

AN ANALYSIS ON THE IMPACT OF COVID-19 IN STUDENT LEARNING AND STUDENT EVALUATION IN NEPAL

Written by **Anurag Chapagain*** & **Roman B. Shrestha****

*High school graduate, St. Xavier's College, Kathmandu, Nepal

** High school graduate, Kathmandu Model Secondary School, Kathmandu, Nepal

ABSTRACT

The spread of the COVID-19 pandemic has dramatically impacted every aspect of human life, including education. In many educational institutions around the world, campuses have closed and teaching-learning has moved online. Nepal's educational institutions have also temporarily closed, causing great fear and uncertainty. The existing discrepancies in the education system are widening the gap in education access and quality. Online learning is having a disproportionately negative impact on students from rural areas. Student assessments are moving online and being decentralized, with no strictly implemented system and first-hand experience. This has resulted in highly biased and inflated grades and test scores, leading the government to cover them up. This paper discusses the various consequences of COVID-19 on student learning and assessment in Nepal. This paper numerically analyzes grade inflation and elaborates on the causes for that. Some positive efforts by government, organizations and private institutions are also discussed. Evidence-based suggestions are outlined and described to improve the teaching-learning process during the pandemic.

BACKGROUND: THE NEPALI EDUCATION SYSTEM

Nepal has seen a dramatic increase in educational enrollment rates in the last 70 years. In 1951, when the Rana anarchy finally came to an end and marked the era of a new beginning for Nepal, the enrollment of youths and children in schools and colleges was relatively low: only 9000 students in the primary, 1700 in the secondary, and only about one hundred students in

[Asian Journal of Multidisciplinary Research & Review \(AJMRR\)](#)

ISSN 2582 8088

Volume 2 Issue 4 [August - September 2021]

© 2015-2021 All Rights Reserved by [The Law Brigade Publishers](#)

the two undergraduate colleges. However, over the past few decades, this number has been rising exponentially. The number of students enrolled in the primary level increased from 400,000 in 1971 to 6.2 million in 2011. Moreover, the number increased from 120,000 to 5 million in lower secondary and secondary levels. At the post-secondary level, including SEE and intermediate level, the number has risen as high as 2.6 million. The net enrollment rate of Nepal's secondary schools increased from 39.3% in 1994 to 69.6% in 2016, with an average annual growth rate of 3.36% [1]. The credit for these quantitative successes at all levels of the school system in Nepal goes to strong social demand for education and the people's and government's endeavors.

However, there are many disparities at all levels of education impeding the access of many students from marginalized communities of Nepal from getting a quality education. Although the number of educational institutions has increased significantly, increased access and improved equity in education remain formidable challenges. These barriers include gender and social inequality, the gap between government schools and private schools, and the inefficiency of the government bodies. The problem, however, is not only social or financial; the main problem is in the education system itself. The courses and curriculum design do not measure up to international standards of higher education of the present day. The Secondary Education Examination (SEE), held at the end of ten years of schooling, is the only readily available way of evaluating how well or poorly children are learning, the strengths and weaknesses of our efforts to improve the education system, and in a nutshell, how well our school system functions. The inefficiency of the educational system in grading students based on internal assessments, projects, research-based works, and classroom activities have posed a severe challenge in student evaluation in Nepal during this COVID pandemic, resulting in delayed academic sessions and highly inflated test scores.

INTRODUCTION: COVID-19 AND ITS IMPACT ON EDUCATION

The 2019 novel coronavirus disease (COVID19), which originated in Wuhan, China, has rapidly spread to all parts of the world, and billions of people have been sent into lockdown. The World Health Organization (WHO) has declared the coronavirus epidemic as a pandemic.

In light of growing concerns about the current COVID19 pandemic, more and more universities worldwide have postponed or canceled all campus events, such as seminars, conferences, sports, and other events. Universities are taking intensive measures to protect and prevent the spread of highly infectious diseases among all students and staff. Due to the emergence of a series of pandemic waves, Nepal's educational institutions have been temporarily closed, causing great fear and uncertainty. It is estimated that nearly 9 million students in Nepal have been affected [2]. The closure of educational institutions for quite a long time initiated changes in the education system. It led to a noticeable increase in online learning, where digital platforms are used for teaching and learning. As distance and online education relies on technological facilities, including the Internet and WiFi, the existing discrepancies widen the gap in education access and quality.

IMPACT ON TEACHING AND LEARNING

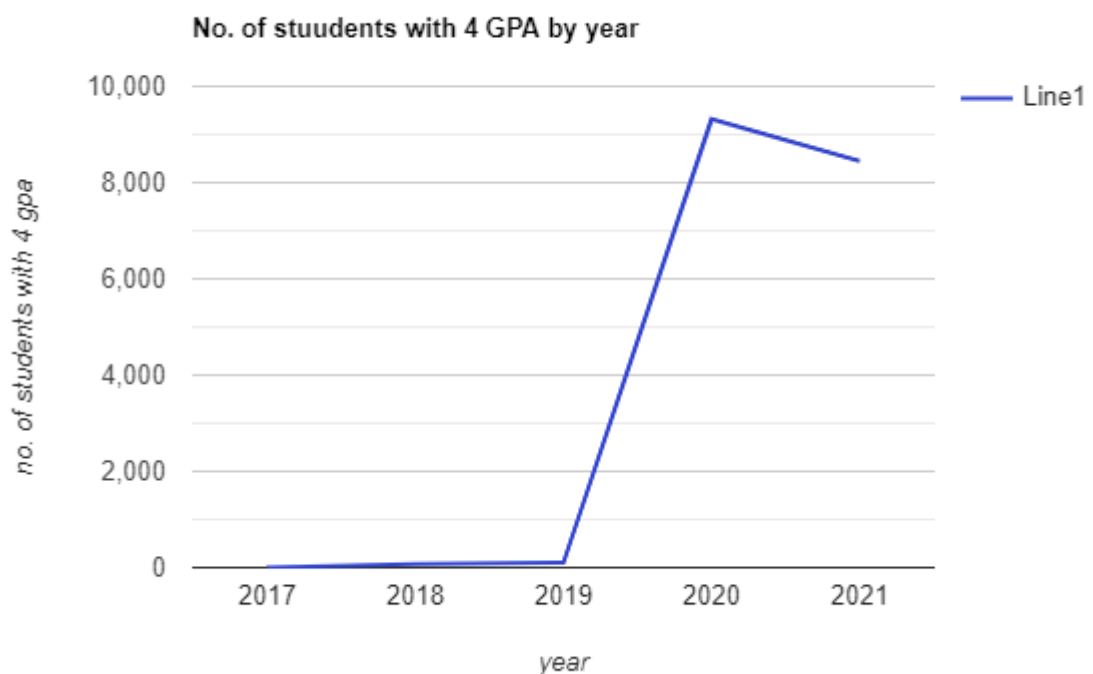
Physical facilities, such as a good Internet connection and electronic devices, are fundamental for effective e-learning. Due to poor economic conditions, uneven geological topography, and poor foundation, students have difficulty accessing proper Internet facilities. Nepal ranks 123rd globally in terms of information communication and technology (ICT) [3]. This clearly concerns the legitimate implementation of online education. In addition, the lack of appropriate plan of action is also the main reason for the ineffectiveness of online learning. Moreover, the challenges encountered in developing online classes include affordability, technology literacy, and self-motivation among faculty members in Nepal [4].

COVID-19 truly affects the learners' social and mental prosperity. Students are found to be experiencing several health issues due to prolonged online classes, including screen fatigue, eye problems, and mental isolation. Also, the trend of skipping virtual classes, using social media, and playing online games during online classes is truly distracting students from their primary motive. Similarly, the lack of a strictly implemented monitoring and assessment system demotivates the learners to be serious about this newly implemented education system. Based on a research, 64.6% of the survey respondents from Nepali students were dissatisfied with online education and about 28.8% of respondents reported online education as

unappealing[5]. Perhaps most importantly, this crisis has raised questions about the value of higher education, which includes social opportunities and educational content. In order to remain relevant, educational institutions will need to reshape their learning environment to expand digitally and complement the relationship between students and teachers.

INTERNAL ASSESSMENTS AND GRADE INFLATION

In Nepal, the major exams like the Secondary Education Examination (SEE) for grade 10, and high school final year exams were canceled. For the SEE exam, the government decided to have an internal evaluation for students provided by teachers in their respective schools. The internal evaluations were done primarily based on previously taken internal exams. This turned out to be a big mistake. Schools started putting disproportionately higher marks than students got in internal exams. The number of students who got the highest grade possible was unbelievably large. As a result, students who did not deserve good grades got them. This line graph below supports this argument.



The line graph shows the number of students who got the highest grade possible in the Secondary Education Examination from 2017 to 2021. From 2017 to 2019, the exams were conducted physically and were examined by teachers from the schools other than the student attended. While the number of students who gave the exam was fairly constant each year, the number of highest achievers was nowhere near constant or corresponding to modest growth for the year internal evaluations were done. As reported each year by the National Examination Board, the numbers of students getting 4 GPA were 4 in 2017, 74 in 2018, and then 106 in 2019. However, the data was unbelievably higher for the years internal evaluation was done. The number of highest achievers was 9,319 for 2020, the first year when the internal evaluation was done. The percentage increase in highest achievers was 8691% for the year 2020. In addition, the number of highest achievers was 8,444 for 2021, the second year of internal evaluation [6]. Assuming that there was a similar growth pattern of highest scorers, it can be calculated that about 97% of the highest scorers had highly inflated grades and scores for the years internal evaluation was done. This certainly denotes that an objective process was not implemented while evaluating the students. The above-reported data was made unavailable from the NEB website and its archives as of Sept 5, 2021 [6]

There are several causes for grade inflation. A significant cause is that schools tend to increase the reputation of their schools by portraying a more significant number of high achieving students. The absence of scrutiny by government agencies is also a major cause. We also observe an effect called the “neighbour effect” in which the schools that want to provide actual data do not do so because of the worry that the schools who give unfair data will become more reputable.

INEQUALITY IN EDUCATION ACCESS DUE TO DIGITAL LEARNING

Nepal is a socio-economically backward nation by all measures. Most schools do not have internet connectivity, as noted in the 2019-20 Economic Survey (Ministry of Finance), which reported that only 12 percent of public schools have the capacity to offer information and communication technology-(ICT) based learning [7]. There has been a significant development in the utilization of online, blended, and distance learning approaches in HEIs in Nepal as the

internet penetration and availability of electronic devices are quickly expanding [8]. However, the absolute percentage of the population with internet access is far from the mark required for a nationwide online learning initiative. The data showed that internet users increased by 657 thousand (+5.5%) between 2020 and 2021. There were 10.78 million internet users, and Nepal's internet penetration stood at 36.7% in January 2021 [9]. The availability of the internet in schools is also not satisfactory. Even the ones who have the internet cannot run online classes due to a lack of infrastructure and technical capabilities. Despite the fact that 35% of schools have access to the internet, only 13 % of schools might be able to run online classes [10].

The massive rural-urban infrastructure disparities indicate that urban areas have electricity and telecommunications capabilities, but rural areas lack such advancements and hence are disadvantaged. Of the many barriers to technology integration in developing areas, the most basic barrier is still the key: lack of access to technology in the first place. The number for accessibility varies wildly in places depending on how rural/urban the place is. For example, following the decision of the Ministry of Education to start online classes, Indrawati Rural Municipality had recently conducted a random survey among school children and parents. The study found that less than 10 percent of the students had internet access at their homes [11].

The majority of students with little access to the internet reside in rural areas, where education is not taken very seriously. The majority of students who are not able to take classes will fail written exams, and as a result, drop out early from school. As a result, The rural-urban gap in technology is further exacerbating the rural-urban gap in literacy. Pokhara Metropolitan City, in April 2020, issued a circular to schools to stop online classes, citing that the digital divide was so vast that conducting remote classes went against the spirit of equitable access to education [12]. Even in the presence of resources, the teachers from rural areas tend to be less technologically educated, leading to an awful classroom experience and irregular class routines. In developing countries like Nepal, online education is currently facing challenges such as lack of resources, poor national infrastructure, course delivery problems, problems facing students, and cybersecurity problems [12]. The sudden move to online learning is becoming a significant factor in widening the urban-rural and rich-poor gap in literacy.

IMPACT ON INTERNATIONAL STUDENTS AND STUDENTS ASPIRING TO STUDY ABROAD

The global spread of the COVID19 pandemic has severely impacted international students. It has created many uncertainties on Nepali students enrolled or aspiring to enroll in overseas universities as universities closed their premises and countries shut their borders in response to lockdown measures. Students had to decide whether to return home with an uncertainty of when they might return or stay in their host country with limited employment and educational opportunities, all while sorting out their visa status. Those who manage to go home may not have the correct setup, such as books, computers, and high-speed Internet connection. While the extension of the study period might cause financial problems for students, online classes might also change the perception of Nepali students towards the value of foreign education. The failure of the Nepalese Education Board (NEB) to conduct timely board examinations and fair student evaluation has created a potential dent in the education system, which might affect the prospective students while applying abroad. This disruption may affect the admissions of prospective students for the coming academic session. The unrealistic grade inflation seen in student's mark sheets might pose a severe threat to the standard of NEB amidst the international education institutions. The ripple effect of this might be seen in the long term in the change in perception and trust of Nepali students towards the education board in Nepal and impact the overall economy of Nepal. The situation is likely to worsen the already deteriorating standard of education.

INITIATIVES BY DIFFERENT AGENGIES

1. CHEAP DATA PACKAGES

As the COVID19 situation has made e-learning mandatory for everyone, it has become difficult for many students to obtain alternative education and attend classes. This is because not everyone can afford the Internet across the country. So, to ease the situation, the Ministry of Education, Science, and Technology of Nepal announced to provide free or subsidized data

packages to schools and students for the operation of the academic session. In response to this announcement, Nepal Telecom, Nepal's national telecommunication service provider, initiated the e-Shiksha Package to help people conduct online classes in schools and universities during the lockdown period [13]. Soon after that, Ncell, the private telecom, brought out a special data offer targeted to the university students in collaboration with the Tribhuvan University of Nepal. The "Mobile class data pack" offer will help University students take online courses and distance learning during this COVID-19 pandemic [14]. Ncell has also collaborated with two of the private school associations (PABSON and NPBASAN) to come up with a monthly plan for students to make online learning easy. The special monthly plan targets students and teachers to facilitate online classes during this COVID19 pandemic. These initiatives have allowed students within the connectivity range to get data packages for as low as \$2 a month to facilitate their online classes.

2. RADIO-BASED LEARNING

Since more than 60% of Nepal's households own a radio set, the inclination towards radio listening has further increased post-COVID, as people in remote communities consider radio as trustworthy media for news and views related to COVID-19. Identifying the need of the time to continue education through innovative digital media and approaches, Save the Children developed a series of radio-based learnings' for students and aired through national and local FM stations [15]. The radio-based lessons were curated in the form of 'radio schools' led by local teachers. They included chapters on early grade learning, catch-up classes from primary to secondary school students, Secondary Education Examination (SEE) revision classes, and information on caregiving and positive parenting.

Moreover, to ensure access to education for secondary students, UNESCO, through the Capacity Development for Education (CapED) Programme, collaborated with Nepal's Education Development Directorate and Prime FM Radio. In May 2020, they launched Radio Pathshala, an initiative broadcast in the Bagmati Province where teachers taught educational content and facilitated live call-in support to students [16]. This initiative has now been expanded through community radio in collaboration with the Ministry of

Education, Science and Technology and Nepal's Association of Community Radio Broadcasters (ACORAB), covering 77 districts in seven provinces across the country.

3. TELEPHONE-BASED LEARNING

Telephone-based learning is a viable option to ensure students can continue learning through prolonged school closures brought about by the COVID-19 pandemic. As part of the UNICEF and Finland Government partnership to improve the overall education and water, sanitation, and hygiene (WASH) situation of children and families in Nepal, more than 270 teachers have been supporting the continuation of education of over 3,200 children amidst COVID-19 through telephone-based learning [17]. In Saptari, in collaboration with Save the Children, more than 70 Early Childhood Care and Development (ECCD) teachers have been reaching out to 518 parents via mobile phones every week to cascade critical knowledge and skills on positive parenting, child well-being, and innovations to create an enabling environment for their children at home [15].

4. OTHER EFFORTS BY THE GOVERNMENT

Nepal has placed education at the core of its COVID emergency response and has pursued remote and e-learning opportunities to compensate for school closures. One example is the learning portal developed by the Ministry of Education, Science, and Technology, which provides digital content such as interactive learning games, classroom lecture videos, audio, and e-books [18]. This content is categorized according to grade and subject for easy navigation and is maintained by Nepal's Curriculum Development Center. Recently, the Ministry of Education has also formulated and issued new guidelines to facilitate learning for students through alternative ways [19].

RECOMMENDED SOLUTIONS

1. BUILDING DIGITAL INFRASTRUCTURE

The modern world is digital, and that will be the basis for everything in the coming decades. Education is no different. The government should put policies and programs in place to make sure that every school in the nation, rural and urban, has the necessary digital infrastructures, including computers, the internet, and the knowledge required to operate them. For that, the Nepal government should allocate a larger portion of its budget for building education-related infrastructures [20].

The classes in the near future will increasingly embrace online/virtual classrooms. The recent pandemic created an opportunity for the Nepalese academia and decision-makers to develop human resources and ICT infrastructures in schools, making it clear that the pedagogical approaches need to be changed and IT education (curriculum) has to be introduced at all levels of school education [21].

2. HELPING DISPROPORTIONATELY AFFECTED STUDENTS

Students who could not take online learning methods should be helped with an incentive to continue education. Incentives may include a "crash course" to cover the syllabus in a small amount of time. Similarly, students who failed due to the ineffectiveness of online learning should be provided with short-term personalized assistance by teachers in the areas where they are weak. Instead of having students repeat a whole year, failed students should be provided with a second exam with a short preparation and helping period by teachers. The school administration or the government should establish measures to minimize education loss by running extra classes, providing additional materials, or crash courses convenient for students. Furthermore, public and private schools should consider providing economic support via hardship funds or scholarships to students disproportionately affected by the pandemic due to a lack of economic means [22].

3. USING NEW APPROACHES FOR STUDENT EVALUATION

As the external evaluations in Nepal were postponed and it was unclear when and how we could conduct the exams, we understood that such prominent, nationwide scale evaluations were inconvenient. A possible alternative for this can be the method widely used in developed countries to replace large-scale exams with much smaller low-scale works like homework, quizzes, or projects. These methods, however, should be under the strict supervision of the government, as the school administration is likely to provide inflated grades and fake records to elevate the school's reputation. Furthermore, an exam supervision committee, consisting no more than 2-5 members, can be formulated in every municipality whose job would be to raid schools without pre-notice, and demand the necessary materials on the basis of which students were evaluated. The teacher/school administration not adhering to the guidelines provided by federal/state level government agencies should be punished with strict measures.

4. ENHANCE THE USE OF A SOFT COPY LEARNING MATERIAL

In lockdown situations, students could not collect the hard copies of study materials and hence most of the students used soft-copy materials for reference. Soft copy materials are much more cost-effective and are easier to work with, provided necessary devices are available. Furthermore, they can be convenient to buy and explore as well. Book authors should give a thought to publishing their books on sites such as Amazon. Similarly, the Government of Nepal should make it easier to make financial transactions with overseas services such as Amazon, eBay, etc. The publishers and book distributors should establish the necessary protocols and applications to ensure that digital books will benefit both the students and the book publishing industry.

5. PARTNERING WITH INTERNATIONAL ORGANIZATIONS

Another possible solution is for local schools/governments to look for some opportunities. Several charitable organizations and UN agencies are involved in helping developing countries like Nepal tackle the damages done by Covid-19 in education. The Global Partnership for

Education (GPE) had announced to provide “US\$250 million to help developing countries mitigate both the immediate and long-term disruptions to education being caused by the COVID-19 pandemic”. Similarly, UNESCO has established a task force to support governments from low- and middle-income countries to deal with the developing crisis. Thus, federal/local governments should ask for organizations such as GPE and UNESCO to have an effective solution [21].

6. TRAINING TEACHERS TO RUN ONLINE CLASSES

Most of the teachers in Nepal are not technologically familiar. Many of them are not familiar with platforms such as Zoom, Google Meet and Microsoft Classrooms. Even worse, Some don't even have a smartphone or laptop that would enable them to take classes. The salary in government schools of Nepal is nowhere enough for teachers to buy gadgets without vastly compromising on family expenditure. Online classes in many institutions are running without a proper plan. Teachers are being forced to take the classes. Most teachers in Nepal are not well trained for online classes. Online teaching requires trained and skilful teachers. It can be pointed out that online learning is not effective by merely posting a lecturer's notes online or recording the lecture. Quality online learning requires that a professional instructional designer prepares the teaching material. The lecturer is pedagogically trained to deliver the program, and the students are equally exposed to online learning pedagogy [23]. Teacher training programs should, thus, integrate technology as a part of the training program, and teachers should be trained to use technology for their lessons in class [24].

A more effective solution can be a nation- wide volunteering program in which high school graduates, and IT individuals are mobilized to train teachers on how to conduct classes either virtually or physically. The government can provide them accommodation facilities or finances for accommodation. If one volunteer is assigned to every school, a total of 35,500 schools , for a month with an accommodation cost of Rs.10,000, the cost comes out to be about Rs. 35.5 crore. For the federal government, it is not a large sum for spending on one of the most significant programmes. The participation in such programs can be increased via considering

volunteering experience, along with other factors, for admissions in government colleges and universities.

CONCLUSION

Covid-19 has caused huge impacts on student learning and student evaluation in Nepal. As distance and online education relies on technological facilities, including the Internet and WiFi, the existing discrepancies are widening the gap in education access and quality. In order to remain relevant, educational institutions will need to reshape their learning environment in order to digitally expand and complement the relationship between students and teachers.

According to our analysis, more than 90% of high scorers in internally evaluated results had highly inflated scores. The inefficiency of the educational system in grading students based on internal assessments, projects, research-based works, and classroom activities has posed a severe challenge in student evaluation in Nepal during this COVID pandemic.

REFERENCES:

1. Ministry of Education, Science & Technology Planning and Monitoring Division (Statistics, Policy and Research Section). (2018). (rep.). *Education in Figures 2017 (At A Glance)*. Kathmandu. Retrieved from https://moe.gov.np/assets/uploads/files/Education_in_Figures_2017.pdf.
2. *Education: From disruption to recovery*. UNESCO. (2021, September 13). Retrieved September 17, 2021, from <https://en.unesco.org/covid19/educationresponse>.
3. Sharma, G., & Bhatta, M. P. (2018). Implementing e-learning in far Western region of Nepal. *Advances in Computer Sciences*, 1(3). Retrieved from <https://doi.org/10.31021/acs.20181111>.

4. *Nepal's national information and communication Technology (ict) Policy, 2015 (2072 bs)* • *Techsansar.com*. TechSansar.com. (n.d.). Retrieved September 17, 2021, from <https://techsansar.com/ict/nepal-ict-policy-2015/>.
5. Acharya, A., Poudyal, N., Lamichhane, G., Aryal, B., Bhattarai, B. R., Adhikari, B., Bhatta, M., Gyawali, N., & Parajuli, N. (2020). Digital Learning Initiatives, challenges and achievement in higher education in Nepal amidst COVID-19. *EdArXiv*. Retrieved from <https://doi.org/10.35542/osf.io/r85bc>.
6. Rauniyar, Rabi. "SEE results kept 'secret' to cover up school misconduct. " *myRepublica*, 9 August 2021, Retrieved from: <https://myrepublica.nagariknetwork.com/news/see-results-kept-secret-to-cover-up-school-misconduct/?fbclid=IwAR0pWjgErVx4YoTA06cP5BkF2y4uHpOOhgE7A2CxUbH0pGC8CO1ypuDMiDo>
7. Farid, N., Hayes, B., & Sirkhell, R. (2021, January 27). Nepal's Challenges in Delivering Education Amidst the COVID-19 Pandemic. *Asia Watch Newsletter*. Retrieved from: <https://www.asiapacific.ca/publication/nepals-challenges-delivering-education-amidst-covid-19>
8. Thapa, V. (2020). POSSIBILITIES OF E-LEARNING IN HIGHER EDUCATION OF NEPAL. Retrieved from: <https://doi.org/10.13140/RG.2.2.24345.77923>
9. DataReportal. (2021). Digital in Nepal: All the Statistics You Need in 2021. DataReportal – Global Digital Insights. Retrieved from: <https://datareportal.com/reports/digital-2021-nepal>
10. Pandit, S. (2020). Sankat Ma nirantar sikai. *Gorkhapatra* (07 May). Retrieved from: <https://gorkhapatraonline.com/education/2020-05-06-13805>.
11. Ghimire, B. (2020, May 28). Digital divide too wide for online classes to succeed in Nepal. *The Kathmandu Post*. Retrieved from: <https://kathmandupost.com/national/2020/05/28/government-has-proposed->

conducting-online-classes-but-a-majority-of-schools-and-students-don-t-have-computers-and-internet

12. Zarei, S., & Mohammadi, S. (2021). Challenges of higher education related to e-learning in developing countries during COVID-19 spread: A review of the perspectives of students, instructors, policymakers, and ICT experts. *Environmental Science and Pollution Research International*. <https://doi.org/10.1007/s11356-021-14647-2>
13. Paudel, S. (2020, September 1). *Nepal telecom e-shikshya package to facilitate students for online learning*. NepaliTelecom. Retrieved September 18, 2021, from <https://www.nepalitelecom.com/2020/05/nepal-telecom-ntc-eshikshya-package-student-online-learning.html>.
14. NepaliTelecom. (2020, September 2). *Ncell launches mobile class data pack in collaboration with Tu*. NepaliTelecom. Retrieved September 18, 2021, from <https://www.nepalitelecom.com/2020/05/ncell-launches-mobile-class-data-pack-in-collaboration-with-tu.html>.
15. Save the Children. (2021). (rep.). *COVID-19: Adaptation and Innovation in Education Programming in Nepal*. Retrieved from https://nepal.savethechildren.net/sites/nepal.savethechildren.net/files/library/Nepal%20Learning%20Document_%20COVID-19%20adaptation%20and%20innovation%20in%20education%20programming%20_%20FINAL%20Sept%202020.pdf.
16. *Covid-19 response: Learning moves from the classroom to radio in Nepal*. UNESCO. (2020, September 5). Retrieved September 18, 2021, from <https://en.unesco.org/news/covid-19-response-learning-moves-classroom-radio-nepal>.
17. *Just a call away*. UNICEF Nepal. (2021, July 23). Retrieved September 18, 2021, from <https://www.unicef.org/nepal/stories/just-call-away>.
18. *CEHRD Info Center*. Welcome to CEHRD. (n.d.). Retrieved September 18, 2021, from <https://cehrd.gov.np/infocenter/9>.
19. Ministry of Education, Science & Technology, *Guidelines to Facilitate Learning for Students Through Alternative Ways* (2020). Kathmandu.

20. Bhatta, P. (2015). Privatization through affiliation: Trajectories of higher education expansion in post1990 Nepal. *Studies in Nepali History and Society*, 20(2), 303–333.
21. Dawadi, Saraswati; Giri, Ram; Simkhada, Padam (2020): Impact of COVID-19 on the Education Sector in Nepal - Challenges and Coping Strategies. Sage Submissions. Preprint. <https://doi.org/10.31124/advance.12344336.v1>
22. Giannini, S. & Albrechtsen, A. (2020). COVID-19 school closures around the world will hit girls hardest. UNESCO. <https://en.unesco.org/news/COVID-19-school-closures-around-worldwill-hit-girls-hardest>.
23. Dr. Pravat Kumar Jena. 2020. “Impact of pandemic COVID-19 on on education in India”, *International Journal of Current Research*, 12, (07), 12582-12586.
24. Devkota, K.R. Inequalities reinforced through online and distance education in the age of COVID-19: The case of higher education in Nepal. *Int Rev Educ* 67, 145–165 (2021). <https://doi.org/10.1007/s11159-021-09886-x>

