



Teachers' Digital Competence in Using Information and Communication Technology for Inclusive Education

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Abstract

Information and Communication Technology (ICT) possesses the potential to transform education by enhancing engagement, promoting personalized learning, and supporting inclusive classrooms. However, teachers' ability to effectively integrate these tools is critical, particularly for students with diverse learning needs, including those with disabilities and learning difficulties. Despite policy efforts in Nepal, there remains a limited understanding of how teachers' digital competence affects inclusive education in practice. This study aims to explore teachers' digital competence in using ICT tools to support inclusive education by examining their skills, perceptions, and challenges in meeting the needs of all learners. Employing a qualitative phenomenological design, the research focused on Bhaktapur district of Nepal and involved six teachers by using a purposive sampling method based on their respective subject areas to allow for a nuanced, discipline-specific analysis. Data were collected through semi-structured interviews and a comprehensive review of key documents. The information was analyzed thematically, utilizing the P1-P6 coding system to identify patterns regarding ICT usage, barriers, and professional development needs across different subject categories. Findings reveal that while teachers maintain positive attitudes toward ICT and recognize its potential for differentiated instruction, practical competence varies significantly. Major barriers identified include a lack of specialized training, limited access to ICT resources, technical issues, and insufficient institutional support. Ultimately, the study highlights a significant gap between policy expectations and classroom realities, concluding that strengthening context-specific teacher training, improving infrastructure, and ensuring effective policy implementation are essential for advancing inclusive education through ICT in Nepal.

Keywords: Assistive technology, ICT, ICT in education, inclusive education, teachers' competency

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Introduction

Recently, the rapid development of Information and Communication Technology (ICT) has started to drastically change educational systems globally, making digital competence a basic professional teacher qualification in the 21st century (UNESCO, 2018). Teachers are required to use digital tools, but also make thoughtful decisions regarding their integration in pedagogy to support diverse learners (Government of Nepal, 2016) across contexts. Digital competence has a variety of definitions, but an understanding that most people have is as knowledge, skills, and attitudes together with ethical awareness to use digital technologies in teaching and learning (European

Commission, 2018; Ferrari, 2013). It covers areas including information literacy, communication, content creation, safety, and problem solving, all essential for promoting equitable access to inclusive education (Caena & Redecker, 2019; Carretero et al., 2017). In this regard, teachers' digital competence has become central to achieving quality education, particularly in alignment with global agendas such as Sustainable Development Goal 4.

An increasing number of studies have highlighted the mediating role that teachers have in assimilating ICT into classrooms. Research also consistently shows that effective teaching with technology relies primarily on teachers having high levels of professional digital competence,



an integration of technological knowledge, pedagogical knowledge and content knowledge (Mishra & Koehler, 2006; Falloon, 2020). Several frameworks, including TPACK, DigCompEdu and the UNESCO ICT Competency Framework for Teachers, offer systematic approaches to conceptualising and measuring this competence (UNESCO, 2018; Caena & Redecker, 2019). Research also provides evidence that teachers generally hold positive teaching attitudes towards ICT, but in contrast, their actual levels of competence seem to be moderate or low, especially regarding digital assessment and inclusive practices (Gudmundsdottir & Hatlevik, 2017; Fernandez-Cruz & Fernandez-Diaz, 2016). In-line with this, systematic reviews show that self-assessment is one of the most common forms of assessment of digital competence, highlighting gaps between perceived and actual skills (Basilotta-Gomez-Pablos et al., 2022).

Simultaneously, the model of inclusive education has become widely popular, promoting the idea of all students, regardless of their ability, background, or learning needs, being taught in mainstream schools (UNESCO, 1994). Since the Salamanca Statement, inclusive education has been an important educational principle, although its implementation varies across contexts (Florian, 2019; Nilholm, 2021). ICT has been acknowledged as a powerful enabler of inclusion, providing opportunities for differentiated instruction, assistive technologies, and multimodal learning environments. However, research also shows that digital tools can create new barriers if they are not designed or used with accessibility in mind (Bong & Chen, 2021). It is becoming increasingly necessary that teachers have the skills to use ICT in a way that inclusively caters to accessibility, participation, and engagement of all students.

In spite of the increasing fascination with digital competence and inclusive education, the relevant research usually deals with these two areas separately. There are plenty of studies focusing on teacher digital competence and ICT integration, but not many of them reveal how these skills are used to support inclusive education. Some recent reviews point out that there is a dearth of compiled information on how teachers' digital skills can help inclusive teaching methods, especially in terms of scaffolding, multimodal learning, and accessibility (Bray et al., 2024; Skantz-Aberg et al., 2022). Besides, the very idea of digital competence is still quite diverse, as it is defined and understood differently across studies, which results in inconsistencies in both measurement and implementation (Godhe et al., 2020; Spante et al., 2018). Another important aspect that has not been sufficiently studied is the one related to context: a teacher's digital competence is usually impacted by things like infrastructure, training, and institutional support; however, these aspects have not been adequately linked with inclusive education (Cabero-Almenara et al., 2021; Liesa-Orus et al., 2023).

There also seems to be the desire to go beyond just developing technical skills and focus on the whole digital

competence concept that includes the pedagogical and inclusive aspects. Some scholars go as far as suggesting that digital competence is not only technical but also requires pedagogical aspects because teachers must find ways of integrating the use of technology in a way that meets the diversity of learners in a class (Rahimi & Mosalli, 2024). To support this, mixed-methods study results show that those teachers who have high levels of digital competence tend to use digital strategies for inclusion more than those who do not, but at the same time, they experience the same limitations, such as lack of training and resources (Author, 2025). This is pointing towards the fact that teacher development in digital skills for inclusion education is a necessary and besides that, there should be a conducive policy environment as well. Furthermore, the current research intends to find out how digitally competent teachers are when it comes to the use of ICT for and in inclusive education. Overall, the research seeks to determine the digital competence level of teachers, discover the main features of teacher digital competence for inclusive educational practices, and investigate challenges and opportunities of ICT usage in inclusive classrooms. With a comprehensive lens combining digital competence models with the principles of inclusive education, this research is a step forward in closing the gap between theory and implementation.

In this article, the teacher's digital competence is one of the factors making it possible that every student benefits from learning. At first glance, it seems that most teachers realize that ICT can be a tool for the inclusion of learners who are individually different but their skills differ widely and depend on various factors such as the environment and the institution where they work. The results will likely illustrate what competencies are necessary for posing digitally inclusive pedagogy, and thus shape professional development curricula.

Objectives

The objectives of the study are:

- i. To explore how well teachers can use digital tools to support children with diverse learning needs in the classroom.
- ii. To find out the perception of teachers towards using ICT tools for inclusive education.

Literature Review

This chapter represents a detailed examination of the research literature that combines teacher digital competency with inclusive educational practices. To start with, the article sets up a theoretical foundation through international frameworks on digital literacy and the integration of technology in teaching methods. After that, the focus is turned to ICT as a break-through tool for learners with different abilities, with a spotlight on students with disabilities and the ways in which they can be supported through technology. Finally, this section brings these global

perspectives together with the very specific socio-economic and policy context of Nepal and thus reveals the unique challenges and opportunities of teachers in a developing education system. By synthesizing the global and local literature, this chapter aims to reveal the major research gaps that this study is going to address.

Conceptualizing Teachers' Digital Competence

Nowadays, educators are expected to be digitally competent as a standard condition in their work, going beyond the simple consideration of digital skills as optional freebies. It is widely recognized that digital competence encompasses a set of intertwined elements, including knowledge, skills, attitudes, and ethical values, which are collectively needed to work effectively, critically, and responsibly with digital technologies (Ferrari, 2013; European Commission, 2018). In the case of education, the focus of digital competence goes further than being a technical expert; it involves knowledge and skills in the use of technology to support learning and instruction as well as content knowledge and pedagogical skills. The resulting combination is known as Technological Pedagogical Content Knowledge (TPACK) (Mishra & Koehler, 2006).

Many studies point out that how digitally competent a teacher is determines the quality of the teaching they offer. Besides, it is the digital competencies that help teachers to come up with student-centered and interactive programs that depend on digital tools for enhancing students' engagement at a deeper level (Gudmundsdottir & Hatlevik, 2017). On the other hand, research shows that most teachers only have average digital competence and are hardly able to perform complex tasks such as digital assessment, content creation, and the critical evaluation of online resources (Fernandez-Cruz & Fernandez-Diaz, 2016; Tondeur et al., 2017).

ICT as a Catalyst for Inclusive Education

The worldwide transition to inclusive education confirms that each student, no matter their ability, origin, or educational difficulty, should have the opportunity to get education of a high standard in the regular classrooms (UNESCO, 1994; Florian, 2019). As part of this new model of education, ICT plays a tremendous role in making education inclusive by making it possible to carry out instruction in a variety of ways, offering special educational tools, and creating learning environments with multiple modes of presentation and delivery (Rose & Dalton, 2009; Al-Azawei et al., 2016). For instance, screen readers, speech-to-text software, and interactive multimedia can remove learning obstacles that have existed for a long time, and teachers are able to design their instruction in a way that best serves the needs of different students (Edyburn, 2013; Kimmons, 2020).

Yet, ICT impact in inclusive education depends a lot on teachers' "digital proficiency" and pedagogical mindset. Studies show that the presence of equipment does not always encourage teachers to resort to IT to accomplish the usual instructional tasks; quite the contrary, they may

use ICT for carrying out specific inclusive activities, such as scaffolding or adaptive learning for the students (Bong & Chen, 2021; Liesa-Orus et al., 2023). This means that a favorable attitude toward a technology goes hand in hand with the technical skills in order for one to truly adopt inclusive digital pedagogy (Teo, 2011).

The Context of ICT and Inclusive Education in Nepal

While international frameworks provide a global blueprint, the socio-technical landscape of Nepal presents a unique set of challenges and opportunities for educators.

Policy Literacy and Implementation Gap

The major focus in recent national studies has been on the gap between policy-making and actual practices. Shahi (2022) observed that although most secondary school teachers in Nepal generally agree with the concept of inclusion, they experience a deep lack of 'policy literacy.' Teachers might be familiar with the existence of a certain policy, for example, the School Sector Development Plan (SSDP) or the ICT in Education Master Plan, but they are not equipped with actionable ways to connect these broad policy statements to the everyday classroom activities. As a result, inclusive education continues to be more of a theoretical objective than a reality in most cases.

Infrastructure and the 'Functional' Digital Divide

In Nepal, talking about digital skills largely means talking about the availability of infrastructure. Acharya (2024) states that the main problem is not necessarily the lack of computers but rather the absence of a functional ecosystem, which includes stable power supply, high-speed internet, and technical support. According to his findings, many public schools have ICT facilities, which are rarely used because teachers are not provided with technical support to solve simple problems, thus the resource remains "dormant."

National Perceptions of ICT as a 'Bridge'

Despite big infrastructural problems, the teachers' minds in Nepal hold a positive view. Phunyal (2024) reports that educators are showing a growing tendency to see ICT as a "pedagogical bridge" for learners from marginalized and diverse backgrounds. The research showed that there is a strong faith in the idea that audio-visual materials are very useful for those students who find it hard to memorize through traditional methods. Unfortunately, this hopeful attitude is very often overshadowed by the "technophobia" of older teachers, implying that digital competence in Nepal is a combination of generational differences and the culture of the institution.

Critiques of Professional Development

The suitability of current training programs is one of the major concerns highlighted in the national debates. Rana, Greenwood, and Fox-Turnbull (2021) reviewed the subject of ICT incorporation in Nepal and found that most

training programs are “one-size-fits-all.” They ignore the complexity of “digital pedagogy” i.e. the specific technique of using technology to teach a child with a learning disability effectively. This results in teachers going home with a feeling of not being ready enough to use technology for real inclusion, although they have very good computer skills.

Equity and Social Justice

Using technology to bridge, the gap between rural and urban areas is at the heart of Nepal’s education strategy. Khadka (2021) makes a case for digital skills as the key to ensuring social justice. He points out that in the remote areas, where even specialized teachers for special education are hardly available; ICT can be a lifeline for students to get quality helper materials. Besides that, Khan et al. (2022) noticed that the pandemic has changed education in Nepal permanently. Therefore, it has pushed everyone, even unwillingly, to go digital. However, they see a danger in that if students do not get the technical support all the time and the teachers do not have ongoing professional development, the skills learned during the pandemic will not lead to long-term inclusive practices.

The Influence of the COVID-19 Paradigm Shift

The novel coronavirus pandemic acted as an immense, albeit unintended, stimulus to the digitization of Nepal. Khan et al. (2022) found that the pandemic has changed teachers’ attitudes towards e-learning forever. In Nepal, the pandemic has been a major factor in pushing teachers to discard their technology reluctance in the first place. But the paper also cautions that if there is no continuous provision of technical assistance and “ongoing professional development” (CPD), the skills acquired in the digital domain during the pandemic could start to decay gradually. This is a clear indication of the necessity to switch from “emergency remote teaching” to a well-established and sustainable “digitally inclusive pedagogy.”

Synthesis and Research Gap

Existing studies show that even though teachers mostly keep positive views of ICT, their real qualifications in digital assessment and inclusive practices are quite low. When it comes to Nepal, these issues become even more serious due to the country’s shortage of materials, specialized teacher training, and inequitable distribution of technology. Research that explicitly connects digital skills to the use of inclusive teaching methods in Nepalese schools is almost non-existent, which makes this field very open for new work. What this paper does is delve into the question of how teachers’ proficiency or lack of proficiency in digital areas influences their capacity to help learners with different needs in Bhaktapur District of Nepal.

Methods

This study employed a qualitative research approach with

a phenomenological design to explore teachers’ digital competence, understand participants’ lived experiences, perceptions, and practices in depth within their natural educational settings (Creswell & Poth, 2018). The Bhaktapur District of Nepal were considered as a research area, where schools are increasingly encouraged to integrate ICT into teaching and learning practices in line with national educational policy. Based on the research need, there are more than 24 teachers in six secondary-level schools, among them, six teachers who had direct experience and active involvement in the use of ICT tools in inclusive classroom practices and who could provide detailed insights into the phenomenon under study (Patton, 2015) were confirmed as respondent by using purposive sampling method. Both primary and secondary data collection tools were used. For the primary data, the data was collected through semi-structured interviews, which allowed the participants to openly share their experiences, perceptions, and challenges regarding ICT integration in inclusive classrooms (Kvale & Brinkmann, 2009) and For the secondary data, recorded interviews, relevant policy documents such as the School Sector Development Plan (SSDP) and the ICT in Education Master Plan 2013-2017 were reviewed to support the understanding of national policies related to ICT and inclusive education in Nepal. The collected data were transcribed, organized, and analyzed using thematic analysis (Braun & Clarke, 2006). The coding process involved repeatedly reading the interview transcripts, categorizing similar responses, and generating broader themes aligned with the objectives of the study. The Ethical considerations were carefully maintained throughout the study. Prior consent was obtained from the participants before data collection, and they were informed about the purpose of the study, confidentiality, voluntary participation, and their right to withdraw at any stage of the research process. The information collected from participants was used only for academic purposes, and confidentiality was strictly preserved throughout the study. For ethical consideration and confidentiality, pseudonyms such as P1, P2, P3, P4, P5, and P6 were used instead of real names throughout the study.

Results

This section presents the findings of the study, focusing on teachers’ understanding of inclusive education, their engagement with ICT, and the factors affecting its use in inclusive classroom practices. The findings are categorized into thematic areas, which are discussed below.

Teachers’ Understanding of Inclusive Education and Policy Context

The results showed that all of them are familiar with inclusive education, but all have only a general concept not linked to a national policy. P1 defined inclusive education as “providing equal learning opportunities for all students”; P2 defined it as “it includes all learners, including those with disabilities.” P3 and P4 defined it as “includes all students

for learning"; whereas P5 and P6 defined it as *"teaching all students equally."* Even though all the participants talked about the essence of inclusion conceptually, no one specifically addressed the policy documents such as the SSDP. Government of Nepal (2016) stated that inclusion means equity, access, and participation of marginalized learners. Likewise, Shahi (2022) reports that teachers in Nepal do not have a clear policy-level understanding, although they support inclusion in principle.

In conclusion, that while teachers have surface knowledge of inclusive education, they do not use their knowledge of inclusive education policy when teaching. Training programs should link the provisions of inclusive education policy with practical strategies teachers can use to promote inclusion in the classroom, easing the implementation of inclusive education.

ICT Training, Availability, and Frequency of Use

Training and use of ICT also varied, with P1 reporting *"no training and occasional use"* and P2 *"basic ICT training and use according to the requirements"*. In relation to ICT literacy of participants P3 had *"no formal training and used ICT rarely"*, P4 had *"attended several ICT trainings and use as needed"*, P5 had *"limited training and occasional use"*, while P6 had *"advanced training and used ICT frequently"*. All six participants reported availability of ICT tools such as computers, projectors, a smart board, smart tv, laptop, and mobile phones. The ICT Master Plan (MoEST, 2019) suggests ICT as a tool in teaching and learning to achieve quality education. ICT use depends on the availability of training, access, and institutional support (Acharya, 2024).

While there is a policy emphasis on ICT, teachers' ICT training and access to equipment clearly contributes to the positive uptake of these tools. This suggests that to ensure equitable use of ICT across schools, equal access to ICT resources should be combined with active training opportunities.

Use of ICT for Supporting Diverse Learners

All participants agreed that ICT could support diverse learners as they can use various ICT. P1 used the *"ICT of videos and tools- smart board, projector and laptop to help slow learners understand concepts"*, and P2 used *"videos and tools- smart TV computer, smart board, projector and laptop to engage students"*. P3 reported *"limited use of computer and smart TV due to lack of skills but believed ICT could be helpful"*. P4 used *"presentation, multimedia and tools- projector, laptop and projector for students with learning difficulties"* and P5 used *"occasionally used videos for learning"*. P6 *"actively used multimedia tools to differentiate instruction for different learners."* According to UNESCO (2014), ICT eases flexible, learner-centered and inclusive teaching.

However, ICT for inclusion is not fully embedded in all teachers' practice, ICT is sometimes used efficiently

and inclusively, while other participants may lack the technological skills or equipment to be able to use ICT effectively. Teachers should therefore be given practical ICT training, alongside inclusive practice, in the classroom.

Challenges in Using ICT for Inclusive Education

All participants faced ICT issues. P1 faced *"poor internet and lack of advanced skills"*. P2 faced *"internet problem and lack of ICT tools"*, while P3 faced *"lack of ICT facilities and training"*. P4 identified *"technical problems and insufficient knowledge"*. P5 described *"lack of confidence and infrastructure"*. P6 had *"technical issues and occasional connectivity issues"*. This reflects Acharya (2024), Phunyal (2024), and the ICT Master Plan of Nepal (MoEST, 2019), found that poor infrastructure and training and a lack of technical support were the biggest challenges to ICT integration in Nepal.

In practice, these barriers have meant that ICT use has not been as effective as it could have been and policy has focused more on infrastructure and confidence in use by teachers. These barriers must be overcome before ICT can enable inclusion.

Teachers' Perception of ICT in Inclusive Education

All the participants considered that ICT was useful and effective for inclusive education. P1 stated *"integrating ICT is effective as it improves understanding and students' engagement."* P2 stated *"ICT is useful for inclusive teaching and improves student participation."* P3 stated *"we do not use ICT often, but ICT is helpful for understanding."* P4 stated *"ICT is highly effective for inclusive education."* P5 stated *"it makes teaching easier but also challenging to use."* P6 stated *"ICT is essential and effective for inclusive education."* Also, according to Phunyal (2024) teachers have a positive view towards ICT, and Shahi (2022) finds that teachers have a positive attitude towards inclusive education in Nepal despite challenges to its implementation.

However, data shows that while teachers perceive ICT positively and are willing to use it, barriers prevent them from using the technology to its full potential. Therefore, access, support systems, and training are important when translating positive attitudes into practice.

Need for Support and Training

All the participants discussed the need for support and training. P1 suggested *"ICT training and technical support"*, P2 suggested *"ICT based training and skills improvements"*, P3 proposed *"ICT skills training and equipment's"*, P4 discussed the need for *"continuous professional development and different ICT based training"*, P5 suggested the need of training, and P6 recommended *"advanced and updated ICT training"*.

As UNESCO (2014) suggested, building skills for training teachers and improving their use of ICT is essential. MoEST (2019) and Acharya (2024) also stress improving teachers' digital competence. Regular, and contextualized training

programmes, infrastructure, and institutional support are required for empowering teachers to develop their ICT competence for inclusive teaching practices, as training opportunities available are considered inadequate and not contextually relevant to their local needs.

Discussion

The results of this research contribute significantly to understanding where inclusive education and digital competence stand in the Nepalese school system. By combining the survey results with what is already known from the literature, here we explain the “digital reality” of Nepalese teachers and reveal the gap between the very forward-thinking national policies and the very real constraints of the classrooms.

The Policy-Practice Disconnect: Awareness without Agency

One of the major revelations in this research finding is all the respondents' awareness of the national inclusive education policy and the ICT Master Plan (MoEST, 2019). Nevertheless, this great “policy literacy” is quite the contrast with the infrequent use of ICT, which remains moderate. Just a few months ago, Shahi (2022) argued that teachers in Nepal, in many cases, continue to be in favor of inclusion at least in their ideas, but they do not have enough “agency” or technical power to put it into practice. According to data, being aware that a policy exists is a passive form of competence; without actively changing these policies into actual, practical classroom strategies, the objectives of the School Sector Development Plan (SSDP) will remain largely unmet. In fact, this research has found that teachers are not lacking in motivation, but the system is failing to reduce the gap between administrative awareness and pedagogical application.

The Infrastructure Paradox: Availability Versus Functionality

While all the schools claimed to have ICT facilities, this study uncovers a major paradox of the infrastructure, as some of them are using them daily or weekly. This result supports Acharya's (2024) idea of “functional digital divide.” It is said that “having a computer” is not the same as “having a digital classroom” in Bhaktapur and the rest of Nepal as well. Lack of internet connectivity and other technical issues are the problems that have caused the majority of the hardware to remain practically useless. As Rana, Greenwood, and Fox-Turnbull (2021) reported, “*laptops will not solve the problem if the underlying technical infrastructure is not reliable*”. Clearly, the government has concentrated its efforts on the purchase of hardware when the reality is that the “soft infrastructure,” such as stable electricity, high-speed connectivity, and available technical support, has been neglected. These essential elements are the ones that can make teachers feel comfortable and at ease with their use of ICT tools and, thereby, transform them into facilitators of inclusion.

From Technical Literacy to Inclusive Pedagogy

According to the survey, teachers are very confident in their use of basic digital tools yet their skills and knowledge level in the use of technology for meeting the diverse needs of learners remains relatively low. This evidences the TPACK model (Mishra & Koehler, 2006) and altogether goes against the idea that technical skills alone will do the trick, as pointed out by Rahimi and Mosalli (2024) as well. At least in the current ICT practices, a Nepalese teacher is essentially involved in a traditional way of teaching complemented by technology and not by a tool of transformative power for differentiation. Teachers have also shared in the open-ended questions (Theme 6) that they consider ICT as something that can “bridge” students with disabilities from one world to another but the numbers show that they do not have the skills that they need for instance with screen readers or speech-to-text software. Clearly, that type of training or professional development which in Nepal nowadays is equated to “computer skills” must be made into “inclusive digital pedagogy.”

Teacher Attitudes as a Lever for Social Justice

Even though there are main structural barriers, high positive perception of ICT utility and willingness to learn are the huge opportunities. This “attitudinal readiness” at a massive level is the most powerful agent of change in the education system of Nepal. Digital competence for Khadka (2021) is a social justice issue in Nepal; it is the key tool through which the geographical and physical barriers to education are removed. The results show that the new normal after the pandemic, as Khan et al. (2022) pointed out, has permanently changed the teacher's way of thinking. Teachers no longer debate if technology should be used, but rather they question how it can be used more effectively. This change in the system of beliefs is the first condition for the success of any future inclusive interventions.

Addressing the ‘One-Size-Fits-All’ Training Deficit

Now to the biggest challenge of all: ‘Lack of Training,’ which was ranked by majority number of the respondents as the major problem. It seems from the research that the people of Nepal find the current training programs not only insufficient but also out of touch with their real situations. Very often, the teachers in this research wanted to get ‘advanced and updated ICT training’ that also ‘technical support’ and ‘inclusive practice’ could be the hallmarks of. This is consistent with the international results of Liesa-Orus et al. (2023) who show that training should be continuous and tailored to the local conditions. For Nepal, this implies that training should be done in situation, i.e., using the actual devices and internet situations teachers deal with, rather than in a one-off workshop in idealized computer labs.

Teacher resistance is not the reason hindering the path to a digitally inclusive education system in Nepal; instead it is the systemic ‘competence-infrastructure’ mismatch. Teachers are rethinking and ready to use ICT as a tool

for equity in their teaching. But the 'accessibility gap' for students with diverse needs will remain as long as the national policy is focused on hardware distribution instead of pedagogical training at the deep tiers and also technical support. We are calling for a 'human-centric' approach to digital competence that is, a teacher who is digitally skilled and empowered not only as a user of technology, but as a creator of inclusive digital experiences.

Conclusion

This research reveals that there is a tremendous gap between the inclusive education policies of Nepal and experiences of teachers in the Bhaktapur District. The study shows teachers have very positive attitudes and understand the transformative potential of technology with different learners, but the reality of using these in practice is constrained by systemic barriers. The results have shown that the access to hardware does not equal digital competence and the lack of stable infrastructure and technical support leads to a functional digital divide. The conclusion of the study is that if ICT can become a bridge for students with disabilities, the emphasis of the educational system must start to move from the distribution of ICTs to the creation of meaningful digital pedagogy. Having a comprehensive plan that includes infrastructure, institutional support and targeted training will be set to failure without a comprehensive plan.

Educational Implications

The results of this research suggest a number of implications for the education sector in Nepal. First, policy makers and government bodies should not only be buying hardware, but also should focus on the soft infrastructure and make sure that the tools are not sitting dormant, such as high-speed internet and onsite technical assistance. Second, professional development programs need to be restructured and changed from a one-size-fits-all approach to computer literacy to a one-size-fits-all approach to digital pedagogy focussed on inclusive classrooms. This includes instruction in the use of assistive technology such as screen readers, and multiple modalities in teaching. Third, school leaders need to create an environment that helps older teachers to demystify technophobia by participating in peer mentoring and lifelong learning. Finally yet importantly, there needs to be greater linkage between policy goals and the manual for effective classroom implementation; teachers must be given more than just goals to work toward, they must be given strategies to use.

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Conflict of Interest

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Authorship

Both of the authors are equally responsible for the design, data collection, analysis, and writing of this entire study.

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