

Investigating Teacher Educators' Digital Practices

**Breaking Barriers:**

**Exploring Digital Practices of Teacher Educators in Nepal**

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A thesis submitted in fulfilment of the requirement for the degree of

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**CERTIFICATE OF ORIGINAL AUTHORSHIP**

I, Suman Laudari, declare that this thesis is submitted in fulfilment of the requirements for the award of PhD, in the School of Education, Faculty of Arts and Social Sciences at the University of Technology Sydney.

This thesis is wholly my own work unless otherwise referenced or acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

This document has not been submitted for qualifications at any other academic institution.

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Dedicated to my **PARENTS**. Thank you for the seed of inspiration.

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## ABSTRACT

This thesis presents a qualitative case study of digital practices of teacher educators at two Nepalese universities. In doing this, the study examined factors that facilitated or inhibited teacher educators' technology use, how they gained the digital competencies required to use technologies and how such learning supported their teaching.

The study, which was conducted between the end of 2016 and mid 2017, is primarily informed by semi-structured interview data collected with 25 teacher educators teaching BEd and MEd courses. Additional data were collected using focus group discussions with four groups of pre-service teachers and interviews with three policymakers.

To uncover the digital practices of teacher educators, Activity Theory was used as an analytical framework. The study used the conceptual tools that Activity Theory offers heuristically to anchor the discussions and drew on the literature on teacher educators' digital competencies, professional learning and use of technologies for analysis.

The analysis of the data revealed that even when there were elements at the institutional or broader level that were not supportive of technology use, teacher educators sought learning opportunities inside and outside the teacher education institutes and engaged in those to enhance their digital competencies. Through the development of their digital competencies, teacher educators were able to implement the use of digital tools into their practice. Whilst the in-class use of digital technologies was not sophisticated, teacher educators used technologies outside the classroom to keep the classroom discussion ongoing and to engage students in learning activities. The findings of this study demonstrate that significant transformations occurred in their pedagogical practices.

The significance of this study is that it contributes to an understanding of teacher educators' digital practices - why teacher educators use technologies; how they enhance their digital competencies; how their learning supports technology use in their curricular practices; and, what changes those practices can bring. Other areas to which this study contributes are the theoretical implications of using Activity Theory to study digital practices and policy implications concerning technology use in teacher education.

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## GLOSSARY

**Affiliated campus:** Colleges affiliated to a particular university to teach their courses.

Affiliated colleges can be privately or community-owned. They have their own administration and manage the financial resources primarily on their own.

**Camtasia:** Camtasia is a computer software suite which can be used for creating video tutorials by capturing screencast, or by using the feature to record Microsoft PowerPoint.

**Constituent campus:** Colleges run under a university as the teaching campuses. The campus can have their own faculties and departments but teach the curriculum and syllabus prescribed by the university. Each constituent unit has its own chief executive officer to whom broad powers are delegated by the governing board for the organisation and operation of the constituent unit.

**Digital competencies:** This term has been defined as knowledge, skills and attitude required to use digital tools in pedagogical activities.

**Digital practices:** This is an overarching theme of this thesis. It is defined as-teacher educators' ICT-related behaviour. In this thesis, it comprises of digital competencies, technology-related professional learning, use of digital tools in teacher education activities and different factors that inhibit or sustain such practices.

**Digital technologies:** A key element of focus in this study is digital technology. It is a broad term as it can include various technologies that use and process digital information such as mobile phones, internet, computer or artificial intelligence. Unless otherwise stated, when digital technology is referred to in this study, it relates to the technologies that are used in educational contexts, and they can include different devices/tools such as computer/laptop, smartphones and associated programmes and

applications, multimedia tools and programmes, and web-based technologies. A list of what tools teacher educators used is discussed in Chapter 7 of this study. Other terms that are used to synonymously to digital technology are information communication technologies (ICTs), educational technologies (EdTech).

**Facebook Group:** Place for small group communication, and for people to share their common interests and express their opinion on Facebook. The page has different privacy settings, which help to make it private or public.

**Google-Group:** A Google-provided service that offers a platform for group discussions and a gateway for newsgroups.

**Google Sites:** It is a service offered by Google. It is a wiki and Web page-creation tool freely available for anyone to be able to create simple websites to support and promote collaborations.

**Kahoot:** It is a game-based learning platform freely available to teachers to create quizzes in different formats.

**Moodle:** Moodle is a free and open-source virtual learning management system. A similar virtual learning platform is known as Blackboard.

**NiceNet:** It is an online educational course management system, also known as Internet Classroom Assistant (ICA). It is run by a non-profit organisation and is one of the last sets of such tools available at no cost to instructor-developers.

**Padlet:** It is an application to create an online bulletin board that teachers can use to display information for any topic.



**LIST OF ABBREVIATIONS**

AT	Activity Theory
CHAT	Cultural Historical Activity Theory
DC	digital competencies
DoE	Department of Education Nepal
ICT	information communication technology
ITU	International Telecommunication Union
MoEN	Ministry of Education Nepal
OLE	Open Learning Exchange Nepal
OLPC	One Laptop Per Child
PD	professional development
PL	professional learning
PLN	professional learning network
PSTs	pre-service teachers
TEIs	teacher education institutes
TEs	teacher educators
UGC	University Grants Commission
UNDESA	United Nations Department of Economic and Social Affairs