

ONLINE LEARNING AND ODL SYSTEM DURING COVID-19: SITUATING THE EXPERIENCES OF UNIVERSITY STUDENTS AND TEACHERS IN KASHMIR

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ABSTRACT

The Covid-19 pandemic badly hit the education sector with global calls for educational institutions to lockdown. The current study aimed to understand how Open and Distance Learning (ODL) responded to the Covid-19 pandemic in Kashmir valley and how students and teachers experienced the role of distance education in such crisis. In this qualitative study, 11 participants, including teachers and students of the Directorate of Distance Education, University of Kashmir, participated. A semi-structured questionnaire and document analysis methods were espoused for collection of data. The thematic analysis method was employed to interpret and analyze the data. This study demonstrated that the Directorate of Distance Education, University of Kashmir, played a key role in continuing higher education in Kashmir through digital and online spaces despite having limited access to high-speed internet. Furthermore, it was revealed that participants frequently used Google Meet, Google Form, Zoom, and WhatsApp during the Covid-19 pandemic because of their easy access and effective platforms for virtual learning. Non-seriousness, lack of interest, and lack of attention among participants were also found because they were not habitual in virtual teaching and learning during Covid-19.

Keywords: Covid-19, E-Learning, Kashmir, Open and Distance Learning, Pedagogical Practices

INTRODUCTION

Humankind has witnessed big disasters and pandemics across the ages. The present century has seen the outbreak of the Covid-19 pandemic originating in Wuhan city of China (Abuhammad, 2020). The inception of Covid-19 badly affected maximum social institutions, including education (Alvi & Gupta, 2020; Gewalt et al., 2022). However, among all the social institutions, education remained the most affected institution globally due to closure for a prolonged period (Abidah et al., 2020). This closure affected 1.7 billion learners globally; India is home to more than 32 crore learners, among which 34 million students are enrolled at higher education level (Jena, 2020a; UNESCO, 2020). Students and teachers were caught in a dilemma as they were disturbed and stressed to understand how to resolve this unexpected crisis (Jena, 2020b). Moreover, besides preplanned activities, it also destabilized the other educational activities, professional growth and development, evaluation, and assessment system (Singh et al., 2020). Online education emerged as a feasible alternative means for education to counter the consequences of the closure of educational institutions (Abidah et al., 2020; Aboagye et al., 2020). Therefore, role of online education for open and distance learners and teachers during Covid-19 need to be understood in the context of Kashmir which is still unexplored.

REVIEW OF LITERATURE

Online education is worthwhile at any moment and anywhere during upheaval periods like-man-made catastrophes, natural calamities, or pandemics like Covid-19 (Bergdahl & Nouri, 2020) because it maintains the continuity of education (Azmat & Ahmad, 2022). Online education emerges as a means to keep the education system running (Nikman e al., 2022). Like other countries, India also issued directives for the lockdown, and the



government advocated for continuing education through distance and online spaces (Babbar & Gupta, 2022). Zoom, Google Classroom, and Google Meet platforms were used frequently for this purpose (Alvi & Gupta, 2020; Lawrence & Preethi, 2021). In their study, Lall and Singh (2020) unpacked that students were optimistic about online education because of flexible learning possibilities. Li et al. (2014) also asserted that online education effectively ensures inclusiveness in less developed areas. However, the findings of different studies conducted by different researchers (e.g., Arora & Srinivasan, 2020; Gratz & Looney, 2020) revealed the various issues of virtual learning experienced by all stakeholders during Covid-19. The common issues experienced by teachers and students include internet gags, lack of technical knowledge, lack of interest, lack of gadgets, and lack of motivation. Various studies (e.g., Bower & Hardy, 2004; LaMonica, 2001; Oliver, 2003) demonstrated that online education demands a distinct pedagogy and a particular skill set from conventional teaching.

Open and Distance Learning (henceforth, ODL) maintains the durability of education (Bruder, 1989; Omiles et al., 2019; Shah & Sofal, 2011). It provides endless learning opportunities (Alharthi, 2020; Lou, 2004), and reduces educational expenses (Al-Husban, 2020) among learners despite being in different places (Weinhandl et al., 2020). Similarly, it is helping India to achieve its higher education goals, including raising the Gross Enrolment Ratio (GER), democratizing education, and making individuals job-oriented (Saumya & Singh, 2020). It is considered a positive breakthrough due to its versatile learning climate (Dietrich et al., 2020). Nonetheless, teachers and students experienced many opportunities and challenges in general and students and teachers at the ODL system at the tertiary level in particular because of the pandemic (Jena, 2020a, 2020b). Among the various challenges, students missed in-person contact cum counseling classes, found time management difficulties, and lack of quality control. Teachers struggle in adopting online gadgets for teaching, stuck in low speed and or no internet connectivity, confusion related to admission in new courses, confusion related to the internal practice of teaching and internship for B.Ed candidates remain major challenges for the ODL system (Jena, 2020a, 2020b).

Nevertheless, in the ODL system, teachers and students interact beyond the boundaries of the educational institute via technical and electronic means, so that knowledge from its sources reaches the students (Lassoued et al., 2020). Distance education gave birth to e-learning (Holmberg et al., 2005). In the ODL system, teaching materials are shared through different internet services so that teachers and students can communicate with each other (Jena, 2020b). In their study, Liguori and Winkler (2020) showed that ODL counseling classes are held for different courses through different video conferencing platforms, including Zoom and Google Meet. Jena (2020b), in his study on Indira Gandhi National Open University (IGNOU), also unveiled that due to the Covid-19 pandemic, learners of IGNOU are taking more interest in pursuing their learning through ODL. It was also shown that IGNOU resolved many grievances relevant to admission through different virtual platforms. Similarly, Jena (2020b) revealed that Covid-19 provided several options for the ODL system, including the admission process conducted online, the counseling process conducted online, and the online submission of assignments. Therefore, the role of technology was vital in the ODL system during Covid-19 period

RATIONALE OF THE STUDY

In the context of Kashmir, which is known worldwide as paradise on earth (Mir, 2014; Sharma, 2008), has seen unrest and turmoil for decades (Bhat, 2019; Bose, 2003). This turmoil affected all dimensions of life in Kashmir, but education was mostly affected (Amin, 2020; Khan & Hamid, 2021; Khan et al., 2022; Shah, 2016; Shah & Mishra, 2020). Moreover, the Covid-19 pandemic further worsened the education scenario in Kashmir (Shoib & Arafat, 2020) by closing all formal spaces of learning (Wani et al., 2022). Thus, Covid-19 hampered the progress of students academically. In such situations, a broken education system in Kashmir can be fixed with technology and the ODL system by adopting the philosophy of thinkers like Ivan Illich (Teräs et al., 2020). Thus, this study aimed to explore the amalgamation of technology and the ODL system during the Covid-19 crisis with special reference to the Directorate of Distance Education, University of Kashmir (DDE, KU). While reviewing the literature, it was observed that no study had been conducted to explore the influence of Covid-19 on the ODL system in Kashmir. Thus, this study is substantial in adding to relevant literature as it involves students and teachers lived experiences.

Objectives of the Study:

- To explore the experiences of ODL teachers and students about the online teaching-learning process during the Covid-19 pandemic in Kashmir valley.
- To understand the role of the Directorate of Distance Education, University of Kashmir, in promoting online learning during Covid-19.

METHODOLOGY

Research Approach and Design

This research was grounded in the qualitative approach with phenomenological design to reconnoiter the lived



experiences of ODL teachers and students in adopting e-learning amid the Covid-19. The purpose of phenomenology, according to Tuffour (2017) and Van Manen (2016), is to articulate the significance of experience from the perspective of the experience both in terms of "what" and "how." Researchers took the insight from the literature (e.g., Islam et al., 2021) and decided that this approach was most appropriate for investigating the study's objectives.

Participants and Procedure

The researchers in the present study used purposive sampling technique to choose the participants. The researchers only approached those persons who, in their judgment, were most likely to have lived experiences about ODL and were ready to provide it. Thus, the DDE teachers and students were approached for this study because the purpose of DDE is to impart education in various disciplines through ODL mode. The Directorate is situated within the University of Kashmir campus in the district of Srinagar, Jammu and Kashmir, India. The participants from DDE recruited for this study were 11, including three teachers and eight students. Creswell (2007) stressed that a sample size of 10 can be considered enough since the quality, not the quantity, is the most significant factor in qualitative research. The demographic profile of participants is presented in Table 1.

S.	Gender	Age	Residence	Course/ Designation*
No.		U		
1.	Male	24	Rural	B. Ed.
2.	Male	27	Rural	Master's in English
3.	Male	28	Urban	Master's in Urdu
4.	Male	27	Rural	Master's in Education
5.	Female	22	Urban	B. Ed.
6.	Female	24	Urban	B. Ed.
7.	Female	26	Rural	Master's in Commerce
8.	Female	25	Urban	Master's in English
9.	Male*	38	Rural	Assistant Professor *
10.	Male *	40	Urban	Assistant Professor*
11.	Male *	37	Urban	Assistant Professor*

 Table 1. Demographic Profile of Participants (N- 11)

Note: asterisk (*) marks are the faculty members at DDE, KU

Participants were recruited through the following inclusion criteria (1) students enrolled and teachers working in the Directorate of Distance Education, University of Kashmir, (2) students currently pursuing a Master's or B.Ed. degree, (3) residents of the Kashmir region, and (4) willing to participate in the study. Researchers discussed the purpose and objectives of the study with all the participants and took consent from them. All the participants were assured of their anonymity. A semi-structured questionnaire with open-ended questions was prepared for data collection and sent to participants through Email and Whatsapp for their convenience. Various qualitative studies (e.g., Castroverde & Acala, 2021; Popa et al., 2020) also adopted semi-structured questionnaires to get the responses from participants. Data was collected between December 2020 and March 2021. Document analysis was also conducted by reviewing and evaluating the documents by visiting the website of the Directorate. As a way of triangulation, "it is frequently used in conjunction with other qualitative research methods-'the combination of methodologies in the study of the same phenomenon" (Denzin, 1970, p. 291). Directorate had put maximum official notifications about examinations, admission process, online classes, and e-material on its website during the Covid-19 pandemic.

Data Analysis

Thematic analysis method was used for the analysis of obtained data. As thematic analysis had been used by many researchers (Sundler et al., 2019) to understand people's lived experiences. The authors examined the data thoroughly through the open coding process in which "you work intensively with your data, line by line, identifying themes and categories that seem of interest" (Esterberg, 2002, p. 158).



RESULTS

Five themes emerged through the analytic procedure, describing the participants' experiences in the thematic map (Figure 1). To ensure the anonymity of participants, researchers used numbers instead of names in verbatim.



Figure 1. Five themes identified in the analysis depicted in the thematic map.

Virtual Education: An Unavoidable Reality

This study found that some teachers and students had experienced virtual mode difficult because they were not accustomed to online pedagogical practices. However, within the stipulated time, it was found that some teachers responded to the shift positively and found it useful and unavoidable mean. Likewise, maximum teachers and students demonstrated that they became techno-friendly, particularly with pedagogical platforms like Zoom, Google Meet, and Google Classroom. In the words of a teacher participant (9):

"Online learning is an important mode as it keeps track of continuing the education, particularly during Covid-19."

One student participant (4) articulated:

"During Covid-19, I felt online education mode a positive and helpful means as it remained only an unavoidable means which can save our educational carrier during this deadly pandemic."

Additionally, most students and teachers became well versed in due course of time in managing all their technical operations to make e-learning productive. It was analyzed that some teachers and students took more interest in virtual teaching-learning as it was found convenient for them in terms of space and time. One teacher participant (10) opined:

"Online mode enhanced the newest ways of digital learning and made me a techno-friendly learner . . . it is now a social reality as future belongs to artificial intelligence and machine learning."

This study found that teachers became techno-friendly and managed to change their pedagogical practices. Some teachers had already attended training courses related to Massive Open Online Courses (MOOCs) much before this pandemic which helped them to manage all things efficiently in the online mode. Google Meet, Zoom, and WhatsApp were found frequently used platforms during the Covid-19 pandemic because of their free and easy access by students and teachers in the DDE. Moreover, it was unveiled that most of the teachers uploaded their PowerPoint presentations and e-tutorials before the conduct of their online classes.



Covid 19: A Game Changer in Distance and Open Learning

Some teachers reported that the DDE contributes unboundedly to society in the form of non-formal education. Likewise, during the Covid-19 times, it was observed that it had played an ineluctable part in the higher education of Jammu and Kashmir. Some teacher participants reported that Directorate had reached the unreached population by offering learners an opportunity to have access to higher education during the pandemic. It catered to the academic needs of thousands of their candidates during Covid-19. It was analyzed through document analysis that DDE shifted its pedagogical practices from offline mode to online mode for their contact cum counseling classes of its various courses very smoothly and provided e-material as well. One student participant (3) reported:

"I do not think DDE got affected by Covid-19 due to the professional commitment shown by faculty members."

One teacher participant (9) narrated:

"DDE adopted diverse online platforms like- Google Meet, Google Form, Zoom, and WhatsApp to sustain the teaching-learning process."

Through document analysis by visiting the DDE website, it was found that DDE had managed all the challenges due to Covid-19. It had carried out all its major activities like the admission process, teaching-learning process, and examination process of different courses like - B.Ed., P.G. programs (M.A/M.Sc./M.Com), and P.G. Diplomas in a sophisticated and systematic manner. To complete the admission process, it was demonstrated that students did all the formalities online while at home, including submitting their fees. Moreover, it was reported that the DDE made their Internal Practice of Teaching (IPOT) and Internship of B.Ed. candidates possible through the home-based online mode. For that, students had clearly instructed via YouTube videos found on the DDE website and on their YouTube channel. One student participant (6) articulated:

"The procedure of IPOT and internship available on YouTube cleared all my confusion. As sir has clearly explained everything about IPOT and internship via YouTube tutorials."

One teacher participant (11) reported:

"We have uploaded videos on our YouTube channel about IPOT and internship so that students will not face any inconvenience in understanding the philosophy of IPOT and internship."

Some student participants unveiled that DDE made their digital help desk functional for any academic grievance of their students enrolled in DDE. Similarly, numerous grievances were redressed, and many queries of students were resolved. However, some teacher participants suggested that Directorate needed to organize refresher courses, orientation programs, and workshops on virtual teaching-learning for both students and teachers. It was because, during any upheaval times like Covid-19, students and teachers need not face the challenge of switching over a virtual platform.

The Rise of Distance Education during Lockdowns

This study found that the socio-political context of Kashmir was demanding flexibility and openness in educational practices. However, the advantages of online learning developed a firm belief among the participants that online pedagogical practices have significant relevance in the future. It was because Kashmir remained under lockdown most of the time due to socio-political issues. Thus, Directorate remained a viable source to continue higher education in Kashmir. One teacher participant (10) articulated:

"Distance education has always remained an effective choice for higher education in Kashmir despite being politically disturbed."

On average, student participants reported that after the constitutional amendment in 2019, they suffered a lot academically due to internet gags. However, after the Covid-19 pandemic outbreak, students had no internet facility for some time. Nevertheless, when it was resumed, that was very low in speed (2G) which hampered their online education process. One student participant (2) expressed his feelings in the below excerpt:

"I felt helpless to remain connected continuously because of the poor network and did not continue online classes and even sometimes failed to appear in online examinations at the stipulated time."

Some student participants demonstrated that the philosophy of distance education remained most relevant for geographically different places like Kashmir and crises like the Covid-19 pandemic. Therefore, ODL is more relevant during upheaval times in Kashmir.

Challenges of Online Classes during Covid-19

Lack of techno-training and weak networks remained barriers that the researchers analyzed frequently. It was found that most students were non-serious, uninterested, and inattentive because they were not habitual to online



teaching and learning, which proved a major academic obstacle for them. One student participant (7) narrated: "I am not interested in virtual classes as it is without joy, enthusiasm, and competition. I think it is just a waste of time . . . It is also stressful to look at the phone or computer screen all day long."

Moreover, it was found that the compulsion to appearing virtual classes and get full concentration were major issues among the maximum student participants. Furthermore, some of the students remained present virtually, but they were busy with other work was another form of bunking. One student participant (5) said:

"I joined the online classes but was not intact with a screen to listen to the lectures; instead, I left the phone frequently in my room and went to do my home chorus."

Some teachers were found failed to create their learning atmosphere that they used to create in their in-person classrooms. Moreover, it was reported that harmonious development among students was impossible to develop in online learning. Thus, online learning can be the best alternative but cannot replace in-person interaction at any cost. One teacher participant (11) opined:

"Online mode of learning does not fulfill the desired things completely which learners used to have in faceto-face teaching and learning process as it is unable to develop all the domains (cognitive, psychomotor, and affective) of learners."

Additionally, most student participants found that they maximum times did not get a chance to pose their questions to clear their confusion. Moreover, it was revealed that some teachers joined the classes at their convenience without knowing their students' interests, convenience and readiness and left the class at their own will at any time. It was further unearthed that education reached almost every learner but could not fulfill their educational aspirations, particularly the students with special educational needs. They got marginalized and remained excluded from the virtual learning culture during Covid-19. Thus, Covid-19 exposed the marginalized section to the hidden layers of the education system.

Examination and Assessment amid Covid-19

This study revealed a lack of seriousness, discipline, and proper surveillance in online examinations, which diminished the competitiveness among the student participants. Google Forms were used to take examinations without proper identification of the examinee. Few participants reported that these Google Forms were submitted by well-wishers of students who were experts in the same subject area. All the online examinations were taken in a multiple choice framework which lessened the real essence of academic examinations because such types of examinations failed to evaluate the creativity and writing skills of the students. One of the participants (5) narrated:

"Online examination is not a good choice due to lack of disciple, ethics, and surveillance. Most of the fellows were assisted by their well-wishers to get good grades and ranks in the examinations."

One student participant (7) said:

"Online examination has become an exhibition which lacks surveillance. There is no threat of copying."

The lack of advanced technology found a technical problem in the surveillance of the examination domain in the DDE. Therefore, the question of academic examination and evaluation of students remained a contested terrain in the ODL system during Covid-19.

DISCUSSION

The teaching-learning process has changed because of Covid-19 (Basilaia et al., 2020; Dhawan, 2020; Kumaran & Periakaruppan, 2022). Due to this paradigm shift, distance learning has proved the best remedy to overcome the difficulties of teachers, and students. Hence, the aim of this study is to understand the experiences of students and teachers of the DDE, KU, amid the Covid-19 pandemic. To this end, teachers' online pedagogical and the ICT competence, during online classes and online examinations, and students' experiences with virtual education were analyzed. The results of this study are both contradictory and parallel with the existing literature.

First, teachers and students have responded positively to the pedagogical shift and find it useful and unavoidable amid Covid-19. It has similar results to previous studies (Aristovnik et al., 2020; Jena, 2020b; Mishra et al., 2020) about the tertiary stage students who have experienced distance education as a viable alternative to lessen the influence of Covid-19 on education. This finding is further substantiated by the studies like (Abidah et al., 2020; Aboagye et al., 2020), who have reported that distance education has brought relief among students and teachers as a suitable alternative to continuing education. Moreover, Collins (2010) has also reported that most students are satisfied with distance education. Further, this study has shown that teachers and students are now more interested in virtual learning as it is convenient regarding space and time. This finding is authenticated by (Arora & Srinivasan, 2020; Saha et al., 2022), who have stated that distance education is most feasible because of its



accessibility, affordability, and flexibility. However, this finding contradicts the results of Favale et al. (2020), who argue that accessibility, affordability, and flexibility of distance education are precarious and create friction. These findings suggest that teachers and students are bound to adopt distance education as an alternative medium to make their teaching-learning process continue. E-learning is no longer a choice; it has become the air each institution must breathe to live (Serovaiskaia & Serovaiskii, 2022). Thinkers like Ivan Illich have predicted much before that future will be on learning webs like online education (Shah, 2015).

Participants have used Google Meet, Zoom, Google, and Whatsapp frequently amid the pandemic because of their free, easy access, and effective platforms for the online-teaching learning process. A similar result has been found in the current literature (Aristovnik et al., 2020; Basilaia et al., 2020; Dhawan, 2020), where it has been shown that these platforms have made it easier for students and teachers to communicate (Basilaia et al., 2020; Kumaran & Periakaruppan, 2022). This study also revealed non-seriousness, lack of interest, and lack of attention among participants because they were not habitual to online teaching and learning (Nikman e al., 2022). For example, Dhawan (2020) has stated that virtual education is boring, unengaging, and devoid of personal attention. Parkes et al. (2014) study found students underprepared for different e-learning and academic-based competencies. So, in this context, online classes have remained a compulsion where students have to remain virtually present in the classroom, but physically they have remained engaged in some other different activities. During Covid-19, a lack of experience and motivation to use technology in education has exacerbated the situation.

Education is meant for harmonious development, but in this study, it was found that harmonious development is impossible in virtual education. It can be the best alternative but cannot replace in-person interaction at any cost. This finding is analogous to the study of Collinson (2001) and Dhawan (2020), who asserts that online education cannot replace the teacher because virtual education is unable to address socio-emotional issues such as conflict and rage, socioeconomic disparities, estranged teenagers, uninspired students, and inappropriate behavior. Furthermore, the findings of this study have given an insight that the DDE grounded on the philosophy of ODL is more relevant during crises like Covid-19. It is because ODL has emerged as a promising alternative amid Covid-19 (Abidah et al., 2020; Aboagye et al., 2020). It intensified their efforts to incorporate ICT into their education system (Volungevičienė et al., 2021; Saumya & Singh, 2020). This study has further unearthed that COVID-19 turned the challenges of DDE into opportunities and carried all its major activities like the admission process, teaching-learning process, and examination process of different courses in a sophisticated and systematic manner. This finding parallels the study by Jena (2020a, 2020b) on Indira Gandhi National Open University (IGNOU).

Furthermore, this study has shown that technology is not the solution for all. Online education has shown unfavorable experiences from students' and teachers' perspectives regarding motivation and interest in examinations. Online examination is just an exhibition, lacks seriousness and discipline, and is unproctored, which diminishes the competitiveness among the learners (Arnold, 2016; Bhat & Ahmad, 2020). In Kashmir, participants have experienced severe academic challenges due to continued internet limitations and during the Covid-19 lockdown. Thus, DDE during the Covid-19 like situation has proved an appropriate mode of education to keep the teaching-learning processes alive.

CONCLUSION

Covid-19 has helped the Directorate to explore virtual spaces of learning. Various free and easily accessible technological platforms, including Zoom, Google Meet, Google Classroom, and Google Forms, have been used by DDE, KU to impart education during the Covid-19 times like other distance education institutions of the world. All participants of this study have faced low-speed internet and other technical glitches during the entire virtual teaching-learning process. Despite all these obstacles and problems, Directorate has played a vital role in imparting higher education in the valley during the Covid pandemic. Besides this, ODL seems the most appropriate mode of education to keep the teaching-learning processes alive in geographically different places like Kashmir. The main limitation of this study is that it is delimited to DDE, KU only, so the generalization of findings to other educational institutions shall be made with more care. More like studies should be followed up in the future where researchers should go with maximum resources (multiple distance institutions and a big sample) to reflect more insights and understanding regarding distance education amid the pandemic. Overall this study proved that distance learning never stops, and situations like Covid-19 have demonstrated that the future belongs to Open and Distance Learning.

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REFERENCES

- Abidah, A., Hidaayatullaah, H., Simamora, R., Fehabutar, D., & Mutakinati, L. (2020). The impact of Covid-19 to Indonesian education and its relation to the philosophy of "Merdeka Belajar". *Studies in Philosophy of Science and Education*, 1(1), 38-49. https://doi.org/10.46627/sipose.v1i1.9
- Aboagye, E., Yawson, J. A., & Appiah, K. N. (2020). Covid-19 and e-learning: The challenges of students in tertiary institutions. *Social Education Research*, 2(1), 1-8. https://doi.org/10.37256/ser.212021422
- Abuhammad, S. (2020). Barriers to distance learning during the Covid-19 outbreak: A qualitative review from parents' perspective. *Heliyon*, 6(11), Article e05482. https://doi.org/10.1016/j.heliyon.2020.e05482
- Alharthi, M. (2020). Students' attitudes toward the use of technology in online courses. *International Journal of Technology in Education (IJTE)*,3(1), 14-23. https://doi.org/10.46328/ijte.v3i1.18
- Al-Husban, N. A. (2020). Critical thinking skills in asynchronous discussion forums: A case study. *International Journal of Technology in Education (IJTE)*, 3(2), 82-91. https://doi.org/10.46328/ijte.v3i2.22
- Alvi, M., & Gupta, M. (2020). Learning in times of lockdown: How Covid-19 is affecting education and food security in India. *Food Security*, 12, 793-796. https://doi.org/10.1007/s12571-020-01065-4
- Amin, S. N. (2020). Internet shutdown a digital discrimination for ICT-based education: A multivocal review of conflicted areas. *Ilkogretim Online-Elementary Education Online*, 19(1), 869-877. https://doi.org/10.17051/ilkonline.2020.661914
- Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 pandemic on life of higher education students: A global perspective. *Sustainability*, 12(20), Article 8438. https://doi.org/10.3390/su12208438
- Arnold, I. J. M. (2016). Cheating at online formative tests: Does it pay off? *The Internet and Higher Education*, 29, 98–106. https://doi.org/10.1016/j.iheduc.2016.02.001
- Arora, A. K., & Srinivasan, R. (2020). Impact of pandemic Covid-19 on the teaching-learning process: A study of higher education teachers. *Prabandhan: Indian Journal of Management*, 13(4), 43-56. https://doi.org/10.17010/pijom%2F2020%2Fv13i4%2F151825
- Azmat, M., & Ahmad, A. (2022). Lack of social interaction in online classes during COVID-19. Journal of Materials and Environmental Science, 13, 185-196. https://www.jmaterenvironsci.com/Document/vol13/vol13 N2/JMES-2022-13015-Azmat.pdf
- Babbar, M., & Gupta, T. (2022). Response of educational institutions to COVID-19 pandemic: An inter-country comparison. *Policy Futures in Education*, 20(4), 469-491. https://doi.org/10.1177/14782103211021937
- Basilaia, G., Dgebuadze, M., Kantaria, M., & Chokhonelidze, G. (2020). Replacing the classic learning format universities as an immediate response to the Covid-19 virus infection in Georgia. *International Journal for Research in Applied Science and Engineering Technology*, 8(3), 101-108. http://doi.org/10.22214/ijraset.2020.3021
- Bergdahl, N., & Nouri, J. (2020). Covid-19 and crisis-prompted distance education in Sweden. *Technology, Knowledge and Learning. 26*, 443-459. https://doi.org/10.1007/s10758-020-09470-6
- Bhat, M. U. D., & Ahmad, K. M. (2020, July 27). Making sense of online examination. *Greater Kashmir*. Retrieved from https://www.greaterkashmir.com/todays-paper/making-sense-of-online-examination
- Bhat, S. A. (2019). The Kashmir conflict and human rights. *Race and Class, 61*(1), 77–86. https://doi.org/10.1177%2F0306396819850988
- Bose, S. (2003). Kashmir: Roots of conflict, paths to peace. Harvard University Press.
- Bower, B. L., & Hardy, K. P. (2004). From correspondence to cyberspace: Changes and challenges in distance education. *New Directions for Community Colleges*, 2004(128), 5-12. https://doi.org/10.1002/cc.169
- Bruder, I. (1989). Distance learning: What's holding back this boundless delivery system? *Electronic Learning*, 8(6), 30-35. Retrieved from https://eric.ed.gov/?id=EJ392390
- Castroverde, F., & Acala, M. (2021). Modular distance learning modality: Challenges of teachers in teaching amid the Covid-19 pandemic. *International Journal of Research Studies in Education*, 10(8), 7-15. Retrieved from https://www.researchgate.net/publication/352746170
- Collins, H. (2010). Tacit and explicit knowledge. University Chicago Press.
- Collinson, V. (2001). Intellectual, social, and moral development: Why technology cannot replace teachers. *The High School Journal*, 85(1), 35-44. Retrieved from https://www.jstor.org/stable/40364379
- Creswell, J. W. (2007). Qualitative inquiry and research design (3rd ed.). Sage.
- Denzin, N. K. (1970). The research act: A theoretical introduction to sociological methods. Aldine.
- Dhawan, S. (2020). Online learning: A panacea in the time of Covid-19 crisis. Journal of Educational
- Technology Systems, 49(1), 5-22. https://doi.org/10.1177/0047239520934018
- Esterberg, K. (2002). Qualitative methods in social research. McGraw Hill.



- Favale, T., Soro, F., Trevisan, M., Drago, I., & Mellia, M. (2020). Campus traffic and eLearning during COVID-19 pandemic. *Computer Networks*, 176, Article 107290. https://doi.org/10.1016%2Fj.comnet.2020.107290
- Gewalt, S. C., Berger, S., Krisam, R., & Breuer, M. (2022). Effects of the COVID-19 pandemic on university students' physical health, mental health and learning, a cross-sectional study including 917 students from eight universities in Germany. *Plos one, 17*(8), e0273928. https://doi.org/10.1371/journal.pone.0273928
- Gratz, E., & Looney, L. (2020). Faculty resistance to change: An examination of motivators and barriers to teaching online in higher education. *International Journal of Online Pedagogy and Course Design*, 10(1), 1-14. https://doi.org/10.4018/IJOPCD.2020010101
- Holmberg, B., Bernath, H., & Busch, F. W. (2005). *The Evolution, principles and practices of distance education*. Bis.
- Islam, M. A., Nur, S., & Talukder, M. S. (2021). E-learning in the time of COVID-19: Lived experiences of three university teachers from two countries. *E-Learning and Digital Media*, 18(6) 557-580. https://doi.org/10.1177%2F20427530211022924
- Jena, P. K. (2020a). Challenges and opportunities created by Covid-19 for ODL: A case study of IGNOU. International Journal for Innovative Research in Multidisciplinary Field, 6(5), 217-222. Retrieved from https://www.ijirmf.com/wp-content/uploads/IJIRMF202005041.pdf
- Jena, P. K. (2020b). Online learning during lockdown period for Covid-19 in India. International Journal of Multidisciplinary Educational Research, 9(5), 82-92. Retrieved from https://osf.io/preprints/socarxiv/qu38b/download
- Khan, T. A., & Hamid, W. (2021). Lived experiences of divorced women in Kashmir: A phenomenological study. *Journal of Gender Studies*, 30(4), 379-394. https://doi.org/10.1080/09589236.2020.1826295
- Khan, T. A., Mir, A. H., Farooqi, I., Mohsin, A., Naik, A. B. (2022). Navigating the risk. In Baikady, R., Sajid, S., Przeperski, J., Nadesan, V., Islam, M. R., Gao, J. (Eds.), *The Palgrave Handbook of Global Social Problems*. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-68127-2_251-1
- Kumaran, V. S., & Periakaruppan, R. M. (2022). COVID-19 pandemic is an eye-opener for academicians to use the technology in the teaching–learning process. *International Journal of Educational Reform*, 1-16. https://doi.org/10.1177%2F10567879221076079
- Lall, S., & Singh, N. (2020). Covid-19: Unmasking the new face of education. *International Journal of Research in Pharmaceutical Sciences*, 11(SPL1), 48-53. https://doi.org/10.26452/ijrps.v11iSPL1.2122
- Lassoued, Z., Alhendawi, M., & Bashitialshaaer, R. (2020). An exploratory study of the obstacles for achieving quality in distance learning during the Covid-19 pandemic. *Education Sciences*, *10*(9), Article 232. https://doi.org/10.3390/educsci10090232
- Lawrence, A. S. A., & Preethi, V. (2021). Learners' attitude towards ODL during COVID-19 crisis with special reference to Tamil Nadu Open University. *Turkish Journal of Computer and Mathematics Education*, 12(7), 1564-1573. Retrieved from

https://www.turcomat.org/index.php/turkbilmat/article/view/3016/2586

- Li, F., Zhou, M., & Fan, B. (2014). Can distance education increase educational equality? Evidence from the expansion of Chinese higher education. *Studies in Higher Education*, *39*(10), 1811-1822. https://doi.org/10.1080/03075079.2013.806462
- Liguori, E., & Winkler, C. (2020). From offline to online: Challenges and opportunities for entrepreneurship education following the covid-19 pandemic. *Entrepreneurship Education and Pedagogy*, *3*(4), 346-351. https://doi.org/10.1177%2F2515127420916738
- Lou, Y. (2004). Learning to solve complex problems through between-group collaboration in project-based online courses. *Distance Education*, 25(1), 49-66. https://doi.org/10.1080/0158791042000212459
- Mir, H. A. (2014). Impact of tourism industry on economic development of Jammu and Kashmir. International Journal of Scientific & Engineering Research, 5(6), 592-598. Retrieved from https://www.ijser.org/researchpaper/Impact-of-Tourism-Industry-on-Economic-Development-of-Jammu-and-Kashmir.pdf
- Mishra, L., Gupta, T., & Shree, A., (2020). Online teaching-learning in higher education during lockdown period of Covid-19 pandemic. *International Journal of Educational Research Open, 1,* Article 100012. https://doi.org/10.1016/j.ijedro.2020.100012
- Nikman, K., Hasan, H., Wahid, S. N. S., & Aminuddin, A. S. (2022). Open and Online Distance learning (ODL) challenges during COVID-19: A factor analysis among UiTM students. *Journal of Social Science and Humanities*, 5(4), 34-40. https://doi.org/10.26666/rmp.jssh.2022.4.4
- Oliver, R. (2003). Exploring strategies for online teaching and learning. In L. Foster, B. L. Bower, & L. W. Watson (Eds.), *Distance education: Teaching and learning in higher education* (pp. 249-257). Allyn & Bacon.



- Omiles, M. E., Dumlao, J. B., Rubio, Q. K. C., & Ramirez, E. J. D. (2019). Development of the 21st century skills through educational video clips. *International Journal on Studies in Education*, 1(1), 11-20. https://doi.org/10.46328/ijonse.5
- Parkes, M., Stein, S., & Reading, C. (2014). Student preparedness for university e-learning environments. *The Internet and Higher Education*, 25, 1–10. https://doi.org/10. 1016/j.iheduc.2014.10.002
- Popa, D., Repanovici, A., Lupu, D., Norel, M., & Coman, C. (2020). Using mixed methods to understand teaching and learning in COVID 19 times. *Sustainability*, 12(20), 1-20. http://doi.org/10.3390/su12208726
- Saha, S. M., Pranty, S. A., Rana, M. J., Islam, M. J., & Hossain, M. E. (2022). Teaching during a pandemic: Do university teachers prefer online teaching?. *Heliyon*, 8(1), e08663. https://doi.org/10.1016/j.heliyon.2021.e08663
- Saumya, S., & Singh, T. (2020). Open and distance learning in social work programme: a study of MSW learners of India. Asian Association of Open Universities Journal, 15(3), 371– 393. https://doi.org/10.1108/aaouj-07-2020-0050
- Serovaiskaia, E., & Serovaiskii, A. (2022). Challenges and prospects of online education due to the Covid-19 pandemic. In Chechurin, L. (Ed.), *Digital Teaching and Learning in Higher Education* (201-212). Palgrave Macmillan.
- Shah, H. (2016). Conflict and education: Mapping the field in literature? *Journal of Indian Education*, 42(2), 61-78.
- Shah, H. B. (2015). The trajectory of Ivan Illich: Profile and academic legacy: *Insight- Journal of Applied Research in Education.* 20(1), 265-276.
- Shah, H., & Mishra, A. K. (2021). Trauma and children: Exploring posttraumatic growth among school children impacted by armed conflict in Kashmir. *American Journal of Orthopsychiatry*, 91(1), 132-148. https://doi.org/10.1037/ort0000523
- Shah, H., & Sofal, F. (2011). Relevance of e-education for ODL system in 21st Century. *Techno Learn-International Journal Educational Technology 1*(1), 27-39.
- Sharma, A. (2008). Paradise lost in mission Kashmir: Global terrorism, local insurgencies, and the question of Kashmir in Indian cinema. *Quarterly Review of Film and Video*, 25(2), 124-131. https://doi.org/10.1080/10509200601074744
- Shoib, S., & Arafat, S. M. Y. (2020). Mental health in Kashmir: Conflict to Covid-19. *Public Health*, 187, 65-66. https://doi.org/10.1016/j.puhe.2020.07.034
- Sundler, A. J., Lindberg, E., Nilsson, C., & Palmér, L. (2019). Qualitative thematic analysis based on descriptive phenomenology. *Nursing Open*, 6(3), 733-739. https://doi.org/10.1002/nop2.275
- Teräs, M., Suoranta, J., Teräs, H., & Curcher, M. (2020). Post-Covid-19 education and education technology 'solutionism': A seller's market. *Post Digital Science and Education*, 2, 863-878. https://doi.org/10.1007/s42438-020-00164-x
- Tuffour, I. (2017). A critical overview of interpretative phenomenological analysis: A contemporary qualitative research approach. *Journal of Healthcare Communications*, 2, 1-5. http://doi.org/10.4172/2472-1654.100093
- UNESCO. (2017, October 25). UNESCO: 264 million children don't go to school. *Aljazeera*. Retrieved from https://www.aljazeera.com/news/2017/10/25/unesco-264-million-children-have-no-access-to-school
- Van Manen, M. (2016). *Researching lived experience: Human science for an action sensitive pedagogy* (2nd ed.). Routledge.
- Volungevičienė, A., Teresevičienė, M., & Ehlers, U. (2020). When is open and online learning relevant for curriculum change in higher education? Digital and network society perspective. *The Electronic Journal of e-Learning*, 18(1), 88-101. https://doi.org/10.34190/EJEL.20.18.1.007
- Wani, T. A., Nabi, S., & Shah, H. (2022). Lived experience of virtual learning spaces amid COVID-19 Outbreak: A case of Public Secondary Schools in Kashmir. *Journal of Positive School Psychology*, 6(3), 7804-7815. https://www.journalppw.com/index.php/jpsp/article/view/4718
- Weinhandl, R., Lavicza, Z., Hohenwarter, M., & Schallert, S. (2020). Enhancing flipped mathematics education by utilising GeoGebra. *International Journal of Education in Mathematics, Science and Technology* (*IJEMST*), 8(1), 1-15. https://doi.org/10.46328/ijemst.v8i1.832