Tribhuvan University Journal Vol. 38, No. 2: 69-82, December, 2023 Research Directorate, Tribhuvan University (TU), Kathmandu, Nepal DOI: https://doi.org/10.3126/tuj.v38i2.60769



LEARNING ENGAGEMENT OF CHILDREN DURING THE COVID-19 PERIOD IN LALBANDI MUNICIPALITY: A MIXED METHOD

Matrika Parsad Koirala

Central Department of Education, TU, Kathmandu Corresponding author: koiralamatrika@gmail.com

Received date: 1 Mar. 2023- Accepted date: 25 Nov. 2023

ABSTRACT

This paper analyzes the learning status of children and their access to information and communication technology (ICT) during the pandemic period. This study employs a mixed-methods design, selecting two secondary schools were purposively to cover both urban and rural areas in the Lalbandi Municipality of Madhesh Pardesh. Primary data were collected through interview guidelines with the respondents, surveys, focus group discussions, and field notes, while secondary data were collected using various sources, such as policy documents, empirical reports, theoretical literature, and internet sources. Both descriptive and analytical methods were used in data analysis and interpretation. The study shows that students learned from several modes, such as online classes using computers, mobile devices, and other electronic devices such as radio and television. Some students just self-study. It shows a gap in access to online learning between students who had access to online classes and students who studied on their own. The majority of the students preferred to study at home. Among students staying at home, the majority of them were given a separate room to study in, while others studied in a common room. Despite the variable access to online classes, most of the students performed the given assignments. The persistence of the digital divide has posed challenges to education, but the unwavering dedication of students and parents to learning emphasizes its enduring importance. This situation underscores the urgent need for a more equitable and inclusive educational system in the future.

Keywords: access, e-learning, inequality, pandemic, vulnerable

INTRODUCTION

The COVID-19 pandemic disrupted every sector of Nepal, including educational sector. It has severely affected people's overall physical, mental, social, and spiritual health (Poudel & Subedi, 2020). Therefore, it has not been convenient to open schools in pandemic situations. The closure of educational institutions has interrupted the education of million learners from every education level, with the risk of not returning to the school due to COVID-19 (Nations Educational, Scientific and Cultural Organization [UNESCO], 2020a; United Nations Organization [UNO], 2020). With children no longer attending school, they mostly spent their time at home with their parents (United Nations International Children's Emergency Fund [UNICEF], 2021a; World Bank, 2020; UNESCO, 2021). According to the Center for Education and Human Resource Development [CEHRD] (2020), a total of 8,126,046 students in Nepal are affected by COVID-19, including 973,900 students in ECD/PPE, 3,672,155 students in grades 1-5, 1,820,943 students in grades 6-8, 1,027,512 students in grades 9-10, and 631,536 students in grades 11–12. The only option in this situation to keep students learning is to use alternative teaching methods. The support provided by parents and teachers has a bearing on how effectively a student learns through distance education.

Online learning, or e- learning, denotes the concept of using electronic means either computer or mobile device within a network to learn from anywhere, anytime and with any means (Cojocariu et al., 2014). According to UNESCO (2020b), online learning, e-learning, correspondence learning, external studies, flexible learning, and massive open online courses (MOOCs) are all terms that broadly refer to distance learning. Print-based learning materials, one-way mass broadcasting (TV and radio programs), web-based exchange using social media channels, or learning platforms are used in distance learning. Distance education is defined as a teaching strategy in which the students and teachers are physically apart. It can make use of a variety of technologies; for example, audio, video, computers, and the internet are all examples of communication (Roffe, 2004). Distance learning has evolved over time, starting with correspondence and the use of parcel post, moving on to radio, then television, and finally, online education. Among the five generation outlined, we are now in the fifth generation, which uses web 2.0 extensively for the interactive, collaborative learning, use of Audio/Visual materials within flexible time period. The availability of 5G and AI technologies will continue to drive the transformation and

development of distance learning and educational technology (EdTechs). These technologies support teachers in terms of preparation, innovation and lesson design to enhance the online course (Taylor, 2001; Kentnor, 2015; Kang, 2021).

The havoc it has created on the educational system has many challenges and opportunities to harness. There have been attempts to make a paradigm shift in the traditional educational system by revising curriculum, pedagogy, and evaluation systems through the use of information and communication technology (ICT). The immediate paradigm shift and the lack of access to ICT (devices, Wi-Fi and the internet) for both students and teachers create a gap in the quality of education. The absence of clear operational guidelines and contingency plans creates problems in building accessible, adaptable and inclusive approach to learning and promoting right to education for students. UNICEF (2017) considers the poor quality of education and the unequal access to education based on remoteness, gender, and socio-economic background as key weaknesses of the present-day education system. Social inequalities result in the uneven distribution and access of digital resources, causing a digital divide. Such digital division causes uneven participation in society, reinforcing social inequality. The digital divide is also influenced by motivation, attitude, intention, and social support (Van Dijk, 2017).

The enormous inequality in educational opportunities between developed and developing nations is made worse by the technological gap between them. Children in the poorest societies and members of the most disadvantaged and vulnerable groups, such as women and students with special educational needs, are once again threatened with losing their right to an education, including distance learning. The lack of internet access at home and computer shortages in classrooms make this inequality even more harmful (Lorente *et al.*, 2020). The delivery of knowledge and skills at different levels of education has been persistently affected by the pandemic. Some families who lack time and skills for in-home teaching and supervision are not addressed properly (Hoofman & Secord, 2021).

Most educational institutions in a developing city focus on providing education on a face-to-face model. With the COVID-19 pandemic, all of the institutions opted for online education as a different model for providing continuous education. However, the infrastructure for the city disables implementing such a model on short notice. Continuous power outbreaks

as well as minimum access to ICT create a new problem for students' access to continuous education. During the pandemic, farmers and working-class people who depend upon daily wages face the challenges of managing devices and the internet for online learning, which results in irregularities in the learning process of children. Most of the students in the study area could not use technologies mentioned in the fifth generation of distant learning, such as online streaming, media, and internet applications, due to inequality in socio-economic, cultural, motivational, intentional factors, and so on. It clearly shows the digital divide between the students, which made alternative educational method ineffective for some students who had no access to technology. Lack of access to digital technologies was an important factor in students not getting qualitative learning experiences (Di Pietro et al., 2020; Koirala; 2023). Furthermore, a research study done by UNICEF on Nepali students shows that 10.4% of the grade 10 students had access to any model of alternative education (UNICEF; 2021b). What are the alternative learning modalities after the schools are shut down due to the pandemic? How can students get equity in access to online learning? What are the programs that will ensure the continuity of education? How are students engaged in obtaining an optimized learning environment? Previous research had not focused on the above problems. Therefore, this research is intended to answer these questions. Thus, the objective of this study is to identify the learning status of children and their access to ICT during the pandemic period in Lalbandi municipality of Madhesh Pradesh.

Research Methods and Procedures

In this study, mix methods design (qualitative and quantitative) was used. 53 students studying in grade 10 were selected purposefully from two schools (Shree Secondary School and Janjyoti Model Secondary School) covering urban and rural areas. Both schools are located in Lalbandi municipality, Sarlahi district, Madhesh Province. In addition, head teachers, teachers, and parents were also included in this study from each school. Primary sources of data are interview guidelines with the respondents, surveys, focus group discussions, and field notes. Policy documents, empirical reports, and theoretical literature are secondary sources of data. Both descriptive and analytical methods were used in data analysis and interpretation. The quantitative data were analyzed using simple statistics, and the qualitative information was interpreted manually by developing detailed transcription. The whole data analysis process consisted of coding, categorizing, and conceptualizing the main objectives of this study.

RESULTS AND DISCUSSION

Learning Engagement

Nepal needs to focus on providing sustainable, inexpensive, accessible, and familiar resources such as television, radio services, social media and so on for remote learning. Rather than imposing any technology or methodology directly, analyzing their sustainability and prospects beforehand would be a good decision (Poudel & Subedi, 2020). Those mediums are the basis of the categorization suggested by Student Learning Facilitation Guide, 2077. During the pandemic, students were found to be involved in different ways to access alternative education. Many classes were organized on different platforms nationwide, such as radio, television, and the internet, and we felt eager to find out the access of respondents to these devices in the area of research.

Table 1

Learning devices	Count	Total (%)
Radio or FM radio	16	30.19
Television	32	60.38
Computer without Internet	5	9.43
Computer with Internet	9	16.98
None of these facilities	7	13.21

Access to the Learning Devices

Sources: Field Survey, 2022

As per the data mentioned by the respondent, we found from Table 1 that 60.38% of the total respondents possess television, 30.19% possess radio or FM radio, 16.98% of the respondents possess a computer with the facilities of the internet and 9.43% of students just have a computer with no internet capabilities. The total count exceeds 53 because each respondent could answer a close question with more than one option. We found that 13.21% of students had no access to any of these learning devices.

Here are the sample interviews taken with the students about their viewpoints on the online classes organized by the school. One of the students from Shree Secondary School told,

> "I did not get a chance to read online. I was not provided a smart phone. So, I read via television. Due to staying in the village, I could not study online."

Some of the students did not have access to the learning device. One of the students told,

> "I had no IT equipment to join the online classes. I used textbooks provided by the School. Further, I also joined private tuition classes conducted by teachers outside of my school."

Despite students' access to different learning platforms, many students did not use those learning devices for learning. Only mobile devices and computers with internet access were primary learning devices. The unavailability of information regarding curriculum televised on different networks and transmitted through radio made students limited to two choices: taking either online classes or self-study. Schools had a hard time categorizing students into different categories, as outlined by the Student Learning Facilitation Guide, 2077. If schools had categorized students into different categories, they would have multiple ways to outreach qualitative education. Children who do not have access to other types of alternative education are 3%, children who access educational programs through television programs are 1.8%; and radio programs are 1.1%. (UNICEF, 2021b).

Access to the Application of Learning

Students who had access to mobile devices, free Wi-Fi, free data packages, and low-cost internet facilities opted for online education, while students who did not have any facilities opted for self-study. As many schools thought that the nation was adopting online learning, we also wanted to find the number of students approaching online virtual classes. Online virtual classes have only one primary need, which is access to the internet.

Table 2

Applications of Learning	Count	Total %
Facebook or Twitter	12	22.64
Messenger	13	24.53
Zoom or Google meet or MS Teams	19	35.85
E-learning portal or YouTube	13	24.53
None of these above	15	28.30

Applications of Learning

Sources: Field Survey, 2022

TRIBHUVAN UNIVERSITY JOURNAL, VOL. 38, NO. 2, DECEMBER 2023 75

According to Table 2, 22.64% of the students used Facebook or Twitter as an application for online learning while 24.53% used both Messenger and the E-learning Portal or You Tube. 35.85% of the students use applications like Zoom or Google meet or Microsoft Teams to assist them in online classes. 28.30% of students did not use any type of application at all. The total count exceeds 53 because each respondent could answer a close question with more than one option. In the same context of not having facilities, one of the students told,

"School conducted online classes during the COVID-19 pandemic. Since I did not have a mobile phone, I couldn't attend the class while my other sister only had a phone."

Contrary to students deprived of technology, one of the students told, "I was provided mobile and Wi-Fi and used to attend online classes where half of the courses were taught online."

Incoming inequalities among families cause disparities in learning experiences of children. Disadvantageous students with poor parental financial support, students' digital skills, and a lack of access to digital technologies were vital factors in students not getting quality learning experiences during the COVID-19 period compared to their counterparts (Di Pietro et al., 2020). Table 2 indicates that students who use mobile devices also from learning not just from online classes organized by the teachers but seek additional materials from other platforms such as YouTube and e-learning platforms. Students who had access to computers with the internet had uniform involvement in learning from online classes, other platforms, and solving assignments given by teachers through Facebook or Messenger. Students who had access to mobile devices generally attended fewer classes but solved the assignments given by teachers on Facebook or Messenger. 33.96% of students had no access to online education, which was backed by the study done where only 70% had access to internet devices (UNICEF, 2021b).

Assignments Performed by Students

Basilaia and Kvavadze (2020) argue that conducting tests and evaluations online can be challenging, depending on the course's structure and the type of test. Teachers, therefore, had to modify their assessment

procedures to fit the online mode. Table 3 explains the frequency of assignments performed by students.

Table 3

Categorization of Respondents According to Frequency of Performing Assignment

Category	Respondents	Total %
All the time	28	52.8%
Most Often	21	39.6%
Often	1	1.9%
Sometimes	3	5.7%
Never	0	0.0%

Sources: Field Survey, 2022

This table describes the frequency of assignments students perform as a student. 52.8% of students mentioned that they did assignments all the time; 39.6% students performed assignments most of the time; 1.9% students did assignments quite often; and 5.7% students did assignments sometimes.

One of the teachers mentioned the use of Messenger for providing assignments to students. He told

"The primary way of communicating with students was by sharing screens, formulating assignments on paper, capturing images and forwarding them to students in groups. During classes on Zoom, students would send answers via Messenger which would be evaluated and resent to the students."

One of the students backed the teacher's statement about sending assignments but further mentioned the lack of evaluation in some cases. He told,

> "The teacher had given me homework, and I was supposed to complete it and send it in Messenger but some of the subject teachers didn't check."

Teachers mentioned sending online materials to the students who had access to the online classes, and sharing copies of assignments through Messenger or transmitting them to students through friends. The municipality also mandated students to distribute assignments in hard copy format through the school, so even those students who had no access to online classes could perform assignment through self-learning and get evaluated from teacher time by time (Student Learning Facilitation Guide, 2077). The majority of students perform assignments all the time, and many performing them most of the time indicates that students are getting assignments.

Learning Place of Student

Students need to live in learning-friendly environments at home in addition to having access to the appropriate digital resources. Many students from less privileged backgrounds, who frequently have to work in a small space shared with other family members, lack a conducive home learning environment (Di Pietro *et al.*, 2020). There are different alternatives to learning places for students involved in studying at home, in a courtyard, in a commonplace, at schools, and friends or teachers' homes.

Table 4

Categorization of Students According to the Place of Study

Categories	No. of respondent	Total %
At your own home	31	58.5%
At the courtyard of your home	7	13.2%
At a common place of the community	0	0.0%
School	17	32.1%
At teachers/friends' home	13	24.5%

Sources: Field Survey, 2022

The total count exceeds 53 as our total number of respondents because the question was a close one question with more than one option. Table 4 indicates that the majority of students (58.5%) spent time at home during learning. 32.1% of students spent time at school, 24.5% spent time at teachers/friends' homes and only 13.2% spent time in the courtyard,

Table 5

Allocation of roomAt your own homeAllocation of roomAt your own homeRespondentTotal %There was separate room2064.52There was a common room722.58Same place for all studying, living, eating and39.68

Association of Allocation to Room with Place of Study (own home)

There was no fixed place Sources: Field Survey, 2022

sleeping activity

Table 4 indicated that 31 (58.5%) students' study at their own home. Table 5 indicates that 64.62% of them had separate rooms for learning. 22.58% of students studied in the common room, 9.68% studied in at room

1

3.23

where all activities were performed, and 3.23% had no fixed room for learning. In the Organization for Economic Cooperation and Development [OECD] nations, 9% of 15-year-old students lack even a quiet study area at home (Reimers & Schleicher, 2020).

Above table indicates that majority of students (58.5%) opted home as their place of study and parents gave more focus on learning even during the period of lockdown by allocating separate room for majority of students (64.52%). It shows the awareness in parents/guardians that students should be given freedom on their own to learn even during the lockdown. Students who could not afford online classes mostly opted for tuition.

Ragneda and Laura Ruru (2017) discuss that there are different levels of the digital divide. At the first level, the digital divide is between those who have access to internet service and those who do not. At the second level, the digital divide is between those who are inspired to use the internet services provided to them and those who are not motivated. The last level of the digital divide can be seen in those who benefit from different factors such as personal, socio-economic, cultural, political, and so on, and those who are left behind. Digital divide is a result of social, cultural, economic, and political benefits being unequally distributed, as well as factors like motivation, skills, and purpose of use. There is a significant relationship between Internet use and users' cultural, social, and economic backgrounds (Van Deursen et al., 2011; Helsper, 2012, Van Deursena et al., 2016). In this study, I found that students who learned from online classes used computers with internet access and mobile devices, while others used devices such as radio and television for learning. Many students did not have access to online classes due to the digital divide. Students who did not have access to the internet or mobile devices chose alternative modes of learning, such as home tuition and studying books.

According to Black and Wiliam (2018), there are five key strategies for learning assessment, which include defining learning intentions, class engagement, students' advancement via criticism, and interactions among students to enhance their own learning. Digital pedagogy trained teachers can mostly implement this strategy of learning assessment. Lack of training for teachers to provide a suitable online learning environment for students can slow down the shift from the traditional educational system to online education. Students were provided assignments through different means, such as printed hard copies and social media (Messenger and Facebook). Despite the variable access to online classes, most of the students perform the given assignments. Study environment and parental support also play a key role in students' learning. The majority of the students prefer to study at home. Despite the socio-economic inequalities and digital divide, most parents provide their children with a separate room for learning.

CONCLUSION

The research findings highlight the profound impact of the digital divide on students' access to online education during the lockdown. While online learning was the preferred option in these circumstances, it exposed significant challenges and disparities among students and their families. Financial constraints posed a major hurdle, with many parents unable to afford the necessary devices and supplementary classes essential for effective remote learning. Additionally, despite the availability of various online learning platforms, some students relied solely on mobile devices and computers with internet access, missing a wider range of educational resources. This underscores the urgency of enhancing digital literacy and optimizing technology for educational purposes. The digital divide, exacerbated by socioeconomic factors, has emerged as a substantial barrier to online learning, leaving many students unable to participate in virtual classes. This underscores the imperative to address these inequalities to ensure equitable access to education.

Thus, there are multiple factors that impede the effective learning in context of emergency. Poor socio-economic condition intertwined with the lack of digital skills serve as barrier for building educational resilience in context of emergency. However, social bonding in the community and parents' commitment for supporting students are important asset vehicle for combatting the learning difficulties for students. For example, on a positive note, the research revealed the dedication of the majority of students and their parents to education during the lockdown. Many students continued their studies from home, with parents actively supporting them by creating designated study areas. This determination in the face of adversity underscores the resilience of both students and their families.

The results of this study highlight the need for policymakers and educators to implement strategies that address the challenges faced by children during the pandemic and promote positive learning engagement. This could include initiatives to improve access to technology, provide teacher training to adapt to new teaching methods, and encourage parental involvement in their children's education. Overall, this study contributes to our understanding of the impact of the pandemic on children's education

and provides valuable insights that can inform policy and practice. Bridging the digital divide is crucial to ensuring that all students have equal access to educational resources. Despite the formidable challenges presented by the digital divide, the unwavering commitment of students and parents to education emphasizes its enduring value and the need for a more equitable and inclusive educational system in the future. Further research is needed to explore these issues in greater depth and to develop more effective interventions to support children's learning engagement during times of crisis.

ACKNOWLEDGEMENT

I am indebted to the director of the Research Directorate, Office of the Rector, who gave me funding for research. I would like to thank seniors, my colleagues and faculties of the Department of Foundations of Education, Central Department of Education, TU, for their immense help. I would also like to express my appreciation toward respondents (faculties, students and parents), without whom the study would not have been successful.

REFERENCES

- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 Coronavirus (COVID-19) pandemic in Georgia. *Pedagogical Research*, 5(4), 1-9. https://doi. org/10.29333/pr/7937
- Black, P. J., & Wiliam, D. (2018). Classroom assessment and pedagogy. Assessment in Education, 25(3). https://doi.org/10.1080/096959 4X.2018.1441807
- Center for Education and Human Resource Development. (2020). COVID-19 Education cluster contingency plane, 2020. https:// www.doe.gov.np/article/1077/covid-19-education-clustercontingency-plan---2020.html. Assessed: 03.06.2022
- Cojocariu, V. M., Lazar, I., Nedeff, V. & Lazar, G. (2014). SWOT analysis of e-learning educational services from the perspective of their beneficiaries. *Procedia Social and Behavioral Sciences*, 116, 1999–2003. https://doi.org/10.1016/j.sbspro.2014.01.510
- Di Pietro, G., Biagi, F., Costa, P., Karpinski, Z. & Mazza, J. (2020). The likely impact of COVID-19 on education: Reflections based on the existing literature and recent international dataset: Publications Office of the European Union. https://publications.jrc.ec.europa. eu/repository/handle/JRC121071. Assessed: 02.06.2022

- Hoofman, J. & Secord, E. (2021). The Effect of COVID-19 on Education. Pediatric Clinics of North America. 68(5),1071-1079. https://doi. org/10.1016/j.pcl.2021.05.009.
- Kang, B. (2021). How the COVID-19 Pandemic is reshaping the education service. *In:* J. Lee and S. H. Han (eds.), *The Future of Service Post-COVID-19 Pandemi.* 1, 15–36. https://doi.org/10.1007/978-981-33-4126-5 2
- Kentnor, H. E. (2015). Distance education and the evolution of online learning in the United States. Curriculum and Teaching Dialogue. 17, (1 & 2): 21–34. https://digitalcommons.du.edu/cgi/viewcontent. cgi?article=1026&context=law_facpub. Assessed: 02.06.2022
- Lorente, L. M. L., Arrabal, A. A., & Pulido-Montes, C. (2020). The right to education and ICT during COVID-19: An international perspective. Sustainability. 12 (21): 2-16. https://doi.org/10.3390/su12219091
- Koirala , M.P.(2023) .Difficulties faced by students and teachers in online teaching process during Covid-19 in Lalbandi municipality. The Geographical Journal of Nepal. 16: 145-16. https://doi.org/10.3126/ gjn.v16i01.53491
- Poudel, K. & Subedi, P. (2020). Impact of COVID-19 pandemic on socio economic and mental health aspects in Nepal. International Journal of Social Psychiatry. 66(8), 748–75.5 https:// doi. org/10.1177/0020764020942247
- Ragneda, M. & Laura Ruru, M. (2017). Social capital and the three levels of digital divide. In M. Ragnedda & G.W.Muschert (Eds.). Theorizing Digital Divides (pp34-47). https://doi.org/10.4324/9781315455334
- Reimers, F. M., & Schleicher, A. (2020). A framework to guide an education response to the COVID-19 Pandemic of 2020. The Organization for Economic Cooperation and Development (OECD).https:// www.oecd-ilibrary.org/docserver/6ae21003en.pdf?expires=16770 86978&id=id&accname=guest&checksum=F6485144A205CCE7 1378D896C0C28184. Assessed: 02.06.2022
- Roffe, I. (2004). Innovation and e-learning: e-business for an educational enterprise. Cardiff, UK: University of Wales Press.
- Taylor, J. (2001). Fifth generation distance education. E-Journal of Instructional Science and Technology (e-JIST), 4(1), 1-14. https:// ascilite.org/archived-journals/e-jist/docs/vol4no1/Taylor.pdf. Assessed: 04.06.2022
- UNO. (2020). Policy brief: Education during COVID-19 and beyond. United Nations Organization. https://www.un.org/development/desa/dspd/

wpcontent/ uploads/sites/ 22/2020/08/s g_policy_brief_covid19_ and_education_august_2020.pdf 992. Assessed: 02.06.2022

- UNESCO. (2020a). How many students are at risk of not returning to school? Advocacy paper, UNESCO, Paris, https://education4resilience. iiep.unesco.org/en/resources/2020/unesco-covid-19-educationresponse-how-many-students-are-risk-not-returning-school. Assessed: 02.06.2022
- UNESCO. (2020b). UNESCO COVID-19 education response education sector issue notes. https://unesdoc.unesco.org/ark:/48223/ pf0000373305/PDF/373305eng.pdf. Assessed: 02.06.2022
- UNESCO. (2021).Global monitoring of school closures caused by COVID-19. https://en.unesco.org/covid19/educationresponse. Assessed: 04.06.2022
- UNICEF. (2017). Education accessible. https://www.unicef.org/nepal/education Assessed: 02.06.2022.
- UNICEF. (2021a). COVID-19 and school closure one year of education disruption. https://data.unicef.org/wp-content/uploads/2021/03/ COVID19-and-school-closures.pdf. Assessed: 02.06.2022
- UNICEF. (2021b). Continuing children's education in Nepal during the COVID-19 pandemic. https://www.unicef.org/nepal/media/14216/file/Child_and_Family_Tracker_-Education.pdf .Assessed: 03.06.2022.
- Van Deursen, A. J.A.M., van Dijk, J. A.G.M., Peters, O. (2011) Rethinking Internet skills: The contribution of gender, age, education, Internet experience, and hours online to medium- and content-related Internet skills. Poetics.
- 39(2): 125-144. https://doi.org/10.1016/j.poetic.2011.02.001
- Van Dijk, J. A. G. M. (2017). Digital divide: Impact of access. In: P.Rosseler, C.A.Hoffner & L.V.Zoonen (eds.), The international encyclopedia of media effects, (pp.1-11). https://doi.org/10.1002/9781118783764. wbieme0043.
- World Bank. (2020). Educational challenges and opportunities of the Coronavirus (COVID-19) pandemic. https://blogs.worldbank.org/education/educational-challenges-and-opportunities-covid-19-pandemic. Assessed: 03.06.2022.