample size in this survey was limited. This has affected the efficiency of the results because an appropriate sample renders the research more efficient. Finally, it was not possible for the researcher to reach parents from different regions in Lebanon. Therefore, only 55 parents responded to the survey and 10 parents did the interview.

1.8 Research Design

To better understand the research problem, the researcher used a mixed-methods design, the embedded design, in which quantitative and qualitative data were collected simultaneously. Quantitative data was collected using an online survey which was sent as a Google form link to all the participants. The participants had to complete this survey online due to the school closure and COVID-19 restrictions. On the other hand, qualitative data was collected using interviews with the participants. The interviews were done online through Zoom application due to the same reasons. During each interview, the researcher asked the participants questions about the challenges of online learning. This helped the researcher record different perspectives on the topic being studied and provides a complex picture of the parental challenges in Lebanon.

1.9 Population

The survey was conducted on a sample of parents from a school in Beirut. The link of the survey has been sent to all parents whose children were enrolled in online education programs. However, only 55 participants voluntarily completed the online survey. The researcher reviewed the survey to choose 10 parents from those who confirmed their willingness to participate in the second part of the study.

2. Descriptive Findings

The first part of the survey included personal questions about the participants' age, gender, marital status, number of kids, digital literacy, employment type, and highest educational degree earned. The results show that 61.8% of the parents were between 41 and 50 years old, 18.2% were between 51 and 60 years old, 18.2% were between 31 and 40 years old, and 1.8% were between 21 and 30 years old. They were almost equally divided according to their gender in which 49.1% were females, 47.3% were males, and 3.6% preferred not to mention their gender. Finally, 3.6% of the participants have only 1 child, 18.2% have 2 children, 32.7% have 3 children, and 45.5% have more than 3 children.

The participants rated their digital literacy from very bad to excellent. Figure 1 shows the results of research question 6.



Figure 1: The level of digital literacy among parents.

As shown in Figure 1, 47.3% of the participants rated their digital literacy as very bad, and 23.6% rated it as bad. Meanwhile, only 5.5% consider it as excellent, 7.3% consider it as very good, and 16.4% consider it as good (Figure 1). This means that 70.9% of the participants believe that they lack the digital literacy needed for them to be able to teach their children online.

In survey question 5, the researcher asks about the highest educational degree earned by parents. The researcher wanted to see if there's an influence of the educational background of parents on their perspectives and experiences with online education. Figure 2 shows the highest educational degree earned by parents.



Figure 2: The highest educational degree earned by parents.

As shown in Figure 2, the majority of participants, 74.5% of them, do not have a university degree in which 43.6% of the

participants have an intermediate degree, 30.9% have a secondary degree, 9.1% have a bachelor's degree, and 3.7% have a master's degree. However, 12.7% have gained other degrees (Figure 2).

Finally, the results show that 43.6% of the participants were unemployed, 18.2% had a part-time job, and 38.2% had a full-time job. In addition, 87.3% were married, 5.5% were divorced, and 7.3% preferred not to mention their marital status.

3. Results

To answer RQ1: "To what extent do parents play a role in their children's online education?", the researcher first analyzed data collected from survey questions 15 and 16. Participants were asked whether they had the chance to interact with the teachers while their child/children learn online. The results are shown in Figure 3.



Figure 3: The frequency of parental interaction with teachers while their children learn online

The results show that 12.72% of the participants always had the chance to interact with the teachers while their children learn online, 49% often had the chance, 14.54% sometimes had the chance, 14.54% occasionally had the chance, and 10% did not have the chance at all (Figure 3).

Parents were also asked whether they had the chance to accompany their children while they were learning online.18.18% of the participants said that they always accompanied their child/children, 25.45% often did, 21.8% sometimes did, 21.8% occasionally did, and 12.77% never accompanied their children while they were learning online.

However, qualitative data shows that parents were responsible of teaching tasks and supervisory tasks. Parents were asked about how their children conducted online education in interview question 1. The results showed that there was no specific way used to conduct online education. In some classes, they attended online meetings. In other classes, the teacher sent the material via WhatsApp. It all depended on the teacher, the subject, and the class. The method of conducting online education did not have a significant influence on other data collected from the survey or interview. The problem was not with the method of teaching, but with the difficulties preventing children from learning. education in interview question 2. Eight out of ten parents mentioned that they had to make sure that their children were sharing the phone according to their schedules. In addition, seven out of ten parents said that they had to make sure that their child is attending the session on the device and not playing video games or using any social media platforms, and seven out of ten parents claimed that they contacted the teachers to ask about the assignments, class timing, etc.

To answer RQ2, "What is parents' perspective of their children's experience with online education?", the researcher analyzed different questions from the survey and the interviews. Data collected from the survey shows that 70.9% of the participants believe that online learning has negatively affected their children's performance at school, 25.5% believe that online learning has not negatively affected their children's performance at school, and 3.6% believe that believe that online learning might have negatively affected their children's performance at school.

Not only the academic performance has been affected after the pandemic, but also dealing with the child/children and their performance at school.73.44% of the participants claimed that dealing with their child became more difficult after the pandemic and 76.3% mentioned that their children's grades became lower after the pandemic.

However, they were asked about their role in online

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Another survey question may help answer RQ2. Parents were asked to rate their children's experience with online education, and the results are displayed in Figure 4.



Figure 4: How parents rated their children's experience with online education.

As shown in Figure 4, the results show that 30.9% of participants rated it as very bad, 20% rated it as bad, 30.9% rated it as good, 12.7% rated it as very good, and 5.5% rated it as excellent (Figure 4).

In comparison with those who considered that they have good to excellent digital literacy, 79.48% of parents who believed that they have low and very low digital literacy rated their child/children's online learning experience as very bad. However, 68.75% of those who considered that they have high to very high digital literacy rated it as good and 25% rated it as very good. This shows that the level of digital literacy of parents can affect their perspective of the online learning experience of their children.

Qualitative data also supports the data collected from the survey. One of the participants said,

"I cannot describe how stressful and challenging these 2 years have been because of online education. I just want my kids to go back to school even if there's a risk of corona virus. We are all suffering from psychological problems now, and I currently take anti-anxiety medications."

This has been said during one of the interviews by one of the participants who had three children who were learning online at the same time which shows how stressful online education has been. In addition, seven out of ten parents said that their children will not continue to learn online if they had to choose between online classes or face-to-face classes. They were also asked the same question in survey question 24. Only 40% of participants admitted that their children will continue to learn online. It is also important to mention that 50% of participants mentioned expressions related to psychological problems like anxiety and depression during the interviews.

Finally, to answer RQ3, the researcher collected data using different survey and interview questions. Parents were asked to select the most common challenges they faced in survey question 17, and the results are shown in Figure 5.



Figure 5: The percentage of types of challenges stated by the participants.

As shown in Figure 5, the most common challenge was Internet problems.94.5% of participants chose this answer, and 90.90% chose electricity cut-offs. In addition, 47.3% of the participants chose not having more than one device at home, 43.6% chose inability to keep the child focused during the online session, and 29.1% chose inability of balancing work and online education (Figure 5).

Ten out of ten parents mentioned Internet problems and electricity cut-offs in the interviews. Participants also mentioned other challenges including inability to buy additional devices due to the economic crisis in Lebanon, the fact that children hate studying online, the fact that students have been unmotivated, and the inability of teachers to explain clearly during online classes. One of the participants said,

"I had to quit my job to take the role of a teacher at home because hiring 4 private teachers for 4 kids will cost me more than my salary is." This shows that parents had to play the role of a teacher at home, and in some cases, they had to quit their jobs to do that. Moreover, as shown in the data collected from the survey, 82% of participants who had full-time jobs and 93.7% of participants who had part-time jobs were unable to balance between their jobs and helping their children which is shown in the data collected from survey question 17.

In a different manner, the results show difference between parents who had three or more children and those who had one or two children.92.7% of the parents who had three or more children found dealing with more than one child as the most stressful task. However, only 23.8% of those who had two children believe that helping more than one child at the same time was stressful, and none of those who had only one child found it difficult. This shows that having three or more children was positively associated with the difficulty of helping more than one child at the same time. Finally, the highest educational degree earned by parents, their age, gender, and their marital status did not have a clear and significant influence on the data collected.

4. Discussion and Conclusion

After collecting data from the two instruments used, the researcher analyzed the data collected to answer the three research questions. First, data analysis showed that parents had an important role in the online teaching-learning process. They were responsible of different tasks that supported and helped their children while they were learning online. These tasks included helping their children with their assignments because teachers were not always able to explain clearly during online sessions. This could be due to the unfamiliarity to online education which has been discussed in different studies previously made in Lebanon. Parents, teachers, and students were introduced to online education in a sudden manner which resulted in having difficulties with online education (Anouti & ElRouadi, 2020 & Nasser & Abouchedid, 2020). As a result, parents had to become responsible of contacting teachers seeking information, support, or instructions.

In addition, when parents had more than one child, they were responsible of making sure that all the children have equal access to the devices available. The findings showed that the reason behind this task was the fact that, in many cases, parents had more than one child with only one device available for all the children at home because they were not able to buy additional devices due to the economic crisis. Moreover, parents were responsible of other tasks including following up with schedules of online classes, exams, and assignments. This shows that parents had an important role in teaching their children while they were learning online.

Even though their role was a necessity, they generally had a negative perspective of their children's online learning experience. The findings of this study showed that they believed that online education has negatively affected the academic performance of their children and face-to-face education was more effective than online education. They also believed that they won't let their children continue to learn online. This shows that the data collected from this study is compatible to the data collected from different previous studies. In his study, Chuanmei (2020) proved that parents generally had negative perspectives of their children's online learning experience. Furthermore, in a country like Lebanon, parents are used to traditional classes and they believe that their children should be taught and learn in the same way they were taught and learned (Anouti & ElRouadi, 2020).

Moreover, the findings of this study proved that different challenges led to having a negative perspective of their children's online learning experience. The two major challenges for the participants were electricity cut-offs and Internet problems. These two problems were the major challenges that lead to the failure of online education as proved in different study made in Lebanon (Anouti & ElRouadi, 2020). Frequent electricity cut-offs, slow Internet connection, and the inability of most parents to provide enough power supplies and stable Internet connection to their children at home under difficult economic conditions prevented parents from having a smooth online learning experience (Atallah & BouMelhem, 2020). The participants also mentioned other challenges including the inability to keep the child focused during the online session, the fact that students hated online learning, and the inability to buy additional devices.

Moreover, the experience of parents was associated with different psychological problems which revealed how difficult it was for them. This could be due to the fact that online education was preventing them from performing their life as usual. Lee, S. (2020) suggested that the parental mental health could be a significant cause behind the success of the online learning experience. The parental mental health might have a major effect on the online teaching-learning process (Lee, Ward, Chang, & Downing, 2020).

Furthermore, some factors were also associated with these findings. The results showed that the higher the number of children at one home was, the more stressful the experience was. This has been proved using data collected from the two instruments. Having three or more children has been considered as a challenge itself. Parents who had three or more children had to worry about ensuring that all children had equal access to the electronic devices available.

Another factor was associated with these findings. Parents who had low digital literacy had worse perspectives of the children's online learning experience than those who had high to very high digital literacy. This is due to the fact that having low digital literacy can make it harder for parents to support their children when they learn online.

Finally, the findings showed that having a part-time or fulltime job can make this experience more challenging for parents. In some cases, they had to quit their jobs, and in other cases they were unable to balance between work and teaching their children. The experiences of working parents have been a huge concern for different researchers. Tajuddin (2022) also proved that working parents have been facing different challenges related to managing their time between work and helping their children with online learning. This also supports the fact that parents spend more than 27 hours, which is almost equal to another job, on childcare, education, and household chores (Krentz, Kos, Green, & Garcia-Alonso, 2020).

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References

- [1] Abuhammad, S. (2020). *Barriers to distance learning during the COVID-19 outbreak: A qualitative review from parents' perspective*. Retrieved from science direct. com: https: //www.sciencedirect. com/science/article/pii/S2405844020323252
- [2] Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students'. *Journal of Pedagogical Sociology and Psychology*, 45-51.
- [3] Alhuzimi, T. (2021). Stress and emotional wellbeing of parents due to change in routine for children with Autism Spectrum Disorder (ASD) at home during COVID-19 pandemic in Saudi Arabia. *Research in Developmental Disabilities*.
- [4] AlOmian, K. (2020, May 9). The Education System Transformation (TEST): How a revolution in education in the Middle East will shape the sector post-coronavirus. Retrieved from Daily News: https: //dailynewsegypt. com/2020/05/09/the-educationsystem-transformation-test-how-a-revolution-ineducation-in-the-middle-east-will-shape-the-sectorpost-coronavirus/
- [5] Anouti, M., & ElRouadi, N. (2020, July). The Online learning Experiment in the Intermediate and Secondary Schools in Lebanon during the Coronavirus (COVID-19) Crisis. Retrieved from Research Gate: https: //www.researchgate. net/publication/343444423_The_Online_learning_Exp eriment_in_the_Intermediate_and_Secondary_Schools _in_Lebanon_during_the_CoronavirusCOVID-19_Crisis
- [6] Atallah, T., & BouMelhem, I. (2020, March 30). Distance education in Lebanon: what it has and what it should. Retrieved from Nida Al Watan: https: //www.nidaalwatan. com/article/17796-%D8%A7%D9%84%D8%AA%D8%B9%D9%84%D 9%8A%D9%85-%D8%B9%D9%86-%D8%A8%D8%B9%D8%AF-%D9%81%D9%8A-%D9%84%D8%A8%D9%86%D8%A7%D9%86%D9 %85%D8%A7-%D9%84%D9%87-%D9%88%D9%85%D8%A7-%D8%B9%D9%84%D9%8A%D9%87
- [7] Azevedo, W. (2007, June 3). Linda Harasim on Online Collaborative Learning. Retrieved from www.slideshare. net: https: //www.slideshare. net/aquifolium/linda-harasim-on-online-collaborativelearning
- [8] Bhamani, S., Makhdoom, S. Z., Bharuchi, V., Ali, N., Kaleem, S., & Ahmed, D. (2020). Home Learning in Times of COVID: Experiences of Parents. *Journal of Education and Educational Development.*
- [9] Bizri, A., Khachfe, H. H., Fares, M. Y., & Musharrafieh, U. (2020, July 13). COVID-19 Pandemic: An Insult Over Injury for Lebanon. Retrieved from SpringerLink: https: //link. springer. com/article/10.1007/s10900-020-00884-y#citeas
- [10] Brink, H. (1993). Validity and Reliability in Qualitative Research. *PubMed*.

- [11] Cherry, K. (2019, September 24). History and Key Concepts of Behavioral Psychology. Retrieved from verywellmind. com: https: //www.verywellmind. com/behavioral-psychology-4157183
- [12] Chuanmei, D., Caob, S., & Lia, H. (2020, November). Young children's online learning during COVID-19 pandemic: Chinese parents' beliefs and attitudes. Retrieved from Science Direct: https: //www.sciencedirect.

com/science/article/pii/S019074092031224X

- [13] Education during COVID-19 and beyond. (2020, August). Retrieved from United Nations: https: //www.un. org/development/desa/dspd/wpcontent/uploads/sites/22/2020/08/sg_policy_brief_covi d-19_and_education_august_2020. pdf
- [14] El Turk, S., & Cherney, I. (2016). Perceived online education barriers of administrators and faculty at. *Creighton Journal of Interdisciplinary Leadership*.
- [15] Guthrie, A. Y. (2020, September 1). Online Learning-What Is It And How Does It Work?. Retrieved from educations. com: https: //www.educations. com/studyguides/study-online/
- [16] Hoover-Dempsey, K. V., & Jones, K. P. (1993, 3 27). Parental Role Construction and Parental Involvement in. Retrieved from ERIC: https: //eric. ed. gov/?q=Parental+Role+Construction+and+Parental+In volvement+in+Children%27s+Education.
- [17] Kentnor, H. (2015). Distance Education and the Evolution of Online Learning in the.17.
- [18] Kirk, J., & Marc, M. (1986). Reliability and Validity in Qualitative Research. *Journal of Marketing Research*.
- [19] Krentz, M., Kos, E., Green, A., & Garcia-Alonso, J. (2020, May 21). Easing the COVID-19 Burden on Working Parents. Retrieved from https: //www.bcg. com/publications/2020/helping-working-parents-easethe-burden-of-covid-19
- [20] Lassoued, Z., Alhendawi, M., & Bashitial, R. (2020). *An Exploratory Study of the Obstacles for Achieving*. Retrieved from researchgate. com: https: //www.researchgate. net/publication/344188603_An_Exploratory_Study_of _the_Obstacles_for_Achieving_Quality_in_Distance_ Learning_during_the_COVID-19_Pandemic
- [21] Lee, S. J., Ward, K. P., Chang, O. D., & Downing, K. M. (2020). Parenting Activities and the Transition to Home-based Education During the COVID-19 Pandemic. *Children and Youth Services Review*.
- [22] McLeod, S. (2019). *Bruner-Learning Theory in Education*. Retrieved from simplypsychology. com: https://www.simplypsychology. org/bruner. html#: ~: text=Bruner%20believed%20that%20the%20most, known%20as%20a%20constructivist%20approach).
- [23] Mishra, L., & Shree, T. G. (2020). Online teachinglearning in higher education during lockdown period of COVID-19 pandemic. *International Journal of Educational Research Open*.
- [24] Nasser, R., & Abouchedid, K. (2020). Attitudes and Concerns towards Distance Education: The Case of Lebanon. *Online Journal of Distance Learning Administration*.
- [25] Pollard, A., & Bourne, J. (1993). *Teaching and Learning in the Primary School.* Routledge.

Volume 11 Issue 3, March 2022

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- [26] Qazi, A., Naseer, K., Qazi, J., Al Salman, H., Naseem, U., Yang, S.,... & Gumaei, A. (2020). Conventional to online education during COVID-19 pandemic: Do develop and underdeveloped nations cope alike. *Children and Youth Services Review*.
- [27] Rasmatilda, R., Rasmatilda, R., Aliyyah, R. R., & Rachmadtullah, R. (2020). The Perceptions of Primary School Teachers of Online Learning during the COVID-19 Pandemic Period: A Case Study in Indonesia. *Journal of Ethnic and Cultural Studies*, 7 (2): 90.
- [28] Robson, C. (2002). Real World Research: A Resource for Social Scientists and Practitioner-Researchers (2nd ed.). *Oxford: Blackwell Publishers Ltd.*
- [29] Roffe, I. (2004). *Innovation and E-Learning*. Great Britain.
- [30] Roselli, N. D. (2016). Collaborative learning: Theoretical foundations and applicable strategies to university.
- [31] Rothana, H. A. (2020, May). *The epidemiology and pathogenesis of coronavirus disease (COVID-19) outbreak*. Retrieved from sciencedirect. com: https://www.sciencedirect.

com/science/article/abs/pii/S0896841120300469

- [32] Saunders, M. L. (2009). An Overview of Research Methodology in Information System (IS). *Research Methods for Business Students*.
- [33] Stern, J. (n. d.). *Introduction to Online Teaching and Learning*. Retrieved from http: //www.wlac. edu/online/documents/otl. pdf
- [34] Tajuddin, J. M., Kartini, R. A., & Dayana, S. (2022). Challenges of Online Learning Faced by Working Parents in Urban Areas. *Journal of Contemporary Issues and Thought*, 55-64.
- [35] West, R. E. (2017). Foundations of Learning and Instructional Design Technology.

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185