

Access, Equity, and the Digital Divide in Open and Distance Learning in Nepal: A Critical Literature Review

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Abstract—The Open and Distance Learning (ODL) approach is increasing in Nepal these days. The paper explores the access, equity, and the digital divide in ODL Nepalese context. The paper employs a qualitative research approach applying interpretivism as the research paradigm and literature review as the main research method. Theories of Transaction Distance and Community of Inquiry have been adopted to interpret the data. The arguments are based on the existing studies, policy documents, institutional reports, and the authors' own experiences. The study finds unstable the Internet connection, frequent electrical power cut, less opportunities for learners and teachers' interaction and relatively less knowledge of digital literacy both in teachers and students are the major findings related to access, equity, and the digital divide in ODL in the study. Besides them, linguistic barriers to go through learning materials and difficulty of English language and even an unfavourable learning environment at home, are other findings in the study. So, the research can be significant for the institutions which are running programs in ODL approach and the policy makers who are designing ODL curriculum in Nepal. The study can also be useful to students and teachers who are practicing ODL mode as an educational approach to teaching and learning. Thus, the concern authorities and academic institutions need to address the above mentioned findings to make the ODL approach accessible and reach the unreached.

Index Terms—Open and Distance Learning, Digital Divide, Access, Equity, Literature Review, Transactional Distance, and Community of Inquiry

I. INTRODUCTION

The history of Open and Distance Learning (ODL) has only about two decades in Nepal. However, ODL has become increasingly important due to Nepal's diverse geographical, social, and economic characteristics

which traditional face-to-face educational approach cannot address many learners (Gurung, 2021). Because of Nepal's physical landscape, scattered population, and poor transportation networks, most of the institutions for higher education are located only in urban areas, which has restricted many students to access higher education in Nepal (Thakuri, 2017). And, ODL provides a viable option for learners who cannot attend in face to face, regular mode of education. This is particularly true for rural learners, employed adults, women caring for families, economically disadvantaged students, individuals with physical disabilities, and even those residing at a distance from universities and colleges (Khanal & Ghimire, 2022).

The ODL is considered as a flexible and student-centred approach in education. But, in general, education system of Nepal is teacher-centred (Pangeni, 2016). Although the use of technology has opened new opportunities in ODL such as increased accessibility to quality educational contents, ability to interact with instructors/peers via electronic means, and availability of up-to-date online resources; however, Neupane (2021) claims that there still exist significant challenges associated with unreliability of the Internet, lack of technological devices and even shortage of pedagogically prepared educators in Nepal.

In fact, Nepal's policy framework acknowledges the significance and need of ODL in Nepal. First time, an Open and Distance Learning Policy was introduced in Nepal in 2007. Its main objective was to extend access to education for a variety of learner groups, including out-of-school youth, working adults, women, marginalized learners, and individuals who are unable to attend in traditional face to face mode of education

(MOE Nepal, 2007). Most recently, the Government of Nepal has released an ICT in Education Master Plan 2021–2026 emphasizing digital learning materials, equitably accessible ICT infrastructure, professional development for human resources supporting digital education, and governance of digital education (World Bank, 2023). Though Nepal appears to have officially recognized the significance of ODL to broaden access to education, policy recognition alone is insufficient to ensure equitable learning.

Kara et al. (2019) state that successful implementation of ODL relies on a range of facilitating factors such as electric power supply, reliable the Internet connection, digital tools/devices, and adequate levels of digital literacy, sufficient language skills, satisfactory academic support, supportive family environments, and even favourable learning environments. For example, Devkota (2021) indicated that the shift to online and distance learning during the COVID-19 pandemic widened existing inequities among rural area learners, learners from lower socio-economic status households, and learners lacking technical proficiency and/or English fluency. That means, the effective practice of ODL depends on many aspects and context. This paper explores the relationship between access, equity, and digital divide in ODL in Nepalese context. The arguments are mainly based on the existing literature related to ODL in Nepal.

II. BRIEF HISTORY OF ODL IN NEPAL

The College of Education, Kathmandu initiated ODL mode first time in Nepal in 1958. By using the radio, the primary objective of the mode of education was to train school teachers of remote villages (Thakuri, 2017). The second major effort toward this direction was made when the Ministry of Education launched the "Radio Education Teacher Training Project" in 1978 with both technical and financial assistance from the USAID (Pangeni, 2016). Following this project's launch in 1978, the radio broadcasts were provided starting in 1980 and those radio broadcasts were intended to enhance the professional capacity of in-service primary teachers who had qualifications under the School Leaving Certificate (SLC) (Dixit, 2009). Later, under the Ministry of Education, the National Education Commission established the Distance Education Centre (DEC) in 1994. The centre used to conduct teachers training and education awareness

programs through the radio broadcasting (Dahal, 2014). So, the ODL mode of education had mainly started for school-level education. Khanal (2014) mentioned that there were 84 centres for open schools throughout all 75 districts (at the time) in Nepal.

Regarding in higher education, Government of Nepal has opened an Open University called Nepal Open University (NOU) in 2016, which started classes in 2018. In fact, it is the only university in Nepal that has programs only through ODL mode. Apart from NOU, some of the leading universities of Nepal have also started limited courses in ODL. Purbanchal University started a one-year B.Ed. program in the distance mode in 2002. Kathmandu University has M.Ed. programs through an online method since 2011. Similarly, since 2014, Tribhuvan University has been running M.Ed. courses in ODL approach. Thus, in higher education, it has only about two decades of history in Nepal.

III. NEED OF THE STUDY

The development of Open and Distance Learning (ODL) has helped to response the growing demand for higher education in Nepal. In a country with vast distances between learners' homes and the nearest campus/university, ODL reduces the necessity for learners to physically travel to their institution(s), pay for hostel accommodations, and adhere to rigid attendance schedules. Additionally, ODL supports working adults, those responsible for domestic duties, individuals with family obligations, or those restricted by socio-economic conditions from attending face to face mode of classrooms (Pangeni, 2016). According to Ghimire (2020), ODL has gained acceptance in Nepal as an alternate method of delivery that separates learners from the instructional source while providing them with technology-based learning options. Given that access to quality educational programs varies significantly depending upon locations such as provinces, districts and even communities.

In fact, the establishment of Nepal Open University (NOU) provided the institutional base for ODL in Nepal. Khanal & Ghimire (2022) indicated that NOU has made efforts to utilize online learning and teaching to increase accessibility to higher education and equity among all learners, particularly since it is the first Open University in Nepal. They emphasize that open universities have the potential to be instrumental in increasing number of learners who traditionally would

be excluded from pursuing higher education within traditional institutions. Conversely, Khanal and Ghimire (2022) also emphasized that open universities must proactively develop strategies to address equity, access, and learner diversity. Although there is much promise surrounding ODL's capabilities, its implementation in Nepal has been inconsistent. As noted by the World Bank (2023), Nepal's educational system still faces significant challenges related to developing adequate Information and Communication Technology (ICT) infrastructures. According to Educational Management Information Systems (2021) data, only 50% of Nepal's public schools were supplied with electric power, 42% were equipped with computers and other technologies associated with ICT, and only 19% of these schools possessed the Internet connections. These statistics are indicative of both the technological capacity of individual schools and the overall digital environment in which learners engage in online and distance education. Without digital capacities at the community, household, and/or institutional level, effective implementation of ODL becomes increasingly challenging which needs to be studied. Thus, the study explores the access, equity and digital divide in ODL in Nepalese educational arena.

IV. REVIEW OF RELATED LITERATURE

ODL and its accessibility

ODL programs usually offer access to higher education for those students who could be excluded from attending 'regular' face to face mode of classes due to their work commitments, family obligations, being geographically distant (Hannay & Newvine, 2006). According to Rose (2014), access refers to both how and which students are allowed by policy, practice or technology to enrol in a course or program. Ghimire (2020) states that ODL is considered as one of the most effective ways to improve the accessibility of higher education by reducing/eliminating the requirement for students to attend classes on campus. It is particularly useful for those students with barriers such as geographical location, employment commitments, age, disability, gender roles, or financial constraints. According Central Bureau of Statistics (2021), Nepal, 77.6 % people live in villages in Nepal. It indicates that ODL has a great need and opportunity to reach to higher education across the country.

According to Pangen (2016), cultural context of education is placed on direct communication between teachers and students and traditional classroom instruction via face-to-face method in Nepal. But, ODL not only expects but also highly demands the use of Information and Communication Technology (ICT) among all stakeholders: learners, teachers, family members, and even institutions to make the ODL mode to make the teaching and learning activities accessible and effective. Neupane (2021) states that ODL increases learners' ability to access education and interact with other learners and use current online educational materials, however; there are basically three major challenges to make ODL more accessible. They are: poor reliability of internet access, low levels of familiarity with computers and other digital technologies (i.e., technophobia), and low levels of preparation amongst online teachers to teach at a distance.

Equity approach and Digital Divide in ODL in Nepal

The historical association of ODL relates to equity theory that provides a basis to understand how education can be distributed (Gunawardena & McLsaac, 2004). Blanchard (1986) noted that equity is a shares distribution based on needs and ability to pay. It is a need-based theory (Hill, 2006). In addition, many authors have connected ODL and social equity as a way to address inequitable opportunities for higher education access (Bates, 2005). This literature illustrates that the foundational premise of ODL is based upon the theory of equity which cares and treats learnings based on their circumstances, needs and abilities.

Digital Divide refers to the gap between people who have access to digital technologies and the Internet and those who do not have (OECD, 2001). That means digital divide is the 'inequitable accesses' to digital tools, the Internet connectivity, electrical power, digital literacy, and online learning resources. According to Baral (2022), in his study of how different levels of access to ICT infrastructure, technology skill, and institutional management impacted the way university students experienced ODL in Nepal, he mentioned that students from rural villages face major challenges such as poor internet accessibility, inadequate or unavailable digital tools, and high costs for accessing the Internet facilities.

Devkota's (2021) argues the practice of ODL during the COVID-19 pandemic and even now has clearly shown the effects of digital divide and the situation of equity approach in Nepal. He explains that learners from rural areas, lower-income households, and those who had limited English proficiency and/or limited ability to use technology were more likely than others to be excluded from effectively participating in their online classes. As the notation of equity approach, the need based treatment to learners was not seen. Similarly, Gurung & Paudel (2021) argued that the COVID-19 crisis revealed significant digital divides in Nepal. They claimed that students/learners from low-income families/rural areas were mostly unable to access alternative online education opportunities. They also observed that students living in rural locations, mainly underprivileged populations could not access online-based education, but students residing in urban areas with better digital equipment and the Internet connections, were able to take advantages of ODL more effectively.

The equity approach and digital divide in ODL can be seen clearly in the time of COVID 19 pandemic. Dawadi et al. (2020) states that as a result of the pandemic, Nepal's education system was severely impacted and institutions started applying alternate forms of instruction; that was ODL mode. However, due to the unequal distribution of digital technology, many students have had difficulty to access online learning. Similar to Dawadi et al. (2020) and UNESCO (2021), who indicated that the COVID-19 pandemic has resulted in severe educational disruption in Nepal. Therefore, there is a need for alternative approaches to education delivery, such as radio, TV, and/or online platforms. Lamichhane (2024), in his systemic review of online learning during COVID-19 in Nepal, states that online learning suffered from several obstacles, such as the lack of stable electricity, inadequate and unreliable Internet access, and insufficient Information Communication Technology (ICT) resources mainly to the students from rural areas. In that sense, the digital divide in ODL created a kind of 'inequalities' in societies which seems to be solved based on the equity approach.

V. RESEARCH GAP

Despite many research studies about Open and Distance Learning (ODL) and the digital divide in

Nepal, we still see an opportunity to create a comparative study synthesizing the connections between learners' access, equity, and personal experiences with ODL. Most studies either concentrate on technical issues related to technology, generic studies of students and teachers as they adapted to COVID-19 in online learning settings, or the ways institutions provide opportunities for students using various platforms. While there are some studies examining students' personal, daily living conditions and their influence on their ODL mode learning environment, few studies examine the role of language, emotional/psychological support, cultural and societal responsibility, physical and material learning environment at home, and economic burden associated with engaging in ODL.

Joshi et al. (2023) demonstrate that learners' social position impacts their participation in ODL This paper aims to bridge this gap and discusses ODL in Nepal based on its access, equity, and digital divide. The paper further argues that success in ODL can be evaluated not only through enrolment numbers or the number of platforms used but also by measuring whether students can actually engage with their educational program, use available resources, complete course assignments, and ultimately get a quality education.

VI. RESEARCH OBJECTIVES

1. Identify access related obstacles in practicing in ODL in Nepal
2. Explore how a digital divide impacts students' participation in ODL programs in Nepal.
3. Synthesize learner-centred themes and propose pragmatic implications for equitable and inclusive ODL approach in Nepal.

VII. RESEARCH QUESTIONS

1. What are the major barriers to accessing Open Distance Learning (ODL) in Nepal?
2. How does a digital divide affect in students engagement in ODL programs in Nepal?
3. What policies or practices could institutions implement to support greater inclusivity and equity in ODL in Nepal?

VIII. METHODOLOGY

This paper adopts qualitative research approach applying interpretivism as the research paradigm. Interpretivists avoid rigid structural framework and adopt a more personal and flexible research structures (Carson et al., 2001) which are receptive to capturing meanings with human interaction and make sense of what is perceived as reality (Hudson and Ozanne, 1988). In the paper, the 'human interaction' has not been done with interviews in person, but done interaction and played with the 'contents' of the different texts. So, the findings have drawn mainly on the basis of prior researches which include Nepal based existing published research, journal articles, national policy documents, and institutional reports of ODL in relation to access, equity and the digital divide. The authors have interpreted data mainly doing thematic analysis with the theoretical lens of Transaction Distance and Community of Inquiry. Firstly, the authors looked at the empirical data of ODL related to access, equity and the digital divide to education. And, these things were looked through - learners' home environment as a place for learning digitally, financial constraints to learning digitally, learners' interaction with instructors and peers and their ability to understand and communicate digitally. Likewise, whether institutions are supporting their learners based on their 'needs' in the process of learning and teaching in ODL is another aspect that looked at in the empirical studies. Then, raw data were coded and categorised for the possible themes. The interpretation has been done within the broader conceptual framework of 'access,' 'equity' and 'digital divide'. As this paper is mainly based on secondary sources, it does not include presenting any interviews transcriptions of the participants. As a result, the authors referred to 'literature' as an analytical term to describe documented patterns of learners experience from existing Nepal-based studies.

IX. FINDINGS AND DISCUSSION OF THE STUDY

Access in ODL Is Uneven and Conditional

One of the major findings of the study is that; access to Open Distance Learning (ODL) in Nepal is unequal and dependent on certain factors. In addition to the fact, ODL is intended to allow participants to be

geographically remote from their instructors, it is contingent upon other forms of conditions, including technological, financial, and social conditions, which enable meaningful participation. For example, learners require reliable the Internet connectivity, electricity, functional digital devices, quiet spaces for studying, sufficient amounts of time, and appropriate guidance in order to fully utilize all of the available options in ODL. If a learner lacks one or more of these types of conditions, then, learners cannot have meaningful access or effective learning in ODL mode.

Ghimire (2020) has shown that there are several issues with ODL programs in Nepal relating to physical facilities, electricity, computers, technology, and qualified personnel. Similarly, Baral (2022) has mentioned that ODL students have experienced lack of technology-related infrastructure, low levels of technical competence, and even the insufficient supports by the concerned institutions. A further dimension is provided by Neupane (2021), who demonstrates that while learners view ODL as a means of improving accessibility and providing them with access to current resources, unstable internet connectivity, fear of new technology ("technophobia"), and/or poorly developed skills for teaching and guiding others online, significantly diminish the effectiveness of ODL. The above findings reflect the access, the approach of equity and the effects of digital divide in ODL in Nepal in one way or the different ways.

The Digital Divide Creates Wider Social Inequality and it affects ODL

The next important finding of the study was an interrelationship between the digital divide in ODL and other forms of social inequality. Digital exclusion was not random; it was found to be related to poverty, rurality, caste/ethnic minority status, language and even prior educational experiences. Devkota (2021) stated that, like many other countries, ODL mode of education in Nepal has had inequitable effects on learners based upon their geographic locations within rural communities, their lower socioeconomic status, and their lower levels of proficiency in both English and technology. In addition, Gurung and Paudel (2021) observed that learners from rural and poor economic background could not experience the access to online learning resources, whereas urban-based learners with the facilities of digital equipment

experienced more benefits by the ODL model of delivery.

Therefore, the equitable treatment of learners depends on how much equity approach has been applied within an ODL system for disadvantaged learners. For example, one learner may have a laptop at home, has English medium education background and a quiet private area/room to use during class time, this can provide significantly different learning experiences than another learner using shared cell phone data, experiencing an inconsistent electricity supply, and studying in a public or noisy common area. Although both learners would be part of the same ODL program, their learning contexts and experiences can be very different. As ODL practitioners, we have also experienced and felt similar situations many times teaching and learning in ODL mode.

Financial Constraints Limit Participation in ODL

One of the main concerns of Open and Distance Learning (ODL) in Nepal is the cost factor. It is generally believed that ODL is cheaper than traditional, face to face mode of education because students are not required to travel to colleges or university every days. However, there are 'hidden' costs associated with ODL, such as the cost of smartphones, laptops, the Internet data, electricity back-up systems, the cost of printing documents, repairs to devices, etc. Joshi et al. (2023) identified financial constraints as a primary challenge for many ODL learners in Nepal. As such, this research shows that not all forms of ODL are inherently inexpensive; yet, the cost of building/establishing an ODL institution is not less expensive.

Therefore, it represents a considerable obstacle for poor families/students to have the required resources for ODL mode of education. The financial component of ODL is also related to digital inequalities among students. Those students who have access to higher-quality equipment and/or reliable high-speed Internet are likely to participate more fully in their studies, whereas those students who cannot afford these same items may miss classes, fall behind in completing assignments on time, or simply avoid participating in online activities. Thus, the financial assistance should also be considered while managing ODL through the lens of equity.

Home-Based Learning Is Not Much Effective

ODL relies greatly upon learners' home environment as well. Although 'home' may be a place where many students spend most of their times, it does not necessarily equate to a positive academic learning environment. Those students who have to share rooms or who have limited rooms at home or need to share computer equipment (i.e., laptops) with other family members/siblings might disturb the students in their learning activities. We too have experienced such kind of unsupportive environment while giving classes in ODL mode. Joshi et al. (2023) also mentioned that the biggest barrier for students pursuing distance education via Open and Distance Learning (ODL) is their unfavourable learning environment. In addition to this, Gurung and Paudel (2021) identified the gender aspect of digital inequality and the added pressure placed on females at home during the pandemic. The authors stated that when students transitioned to remote/online studies as a result of the COVID-19 pandemic, women's workloads dramatically increased and the ODL classes at homes became more problematic or less effective to them.

Thus, the above two studies suggest that a student's ability to succeed through ODL mode is influenced even by external factors, such as household conditions, levels of familial support, gender-related societal expectations, and the amount of time available for studying. Therefore, ODL educational institutions should recognize that; all learnings may not have equal and required facilities. So, ODL institutions need to manage the resources accordingly. Maybe such institutions can assist learners by providing flexible deadline options, pre-recorded lectures, counselling services, asynchronous learning options and/or on-site centres. In other words, learners need to be treated or cared as per their needs, the equity approach!

Limited Interaction Affects Academic Engagement

Interaction is considered as a primary factor for a meaningful learning. Students can interact within a traditional classroom setting via asking questions, participating in discussions, meeting their peers, accessing the library, and receiving informal for academic updates. But, this type of interaction in an ODL environment is unlikely to be as of the 'face to face' interaction even if we use different digital media platforms. Joshi et al. (2023) noted that limited interaction is one of the major barriers ODL learners

experienced in Nepal. Neupane (2021) also stated that technology can create many opportunities for interaction than in-person delivery but, the learners need to have the access to the required resources, if not, the interaction between teachers and students will be limited which eventually affects in learning. Therefore, ODL institutions should not simply involve uploading course materials and/or occasionally holding live virtual class sessions. Rather, they should provide an ongoing interaction opportunities because if learners do not have sufficient interaction, they may lose their interest in continuing their studies well.

Lack of Digital Literacy and Language Efficiency Reduces Learners' Confidence

To get involved in ODL, learners need to be digitally literate. To learn using an LMS, learners need to be able to upload and download course materials and assignments, send e-mail communications, post messages, etc. In such situations, learners with limited experience of using computers or other digital technologies may face difficulties or might need to rely on others to access ODL well. The authors Baral (2022) and Neupane (2021) state that among the many issues related to ODL, the lack of technical competence is one of them. The authors refer to this as 'technophobia' experienced by both teachers and learners. The fact that the findings above show digital access is not just about the availability of a device but also includes enough knowledge and confidence to use it for academic purposes. In case, they do not have the knowledge, it affects learners' confidence.

Another significant factor associated to ODL is the use of language that learners have or use. Devkota (2021) states that learners with poor English proficiency are at a disadvantage in ODL. Nepal is a multilingual country. Moreover, the main language is not English in Nepal. But, most of the learning materials are in English! As a result, they cannot study and do well in the ODL mode. Thakuri (2017) states that some students could not understand even question papers in exams well because they have Nepali medium background and the question papers were in English. As its consequences, some students could not pass some of their papers. But, in the same year but in different days, when some invigilators translated the

questions into Nepali language to the same students, they have got good grades in those 'translated' subjects! It shows medium of language also plays important roles in learning, mainly in ODL where teachers and students have less meetings or face to face communications compare to 'off' line classes.

Policy Commitment Exists, but Implementation has Less Existence

In terms of policies, it seems that Nepal has given a great importance to ODL. An example is the Open and Distance Learning Policy, 2007, which was developed to increase access to education for disadvantaged or excluded groups, such as working individuals, women, and those with special needs (MOE, 2007). Additionally, in Nepal, the ICT in Education Master Plan 2021 – 2026 is made which includes four main elements: digital contents, the necessary ICT infrastructure, training of personnel, and a governance framework (World Bank, 2023).

However, there are issues regarding implementing these policies. As stated by the World Bank (2023), there are still many areas in Nepal where electricity, computers, and the Internet access are lacking in schools and colleges. Lamichhane (2024) states that there are several other major obstacles, including constant power outages, lack of good-quality internet, and lack of sufficient ICT equipment to run ODL effectively in Nepal. It shows a huge gap between what the government wants to accomplish through policy and what actually occurs on an ongoing basis in education, which makes it difficult to make ODL programs successful in Nepal.

The study conducted by Khanal and Ghimire (2022) shows that Nepal Open University has created strategies to achieve equitable access to higher education using ODL; however, it needs a lot of pragmatic efforts to strengthen and develop these new strategies. To successfully implement ODL programs, it is important to invest in technology, provide professional development opportunities for educators, and provide adequate learner support systems. Also, it is essential to monitor how well students participate in their courses and complete them.

Table 1: Summary of Major Findings on Access, Equity, and Digital Divide in ODL in Nepal

Major Finding	Key Issues Identified	Supporting Sources	Implication for ODL in Nepal
Access in ODL is uneven and conditional	ODL requires the Internet, electricity, devices, study space, time, digital confidence, and academic guidance. Enrolment alone does not ensure meaningful participation.	Ghimire (2020); Baral (2022); Neupane (2021)	Access should be measured through actual learner participation, not only admission or enrolment.
Digital divide creates wider social inequality and affects ODL	Rural location, poverty, gendered roles, caste/ethnic marginalization, language background, and weak technological skills affect participation.	Devkota (2021); Gurung and Paudel (2021)	ODL must include equity-based support for rural, poor women and marginalized learners.
Financial constraints limit participation	Learners face costs related to smartphones, laptops, internet data, electricity backup, printing, repairs, and examinations.	Joshi et al. (2023)	Financial aid, subsidized internet, and device-support schemes are necessary for inclusive ODL.
Home-based learning is not much effective	Crowded homes, shared devices, domestic responsibilities, lack of private study space, and gendered household work affect learning.	Joshi et al. (2023); Gurung and Paudel (2021)	Flexible deadlines, recorded lectures, counselling, and local support centres can reduce home-based learning barriers.
Limited interaction affects academic engagement	Weak teacher-student interaction, limited peer contact, delayed feedback, and learner isolation reduce motivation and retention.	Joshi et al. (2023); Neupane (2021); Nepal (2024)	ODL should include mentoring, discussion forums, peer groups, regular feedback, and learner counselling.
Lack of Digital Literacy and Language Efficiency Reduces Learners' Confidence	Learners need skills to use LMS platforms, submit assignments, attend online classes, and understand English-based digital materials.	Baral (2022); Neupane (2021); Devkota (2021)& Thakuri (2017)	Digital orientation, multilingual resources, simple instructions, glossaries, and audio-visual support are needed.
Policy commitment exists, but implementation has less existence	Nepal has ODL and ICT policies, but infrastructure, trained teachers, learner support, and monitoring remain insufficient.	Government of Nepal (2007); World Bank (2023); Lamichhane (2024); Khanal and Ghimire (2022)	Policy must be supported by investment, institutional capacity, teacher training, and equity monitoring.

The findings of this study indicate that Open and Distance Learning (ODL) is not as flexible or easy as people normally think and talk about. Of course, ODL has great potential to widen educational participation; particularly for those learners who live geographically

far away from universities, have limited means to pay for education, work full-time, are married, or are otherwise marginalized, but still, the mode of education has many challenges to access and make a 'meaningful' participation in Nepal. The lack of

appropriate electronic equipment, stable internet connectivity, sufficient electricity supply, digital literacy, a quiet place to study, adequate language efficiency are the major challenges in ODL in Nepal. Regarding the accessibility in ODL, Van Dijk (1999) mainly mentions the three types of accesses. They are: motivational access, material access and skill access. By the motivational access, he means to say learners' interest to learn through the use of technology in education. Likewise, material access refers to the access of required learning devices in ODL. And, skill access is the learners' ability or skills to use technology in learning. Based on the findings in the study, Nepal still needs to do many 'set ups' or preparations to make the ODL mode more accessible and effective.

The above-mentioned literature have reported that ODL learners experienced several types of obstacles related to ODL delivery in Nepal. The major obstacles were: financial constraints, poor time management, insufficient interactions with instructors/peers, numerous technical problems, and unfavourable learning environments. In fact, the digital divide experienced by ODL learners is not solely technological, it is also connected to economic, domestic, social, and emotional too. Thus, to make the ODL more accessible, these things are also equally important to address in Nepal.

Furthermore, the findings from the study have shown that ODL can rather reinforce the previously existing social inequalities. As stated by Devkota (2021), the COVID-19 pandemic created conditions under which online/distance education worsened pre-existing inequalities among learners residing in rural areas, mainly to those who have lower socio-economic status, weak English language, and no or less knowledge in computers/ technologies. This supports Warschauer's (2003) broader position that technology access cannot be disconnected from social inclusion. Education via digital media is meaningful only in the condition in which learners not only have access to hardware and connectivity but also to literacy, language, supportive networks, and even social capital. Thus, the question for Nepal is not simply whether or not ODL platforms exist but; whether learners from marginalized backgrounds can utilize them with confidence, continuity, and effectively.

The paper also discusses the pedagogical quality in ODL. There is a common 'miss/conception' that

successful ODL occurs there when educators upload course materials, record video/audio presentations, conduct periodic virtual meetings/class sessions, etc. However, high-quality ODL requires more than simply transmitting information online. ODL not only needs but highly demands careful planning and execution of student-instructor interactions, academic dialogue, feedback, mentorship and even timely assessment. One of the most influential theories regarding ODL is Moore's (1973) Theory of Transactional Distance. According to this theory, distance education can be explained in terms of the psychological and communication gaps between students and instructors. If dialogue between instructors and students is absent or weak, if structural components of courses are inflexible/rigid, and if students do not receive adequate learner support, then transactional distance increases. When transactional distance grows, it can create misunderstandings, feelings of isolation/social disconnection, decreased motivation, and eventual dropout rates. Given the already disadvantaged circumstances surrounding many learners' experiences with technology, language, and geography in Nepal, the limited 'culture' of interaction between instructors/learners in ODL programs, combined with the relative lack of pedagogical competency among online instructors, increases this transactional distance even more significantly mainly for marginalized learners.

The Community of Inquiry Framework (Garrison et al., 2000) adds substantial strength to this line of inquiry by illustrating that successful ODL depends upon integrating three distinct elements: teaching presence, social presence, and cognitive presence. Teaching presence refers to instructional design such as methods of facilitation or guidance. Social presence refers to learners' capacity to establish feeling(s)/connectedness with their teachers, students and even with colleagues. Finally, cognitive presence refers to meaningful engagement with subject matters or contents. The findings presented above demonstrate deficits across each of these three domains: teaching presence was diminished due to a lack of online pedagogical competency among teachers/instructors. Social presence was reduced as a function of insufficient opportunity for interaction between learners/instructors. Lastly, cognitive presence was limited as a consequence of learners' inability to locate/access materials; difficulties with language

comprehension/conversion processes necessary for interacting with online content, etc., and irregularities in learners' ability to participate in ODL coursework. Therefore, evaluating the quality of ODL in Nepal needs to occur along two lines: the degree to which an ODL program has established an accessible platform available for students, and the degree to which it has provided students with deep forms of teaching presence, social presence, and cognitive presence.

In conclusion, equity in ODL needs to be conceptualized as an outcome measure - not simply as an aspirational goal. Policies promoting equity in ODL frequently employ inclusive rhetoric by emphasizing support for rural learners/women/workers/marginalized groups, etc. However, without creating real-world conditions for learner success, inclusive rhetoric can remain empty rhetoric. Therefore, Khanal and Ghimire's study (2022) on Nepal Open University demonstrates how institutional practices can promote learners' access/equality, but that institutional commitment must be maintained through sustained learner support, flexible systems, and stronger institutional commitments. Likewise, Pangeni (2016) posits that ODL must be considered within the cultural preferences of Nepal (face-to-face tutoring), thus requiring both technological adaptations and pedagogical/cultural transformations.

Thus, the central critical assertion of this paper is that Nepali ODL exists in tension between the promises of expanded access to higher education for marginalized learners AND inequitable effects in terms of exacerbating inequalities though it assumes ALL learners have similar digital capabilities, financial capability, language ability, etc.

X. CONCLUSION

Open and Distance Learning (ODL) is relatively a new educational approach with only about two decades of history in higher education in Nepal. Some leading universities of Nepal and some international affiliated colleges have been running some limited subjects in ODL mode. The mode of education has tried to reach to the 'unreached' group of students who are 'structurally' with less privileged. The structure can be the structure of geography, resources, gender or any kind of dividing factors. Despite its efforts, the 'community' of ODL are facing challenges to access

the required 'things' to run the programs effectively. The things are: proper ODL design of study, technological devices, the Internet, language efficiency and so forth. So, the research can be significant for the institutions which are running programs in ODL approach and the policy makers who are designing or design ODL curriculum in Nepal. Besides them, the study can also be useful to students and teachers who are practicing ODL mode as an educational approach in teaching and learning. Thus, the concern authorities, academic institutions and even government bodies need to be sincere and pragmatic to address the above mentioned findings to make the ODL approach more accessible and reach the unreached.

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