

Reshaping Teachers' Professional Identity Through Technology-based Integrated Pedagogy

Ashok SAPKOTA^{a*}

^a*Department of English Education, Tribhuvan University, Nepal*

*ashok.sapkota@cde.dtu.edu.np

Abstract: Innovative teaching strategies developed by university-level teachers in teaching English as a Foreign Language (EFL) shapes both their professional identity and pedagogical practices. A range of strategies in using innovative technology-integrated pedagogy are scrutinized for how they meet contemporary challenges. Based on qualitative research through narrative inquiry, the study explores the practices, perceptions and observations of seven university faculty sharing their stories of classroom experiences in reshaping their pedagogical practices in integrating technology in the Nepalese context. A questionnaire, reflective sharing, and interview were used as tools to elicit their practical experiences in reshaping their professional identity and pedagogical practices. Findings show that teachers explored the available resources using technology despite technical challenges, nominal or no institutional support and managing their wellbeing. Technical knowledge was a basic requirement that the teacher needs to as a foundation to use several technological applications. This knowledge develops confidence and helps map the content to be used in the classroom for successful integration of technology. It also boosts motivation in the students and eases learning of the textual context. The study concludes that a gradual shift in using technology is helpful for a teacher to address the demand of students as one of the options and keep oneself in a comfort zone. It is recommended that establishing an Information Communication Technology Support Centre for the teachers and students can uplift their technical skills, motivation and positive practices in classroom delivery, assessment, and innovative practices.

Keywords: identity, technological acceptance, instruction, integration, challenges

1. Introduction

In recent years, the use of digital technology has rapidly increased in classroom practices and made teachers more responsive in reshaping their professionalism. The advancement of computer technologies and the development of the internet have a significant influence on the educational environment as process, products, and services for sustainable development (Abubakre & Mkansi, 2022). The use of the resources using the internet as a means has made educators rethink their ways of instruction in their classrooms (Hammond, 2021) and even in managing administrations. Teachers have initiated positive changes in pedagogy, particularly modes of learning and the strategies of teaching. The 'received wisdom' is that learners are supposed to be more advanced in using technology compared to the teachers. Therefore, the needs of the learners have been diversified having a belief that traditional modes of instruction need to be assisted by the regular use of applications of technology. This academic environment has challenged traditional methods of teaching and learning and resulted in some innovative ways of language teaching and learning.

The word *technology* has been linked with e-learning, and often used by itself when it is best to qualify it as *digital technology*. Prior to the terminology of *e-learning* emerging, many other terms were common—for example, ‘Computer-Based Training (CBT)’, ‘Internet-Based training’, Computer-Supported Collaborative Learning (CSCL), and ‘Web-Based Training’ (Oye, Salleh & Iahad, 2012). When *e-learning* emerged, it was adopted widely with many definitions proliferating. Typically, e-learning has been defined as “technology-based learning in which learning materials are delivered electronically to remote learners via a computer network” (Eldeeb, 2014). Following the impact of Covid-19, many educational institutions are now experienced at this. However, the ‘readiness’ of institutions has been discussed for decades (Favretto, Caramia & Guardini, 2003).

The concept of e-learning is relatively noble in South Asia in higher education. It ensures access to education through the use of information technologies. The enabling aspect of e-learning is anyone can explore new innovative ideas and multiple resources and learn aspects of independent or ‘self-directed’ learning. With the advancement of technology, it has become feasible for everybody to get access to learning anywhere. It is equally useful for the teacher educators in shaping their classroom pedagogy as well. Teaching materials are enriched and easily accessed by their target group with the judicious use of technologies. On the other hand, the use of such e-learning technologies and tools fosters learner autonomy. It is widely reported that information and communication technologies can encourage learners to make progress in their foreign language learning and motivate the learners positively and creatively (Dawadi, Giri, Simkhada, 2020). Furthermore, appropriate use of e-learning technologies provides adequate exposure and authentic materials. This is equally useful to Nepalese teacher educators and learners at their place. Teacher educators need to cater for two future needs the dynamics of change in their field and in their professional life (Mason, Shaw, & Zhang, 2019). There is no doubt that students significantly nurture their language skills through the use of advanced synchronous and asynchronous e-learning tools such as podcasts, blogs, wikis, streaming audios, streaming videos, web conferencing and online conferences. In addition, the use of such tools, as feasible in the classroom, can strengthen a teacher in shaping their professional identity (McDougall, 2010) and personal technical expertise as well. These tools serve as a catalyst for the balanced development of EFL students’ language skills and sharpen the teachers’ teaching skills and content. The rapid growth in the use of learning technologies, particularly the use of web-based technologies and communications has offered educators many more opportunities to investigate the most suitable learning environments for their students’ learning preferences.

This research concentrates on exploring the critical incidents, including both success and stories of struggle of the teacher educators. They have successfully used the different applications of technology in higher education to foster interaction among the students. The major objectives of the study were to explore the innovative teaching strategies in teaching English in the foreign language context by university-level teachers in shaping their professionalism and pedagogical practices. The other objectives include exploring the possible challenges faced by them along with the possible strategies. Thirdly, it is helpful to recommend some pedagogical implications based on findings.

2. Methodology

Mixed methods involving triangulation of data collection was used. All the participants completed a pre-survey based on the Technology Acceptance Model (TAM) by Davis (1986, 2011). The teachers’ self-initiatives were observed based on their efforts made to support their students. Teachers then were engaged in a short telephonic interview to know what efforts have been made to support the learners in their classroom as a baseline study. They were asked about their motivations, efforts that they made in integrating technology in language classroom. The recorded interview was transcribed, coded and questionnaire was designed based for the further exploration. Then, the open-ended questionnaire was sent through an online survey focusing on the benefits of ICT use for teaching and learning, perceived usefulness, and behavioural intention to use technology as a part of Technology-Integrated Pedagogy to reshape their professional identity.

Participants

There were seven teacher educators from three provinces: Gandaki, Bagmati and Karnali provinces of Nepal who were inquired about using interview narratives in formal and informal settings (as required)

and the researcher explored their practices in the real field with available applications used by them or the use of technology integration in their classes maintaining the ethical considerations.

Research Design

The research design shows the overall strategy that the researcher chose to integrate the different components of the study coherently therefore effectively addressing the research problem. Among several research designs, a narrative inquiry approach was adopted. Narrative inquiry is the process of gathering information for research through storytelling and exploring one's experiences. It is a research methodology that is growing in acceptance and practice in such disciplines as nursing, medicine, law, especially organizational studies, therapy in health fields, social work, counselling, psychotherapy, and teaching for sharing human stories of experience (Webster & Metrova, 2007). Like other methodologies, the narrative inquiry "inquires" into or asks questions about and looks for a deeper understanding of particular aspects of life experience, in the present case the life of teachers.

Connelly and Clandinin (1990) note that "humans are storytelling organisms who, individually and collectively, lead storied lives. Thus, the study of narrative is the study of the ways humans experience the world." People's lives consist of stories. It is the interdisciplinary study of the activities involved in generating and analyzing stories of life experiences (e.g., life histories, narrative interviews, journals, diaries, memoirs, autobiographies, and biographies) and reporting that kind of research (Schwandt, 1994). Narrative inquiry is unique in its study because it reveals life experiences through narratives or life stories. Moreover, narrative researchers hold in common the study of stories or narratives or descriptions of a series of events (Pinnegar & Daynes, 2007, p. 4). In addition to the above discussion, I reflected further on the critical incidents in using digital tools in the language classroom of EFL teachers through a constellation of images. There are diverse ways that researchers study these stories or sets of images. Narrative researchers often analyze and interpret the stories that they gather and write by drawing them from philosophical and theoretical ideas about how we think through the story and tell about our lives using culturally available narrative models and even live our lives according to these models.

Like other forms of qualitative research, narrative inquiry often involves coding field texts (e.g., interview transcripts, letters from the participant to the researcher) for themes or categories. In this research, I used major themes or categories to a story (or retell or develop a meta-story) from the field texts. This new story may be structured around a chronology of events describing the individual's past, present, and future experiences and situated within a specific setting or context (Creswell, 2012). As narrative inquiry emphasizes relationships or collaboration between the researcher and others, I focused on the teachers' experience and professional practices, challenges in using digital applications for their professional and classroom interaction. I explored the emergent stories and negotiated their meanings with informants (Creswell, 2012), and share work-in-progress or profession with other narrative researchers (Clandinin & Connelly, 1990). As many narrative researchers emphasize the importance of learning from their participants, the focus was laid on the participant's stories in relation to their professional practices in higher education.

3. Data Collection and Analysis

Telephonic interviews, questionnaire and observation are the main research tools used in my research. An interview is the best research tool to obtain a snapshot of teachers' experiences, attitudes, and practices on the research topic. At first, a semi-structured interview was conducted with the target participants. Then voluntarily interested participants were invited for an interview. The series of interview was conducted to elicit the data as one or two interviews may not be sufficient to avail their experience and grit in using the digital applications. Secondly, the works that they have done or the articles that they have written based on their success stories or challenges were explored. If the permission is accessed by them, the snapshots of their successful sharing were kept in the research.

The systematically collected data were analyzed, interpreted, and presented as several themes. Quantitative data obtained from the close-ended questionnaire were presented based on the themes generated from the data in line with research objectives. In addition to this, qualitative data obtained from focus group discussions were coded, counted, and analyzed carefully for classification, summarization, and tabulation. The major discussion on the innovative teaching strategies in teaching

English in EFL classrooms challenges faced by the teacher educators and pedagogical implications from the data elicited.

4. Summary of Findings

The major discussion was on the innovative teaching strategies in teaching English in EFL classrooms, challenges faced by the teacher educators and pedagogical implications from the data elicited. As summary evidence, teachers had the positive and inspiring experience to integrate technology to motivate their students and bring changes to their professional identity. Although they were forced to learn new technologies to cope with the pedagogical shift, they felt happy later when they had positive appraisals from their students. Following sections describe these findings in detail:

Innovative strategies in teaching English in EFL classroom

There were several strategies, like discussion, the best selection of technology applications, access to information, thinking of alternative means, offline tasks, grit in oneself and assessing the effectiveness of the use of technology that English as Foreign Language (EFL) teachers have explored themselves, particularly at the university level. This helped them to explore their skills and create their professionalism in reshaping their pedagogical as well as content knowledge. In eliciting the data from the open-ended questionnaire and interviews, it was found that several new technological and pedagogical skills were learned for virtual teaching, and these reshaped their identity (Sapkota, 2021) as a teacher in an EFL classroom. During the COVID-19, they were forced to learn a few ideas regarding the use of technology. When a difficult situation like a pandemic or epidemic occurs in our context, there are avenues to explore new avenues (Kong, Jager-Biela & Glutsch (2020). Having a similar situation, the pandemic period made to be aware of new technology to the teachers. They learnt new strategies for online teaching and also gradually it's been effective. The research included open-ended questionnaire to share their stories in using technology, practices and reflections. Here are few of them:

Narrative 1

There are many things to name that I have explored during and after the pandemic but particularly speaking, I learnt how efficient online tools can be in delivering the lesson to the students. The best session to name was by Stephen Krashen.

Narrative 2

Instead of the lack of internet access, apply different strategies to be in touch with the students; like phone calls, leaving voice messages in messenger and giving them tasks and asking them to send voice messages regarding the given tasks when I am in the physical class.

Narrative 3

I learned various web tools and developed my skills in IT. I learnt Nepali typing, Excel and other tools useful for ELT class. I learned to be familiar with digital literacy and using ICT in education. Besides that, I got opportunities to take part in several online/virtual events/webinars/conferences from which I received a lot of knowledge and experiences. I have learned amazing skills in using YOU TUBE videos to my advantage. Students feedbacks are quite amazing on my presentation.

Overall, the teachers decided how often they could blend technology in the classroom. Technology helps to get access to authentic sources and an opportunity for alternatives (N,2). It is essential to know when and how much to blend technology in the classroom. Considering the context, level of students, access and knowledge of specific applications is a basis to consider before we use technology. A teacher needs to explore web options to develop confidence in integrating technology (N,3). The teachers suggested that advanced preparation (N,1) and technical knowledge in integrating technology determine its effectiveness as real engagement. The study of Sapkota (2021) relates his reflective writings on how we grow and learn from our own learning in using technology is similar to the stories of the teacher in this study.

Challenges faced by the teachers and addressing those challenges

The second objective of the study was concerned with the challenges faced by the EFL teachers in using technology and the way forward they used to address those challenges. The study tried to explore the major challenges that are faced during their classroom discussion in using technology and the way they overcome those challenges. From the survey and discussion, the following common challenges were identified, such as the challenges of employment opportunities, economic depression, and mental tension.

Narrative 1

I am keenly interested in professional development however the economic hurdles always revolve around my mind. When I try to solve this huddle, I need to teach as many classes as I can. I get tired while teaching and get busy with those classes. Then, the idea of academic writing, and publication dies and remains simply a hope in my life which may or may not be fulfilled further.

Narrative 2

I created a group with students in messenger and shared exercises, and useful materials and communicate with them. I learned to use the digital tools and by using them I am now able to be with my students. The ways to overcome those challenges are: Adopting alternative ways of teaching methods for teaching and learning activities, spreading awareness among people by showing different related videos and asking them to hear news about the Covid19 situation at the international level and national levels.

Narrative 3

One-way online teaching could turn out to be boring or monotonous during the COVID-19 pandemic. However, I found myself in a comfort zone very soon as I discovered and learned using various digital learning tools and techniques, like; Google classroom, quizzz, playposit, padlet, Google tools, etc. that helped me to make the online classes very interactive and full of fun. I learned many of these tools during the online training conducted by NELTA. As I started using these tools in my classes, I got various opportunities to share my learning with other teachers too in various sessions of training and workshops. The use of technology in my class helped me to grow professionally and earn new and better recognition at the local level.

Therefore, technology has brought positive aspects to professional identity despite economic huddles in the EFL classroom (N, 1). In addition, there were several challenges teachers faced in using technology, like time management, employment opportunities, frequent power-cut, low bandwidth, economic depression and mental tension. It is essential first to reflect ourselves how technology works before we use it in the classroom (N, 2). Access to information helps in the acceptance of technological changes and improves their affective, cognitive, identity, and social growth capabilities when the faculties cultivate their network of learning (Prestridge et al., 2021). Despite having challenges, technology helps in creating new knowledge as a part of continuous professional development. Prestridge et al. (2021) relate the concept of connected learning where personal interest or passion is supportive to assist other friends, colleagues and relates in online phenomenon.

Pedagogical Implications

Based on the narratives of the participants, it was found that the use of technology has created a positive impact on the pedagogical implications and has been successful to create social capital in the teachers' identity and has become a local driving force (Badar & Mason, 2020) in the professional development. The teachers' who knew technology applications were perceived as smart ones among others. There are some challenges in using technology such as low bandwidth, no electricity, no institutional support, and students with poor use of technological knowledge. However, the teachers started up with basic ideas in the classroom through their personal effort or learning through different professional associations.

Sometimes, they learned ideas ‘how to do’ from their own students. This helps the students to explore and make the teachers in their comfort zone of learning.

Narrative 1

While I was dealing with the content in Grade XII-Hyperloop, I explained it in detail; however, I remained unsuccessful in making them convinced regarding the new transportation system. I used the technology. I downloaded a video showing how the hyperloop will work in the future. They got the point easily.

Narrative 2

Use of online materials to teach the text "Memoirs of my Visit to France". Because of the use of strange place names/plant names /other difficult vocabularies, it was very difficult to teach this text. Students would always be puzzled and know nothing even after teaching the text was finished. Later, I taught the same lesson using videos and pictures of these strange names, Students got the point. This changed the way I was teaching.

The narratives above found that teachers need to be aware of mapping technology applications with the content of the textbook. It is essential to adapt the freely available resources based on the context we integrate technology (N,1 & N,2). The students even seem smarter than teachers when we use open or free sources. Therefore, the review made by Neupane and Joshi (2022) show that technology has an assert as human capital to accelerate the socio-economic development of the countries. In addition, the students expect more advanced learning and resources in the use of technology. The findings of Abubakre & Mkansi (2022) shows that motivation and capabilities to use digital technology in teachers not only by emotional and empathetic approach. This finding is similar in the Nepalese context as well.

5. Limitations and Further Research

5.1 Limitations

The most significant limitation of this study is that it focuses solely on teacher educators who have been engaged in their professionalism in Kathmandu and Pokhara valley. The research was limited to finding out teacher educators’ professional practices on e-learning for developing language skills. Teacher educators on asynchronous tools of e-learning were the participants of the study. The research was limited to the teachers’ experience and observations in using technology.

5.2 Further Research

The study explored the small-scale data from the university faculty regarding the way they practice and use technology. A further study can be made on the paradigm shift on how traditionally reluctant teachers change themselves in using ICT tools in their professional life. The students’ achievements and experiences could be the additional area to be explored further. The impact of technology and the students’ performance in their academic career is other issue to be explored. The support in learning from the peers or parental guidance integrating technology can be explored in further research.

6. Conclusion

The study was successful in identifying teacher success stories in using digital technology and coping with it successfully on their own. There were several innovative strategies, like determining the appropriate choice of technology applications, access to information and web resources, preplanning for alternative resources, offline tasks, promoting grit in oneself and assessing technical knowledge using technology that the teachers have adopted to bring changes in their classrooms. Despite having nominal institutional support, teachers explored the diverse use of technology from the several online tutorials to grow them. It is recommended to establish an ICT Support Centre in campuses to ease students in active learning and teachers enabling them grow professionally in technology.

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