Challenges and Opportunities of Online Education during Covid-19 Situation in Nepal

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Abstract
Nearly all governments around the world have temporarily closed educational institutions due to Covid-19 pandemic which are affecting up to 60% of the world’s student. Around, near to 200 countries closed their schools are interrupting the education of more than 1.5 billion young people and impact in long-term social and economic consequences. The aim of the meta-analysis is to evaluate the challenges and opportunities of online education during Covid-19 situation in Nepal by performing a systematic Meta analysis of related published literature. The Meta analysis was done diverse subjects and diverse research design was eligible among the 11 full-text articles. A formal extraction protocol was the PRISMA-P. Main finding of analysis is to offer an opportunity to shift to online learning and interaction and use virtual platforms for e-conference, webinars, podcasts, online class/online-lectures etc. Opportunities for being continuations of academic career from any part of country; increase learning outcome among job holders. The changes in education technique, modality and process, which may required extra effort initially, provides teacher, faculty and facilitator the forcedly to keep pace with current trends in technology. This study recognized challenges as unequal access and quality of internet conveniences; affordability of laptops/computers; limited interaction; and frequent disturbances.

Key Words: Meta analysis, online education, opportunities, challenges Covid-19 situation

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Introduction

Nearly all governments around the world have temporarily closed educational institutions due to Covid-19 pandemic which are affecting over 60% of the world’s students. Overall, near to 200 countries closed their schools are disrupting the education of more than 1.5 billion young people and impact in long-term social and economic consequences. It created educational inequalities among gender disability, immigration and mother tongue. Learning difficulties among 40% world poorest countries have been unable to support their disadvantages learner (Deslandes-Martineau, Charland, Charland, & Vinuesa, 2020).

The parents’ perception of online education that lack of direct face to face communication and interactive strategies in online mode with large class might hampers learning in online platform. A number of teachers and parents are not well trained for online mode which has caused technical problems. The developing countries have additional issues of poor connectivity and limited number of devices in a family. The issues related to online education, technical issues, motivation of learners, parental involvement, societal interaction in synchronous online education and the achievable solutions are addressed in the study (Mishra, & Vij, 2020).

In online education, the roles of teachers and competencies which guide the development of teacher preparation and training programs. The drawback of online education is lacks of addressing the issues of empowerment of online teachers, promoting critical reflection, and integrating technology into pedagogical inquiry. Another perspective is considers teachers as adult learners who continuously transform their meaning of structures related to online teaching through a continuous process of significance reflection and action (Baran et al., 2011).

A feeling of connectedness, of being embedded in a "social space" (learning platform), is essential to learner motivation and, hence, to success in learning a foreign language. In traditionally, in-person instruction, teachers usually change activities after about 20 minutes at most; otherwise the class’s attention tends to drop. As a rule of thumb, a group size of about a dozen students is recommended for an online course, too, so each learner will get a chance to actively participate in the full class sessions. It’s usually a good idea to divide up the class for exercises in pairs or small groups. After about 40 minutes, even if the teacher uses listening texts, films or surveys and even if learners have been energetically participating, it’s usually a good idea to divide up the class for exercises in pairs or small groups (Dr. Grein M, 2020).

The face-to-face learning reveals significantly higher than the online learning. Social interaction, was a statistically significant different between face-to-face learning (M=24.20, SD=4.34) and online learning (M=22.77, SD=.4.28). Face-to-face learning
supposed more satisfy; many chose online learning over face-to-face classes for the convenience and ease of time and for the opportunity to work when they wanted instead of when they had to face-to-face learning led to more positive perceptions, higher levels, and stronger sense compared to online learning. face to-face learning is advanced than online learning is due to the lacks of social presence and social interaction itself toward online learning (Bali & Liu, 2018).

Only 68% of the respondents rated their comfort level with technology at the highest end of the scale. Frequently in general students may begin an online class and suddenly discover they are overwhelmed by the course management system, the assignment submission process, the email login, and the discussion board. Some complaints dealt with the “mechanisms” of the class, such as difficulty opening files, compatibility issues with Macs, inconsistencies with various browsers, and confusion with the course management system (Huss & Eastep, 2013)content analysis was employed to compress many words of text into fewer content categories based on explicit rules of coding. A total of 1,085 participated, with numbers varying for individual survey items. The critical themes that emerged spoke to the necessity for clear instructions, timely responses, instructor availability, and an overall course design that integrates appropriate, yet not overpowering, technology. (As Provided.

In online education, the perception of parents was lack of direct face to face interactive strategies in online mode with large class strength hampers learning in online platform. Many teachers and parents are not well trained for online mode which has caused technical problems. The developing countries have additional issues of poor connectivity and limited number of devices in a family The issues related to online appointment, technical aspects, learner enthusiasm, parental participation, social interaction in synchronous online education (Ametova & Mustafaoeva, 2020).

Challenges of online teaching and learning are consciousness with the online environment, ability to use the medium to its advantage, providing quick responses and feedback to students, little or no face-to-face interaction, more work, and intense requirement for self-discipline (Tuyết Minh, 2020).

Out of 127 total classes, same nine students could not attend the online classes as regularly as they could attend the face-to-face classes. Rest of the seven students also faced different challenges while attending the online classes. Other twenty-five students could not join the online classes at all even though they had no negative attitude towards the online classes. The poor result of the students' attendance in the online classes made to critically examine the challenges of the online classes in the context of T U (Nepal, 2020).
The aims of this study is to evaluate the challenges and opportunities of online education during Covid-19 situation in Nepal

**Methods and Materials**

**Design:** Meta-analysis was done by using published national and international journals, articles and reports.

**Inclusion criteria:** The inclusion criteria of study were developed with carefully examined published national and international research articles, reports which were searched from the different databases such as Google, Google scholar, Pub med, and Hinari from April 2019 to November, 2020. The main focus was done the challenges and opportunities of online education during Covid-19 situation. The review was done only on; a) English language b) involved samples of at least 50 to 675 subjects c) eligible diverse research design.

**Exclusion criteria:** The articles related to unreliable data, incomplete information, experimental studies and randomized trial were excluded from data.

**Search Strategy:** The research articles related on the challenges and opportunities of online education during Covid-19 situation were searched for data purpose. During acquisition of data, key words were used as the challenges and opportunities of online education during Covid-19 situation. Hand-searched (manual search) such as the reference lists of all identified studies and key journals in the related field was developed. About more than 77 reports were reviewed thoroughly and captured the required theme. The most common studies were the challenges and opportunities of online education during Covid-19 situation.

**Data Extraction, analysis and synthesis:** While searching, the main key words were used as the challenges and opportunities of online education during Covid-19 situation. The total searched articles were 77 which were published from December 2019 to November 2020. The search engines were Google, scholarly Google Pub med and Hinari through the internet database. A formal extraction protocol was developed as the PRISMA-P (Preferred Reporting Items for Systematic Review and Meta analysis Protocol) workflow which was used by Moher D, et al. (2015) that were checked and revised two or three times. Among 77 articles, 62 articles were excluded from the protocol for the following reason i.e. not relevant, unavailability of total result and incomplete result. Eligibility and inclusion criteria or content related topic of this analysis weren’t provided. Only 11 full text articles related to the challenges and opportunities of online education during Covid-19 situation were kept. The total sample size of 11 articles was 2093.
Results and Discussion

Result analysis of Meta analysis according to PRISMA-P (Preferred Reporting Items for Systematic Review and Meta analysis Protocol) as below.

| Record identified through database searching total articles | Additional record identified through other sources (n=16) |
|-----------------------------------------------------------|--------------------------------------------------------|
| Reaming record screened after 162500 duplicates removed   | Record excluded (n=1433)                               |
| Full text article assessed for eligibility (n=77)          | Full text article excluded (n=66)                      |
|                                                           | Reason: not relevant=49                               |
|                                                           | Total result not available=11, Not accessible=4        |

**Overall Results of the Meta analysis Challenges of Online Education in global Scenario**

**Table 1:** Challenges of Online Education in Global Scenario

| Authors & Countries | Challenges of Online Education |
|---------------------|--------------------------------|
| (Ametova, & Mustafoeva, 2020). | The implementation of distance learning techniques and technology were carried out in all higher educational institutions. Lack of confidence in electronic learning and communication processes. |
| (Neuwirth, Jović, & Mukherji, 2020). | In online education the students may face a sequence of issues when trying to participate in virtual classes, may reduce their capability to focus their attention on the material, retain the information from the virtual lecture and actively participate in important discussions due to environmental and situation-specific difficulties. Students may face privacy issues and concerns where they do not want people to look at them or live and their personal bedroom and they do not want people to see it; they are concerned with their social economic status and do not want others to pass judgments of them based upon their living conditions |
In Covid-19 Pandemic, the universities need to re-examine the curricular interventions to equip for willingness towards online learning. Likewise, college grounds medical health legislative body can develop health management protocols and tools to ensure that stakeholders follow environmental health practices even outside the academe.

The major challenge to extensive online entrepreneurship education lies: while teaching entrepreneurship basics seems to be well suited for traditional approaches to teaching online, may require nontraditional and new approaches to online education. Tools and resources to deal with this gap are slowly emerging, with traditional textbook publishers offering more and more online learning resources, private companies developing more and better online experiential learning curriculums, and simulation providers ongoing to offer enhanced options.

Students living in rural or remote areas face weak internet connectivity. About 60% (59.9%) of students have the internet network problem whereas 44.1% of students have sufficient bandwidth to study online. more than half (58.8%) of students claim that online content delivery can't fulfill their course criteria. only 22.1% of students say that home assignments do not help understand the course and topics., whereas only 10.3% of students claim insufficient duration to clear the concept and to gain knowledge from the online classes. 72.1% of students don't feel easy with the online mode of examination. 91.2% of students said that they have mental stress regarding their studies and career after the COVID-19.

These include lack of faculty training and institutional support, internet connectivity issues, maintaining student engagement, online assessments, unaware of the strategies to incorporate quizzes, polls, and mini assignments in the online teaching in order to keep the students engaged and making the lectures more interactive, issues size video lecture files, scholars (students) living in rural areas often complain of problems with live streaming of lectures and attending video conferences for lectures problems with understanding. Female faculty working from home and maintaining a work-life balance has become particularly difficult and extra stress.
Table 2: Opportunities of Online Education in Global Scenario

| Authors & Countries | Opportunities of Online Education |
|---------------------|----------------------------------|
| (Ametova, & Mustafoeva, 2020). | It is for this reason that students want to study mainly in ordinary (day-to-day and correspondence) types of education, and not in the type of education in the virtual state. |
| (Toquero, 2020). | From the academic implications, the policy implication to craft environmental policy that can strengthen the health managing systems in the university and can also serve as reference for future studies relative to the effects of COVID-19 to the performance of the educational system. |
| (Menin, Pande, Jadav & Agarkhedkar, 2020). | Most of (71.4% & 81%) were participants are happy about online teaching learning. The advantages of E-learning as 77.1% participants included flexibility 28%, convenient, 33%, helps in revision but about 10% participants said no advantages of E-learning. Both students and faculty felt it saves travel time and useful in pandemic. |
| (Goswami, 2019). | Most (89.7%) of students say that the lecture duration per day as scheduled by the curriculum is sufficient even for online classes. only 27.9% of students claimed to be satisfied with the online exams whereas 27.9% of students claimed to be satisfied with the online exams whereas only 8.8% of students are relaxed with their home-setup and facility. |

Table 3: Challenges of Online Education in Nepal

| Authors & Countries | Challenges of Online Education |
|---------------------|--------------------------------|
| (Piryani et al., 2020) | Online teaching learning has be a challenge for both faculty members in online learning environments, supervision and support by the teacher may be less and students should have well developed self-regulated learning skills. The changes in education method, modality and process, which might require extra effort initially, provide teacher, faculty and facilitator the impetus to keep pace with current trends in technology. |
| (Joshi et al., 2020) | The main challenges of online education including work-home balance, lack of social interactions, cyber scam issues (cheat) among others. Faculty challenges in shifting from face-to-face to online teaching: Student challenges in shifting to online learning |
Study recognized challenges as imbalanced access and quality of internet facilities; affordability of laptops/computers; inadequate interaction; and frequent disturbances.

Maintaining the engagement of children, particularly young secondary school students are critical. Going to school is not only about learning math and science, but also about social relationships and peer-to-peer interactions. It is about learning to be national and developing social skills. Parents will be more involved in their children’s learning process.

There are four main issues for students regarding the online education. Firstly difficult to adapt technology and great effort to post assignments and log on to classes. Secondly, some students consider online program as less interactive. Thirdly poor internet connectivity in many areas of Nepal makes it difficult for students to attend classes and post assignments. Fourthly the unavailability of computers poses a challenge in learning.

ICT policy should be cleared and courses should be developed accordingly. Only online style of teaching and learning in the context of Nepal cannot be effective so the participants preferred blend learning and reliable internet at workplace as the extreme challenges.

| Authors and Country | Opportunities of Online Education |
|---------------------|----------------------------------|
| (Piryani et al., 2020) South Asia | The challenge have offered to opportunity to educators, medical educators, some global in perspective and some local ones. The pandemic offers both educators and students the insight into: how health problems particularly infectious diseases can affect human life and livelihood; and thoughtful how people react to it. It has offered an chance to move to online learning and interaction and use virtual platform for e-conference, webinars, podcasts, e-class/ e-lectures etc. |
| (Joshi et al., 2020) | Main opportunities have provided by online education are gain skill in different technologies and participate in global village and virtual classroom opportunities for working professionals, and academic integrity |
| (Thapa, 2020) Nepal | Opportunities as revenue generation; continuation of academic career from any part of country; increase learning outcome among jobholders. |
(KC, 2020) Nepal
Know blended learning can draw on the best of both worlds and create a better learning experience. Thus, blended learning approaches will be tried, tested and increasingly used. This crisis will help us come together across boundaries. It is an opportunity for the education sector to unite, forge connections across countries and continents, and truly share what works in a global way.

(Paudel, 2020)
Online education beneficial primarily for promoting online research, connecting the practitioners to the global community and getting huge and authentic resource of knowledge though they have found time-management skills, more freedom to the teachers and learners.

Conclusion
Meta-analysis of online education concluded that the main challenges of online learning were work-home balance, lack of social communications, cyber scam (cheat) issues among others. Faculty challenges in shifting from face-to-face to online education and student challenges in shifting to online learning, as not the same access and quality of internet services; affordability of laptops/computers; limited interaction; and frequent disturbances. The challenge have offered to opportunity to educators, medical educators, some global in perspective and some local ones. The pandemic offers both educators and students the insight into: how health problems particularly infectious diseases can affect human life and livelihood; and considerate how people respond to it. Promoting online do research, linking the practitioners to the global community and receiving huge and valid resource of knowledge while they have found time-management skills, more freedom to the teachers and learners.

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