

AN INTERPRETATION OF KEY STAKEHOLDERS' EXPERIENCES  
USING EDUCATIONAL ONLINE TECHNOLOGIES  
IN BLENDED TERTIARY ENVIRONMENTS:

A PHENOMENOLOGICAL STUDY

# THESIS

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## **Declaration**

### **Originality**

I hereby certify that to the best of my knowledge and belief, this thesis is my own work and contains no material previously published or written by another person except where due references and acknowledgements are made. It contains no material which has been previously submitted by me for the award of any other degree or diploma in any university or other tertiary institution.

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Kimberley Tuapawa  
PhD student

February, 2017

## Acknowledgements

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This work is a tribute to those of us who have battled through unexpected personal odds to climb a mountain that at times seemed impossible. It is for those of us who set out on a sprint, young and idealistic, and finished a marathon, experienced and resilient.

Kimberley Tuapawa

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## Abstract

Although educational online technologies (EOTs) have transformed the delivery of learning in higher education, significant challenges have impeded their effectiveness, preventing widespread implementation. The prevalence of these challenges suggests that tertiary education institutes (TEIs) have experienced a gap in understandings about the reality of key stakeholders' EOT needs. While it is critical that TEIs adapt to meet these needs, doing this effectively requires that they have current, in-depth knowledge of their stakeholders' EOT challenges and experiences, at a level that enables the delivery of informed, relevant, and meaningful support.

Using a phenomenological approach, this research aimed to build understandings of key stakeholders' EOT experiences to determine their current EOT needs and challenges, and provide a basis from which to recommend methods for effective EOT support<sup>1</sup>. It was completed in two stages. Firstly, the *preliminary research* aimed to establish a robust foundation of current knowledge. It verified and updated key issues in the literature through a qualitative analysis of data from 13 blended learning experts in New Zealand, Australia, and Canada. Secondly, the *phenomenological research* aimed to make an interpretation of key stakeholders' EOT experiences. It examined and classified the experiences of 10 students and 10 teachers from New Zealand and Australia, and interpreted their phenomenological meanings through an abstraction, articulation and synthesis of local and global themes. These interpretations, which included descriptions of stakeholders' EOT challenges, helped to inform a set of recommendations for effective EOT use with different key entities, and assist TEIs to address EOT challenges and meet stakeholders' needs. The research also proposed the development of a digital tool that could conceptualise phenomenological data and further help TEIs make practical application of stakeholders' EOT experiences.

This research developed and unified two extensive systems of data, aggregating a collection of highly contextualised phenomenological interpretations with a spectrum of expertly-verified literature, to form an elaborate and multi-dimensional structure of knowledge. Its output was richly narrated across a dual modularised set of publications, which illuminated and synergised a wide array of contemporaneous EOT issues with compelling firsthand insights into the phenomena of EOT use.

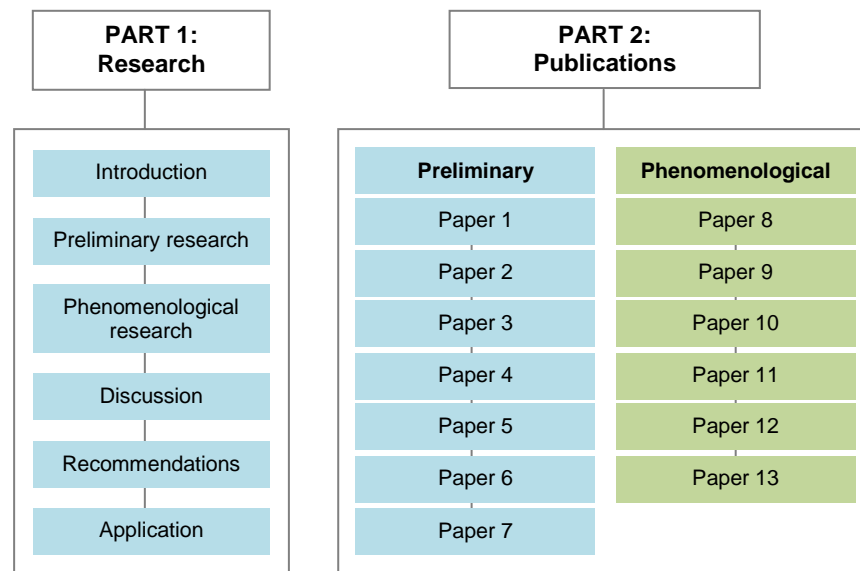
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<sup>1</sup> Its guiding questions were: What are the EOT experiences of key stakeholders in BTEs? What interpretations can be made from their meanings, and how can these be used to support stakeholders' EOT needs?

## Structure of thesis

This document has been structured using the *thesis by publication* format, a compilation style in which the research output is presented as a series of papers<sup>2</sup>. As demonstrated in Figure 1, this thesis contains 13 publications, which have been organised into two sets to represent the output from the two key stages of research: the *preliminary* research (7 papers) and *phenomenological* research (6 papers). This modularised format enables the papers to be used singularly to pinpoint specific issues, or in groups to link homogenous sections of research, or altogether to deliver a broad spectrum of knowledge. Like stackable snap-lock containers, they individually ‘un-clip’ to become unique standalone components, but also ‘join back’ collectively, thematically, and structurally to form a synergistic and coherent whole.

**Figure 1:**      *Structure of thesis*



The by-publication route was selected as a means to accommodate the output of this research, and its progression through a framework of discrete, yet interconnected stages (see *Figure 2*). The format helped unify a series of distinguishable and linked knowledge compartments into a framed system, capable of supporting a meaningful contribution to this field of research. From the researcher’s perspective, this route also presented an exciting challenge: to assume the textual identity of an expert and write with commensurate scholarly authority early in the candidature. The challenge of undertaking a task of this nature, and the appeal of gaining a scholarly head start through published works, further prompted the researcher to pursue this opportunity.

This document is structured in two parts: 1) Research and 2) Publications.

<sup>2</sup> The selection of papers included in a thesis by publication, is created in addition to the sections found in a traditional narrative thesis.

## **Part 1            Research**

Part 1 begins in Section 1, which provides an **introduction** to the research, and its main elements, including the aims, objectives and background. The next sections present this study's two principal stages of research: 1) the **preliminary research**, which verifies and updates key issues in the literature, and establishes a rationale for the selection of key stakeholders for the phenomenological research, and 2) the **phenomenological research**, which analyses and interprets key stakeholders' EOT experiences. The final sections provide a comprehensive **discussion** of findings, and a detailed set of **recommendations** for effective EOT use, which includes a proposal for the practical application of the phenomenological interpretations. In total, Part 1 contains five sections.

### **Section 1        Introduction**

This section defines the key elements or 'foundation blocks' of the research: the problem statement, aims, definitions, key questions, context, objectives, structure, background, significance, and methodology. These are introduced alongside a modular framework, which conceptualises and unifies the key components, and provides a visual overview of the entire research process.

### **Section 2        Preliminary research**

This part presents a detailed account of the qualitative methods and procedures used to complete the key phases of preliminary research, including participant sampling, data collection, data transcription, data analysis, and publication output. It also presents the content summaries of all preliminary publications.

### **Section 3        Phenomenological research**

This section firstly presents a background to the philosophy of phenomenology. It then outlines its limitations, and provides a statement of subjectivity, a first-person narrative by the researcher about her influence over the analysis of data. It then presents a comprehensive account of the qualitative methodology, methods and procedures used to complete the key phases of phenomenological research, including participant sampling, data collection, data transcription, data analysis, and publication output. This section also details the process of thematic abstraction, and documents the *local* and *global* themes as a series of interpretations of the phenomena. It concludes with content summaries of all phenomenological publications.



**Section 4      Discussion**

This part articulates the *global* themes abstracted from the descriptions of key stakeholders' EOT experiences, categorises them to reflect the nature of their interactions with other key entities, and triangulates these findings with literature and data from preliminary research to provide a comprehensive synthesis of knowledge.

**Section 5      Recommendations**

This section provides a detailed set of recommendations for the effective use of EOTs, as informed through the interpretations of key stakeholders' EOT experiences. The recommendations are structured into categories that reflect the nature of stakeholders' interactions with other key entities, and aim to assist TEIs in their efforts to address EOT challenges, and support stakeholders' needs.

**Section 6      Conceptual application**

This part presents a conceptual tool for presenting phenomenological interpretations, and proposes its development as a way to help TEIs make practical application of key stakeholders' EOT experiences.

**Section 7      Conclusion**

A summary of evidence demonstrating how this study fulfils the research aims and objectives, addresses the central questions, and delivers the expected outcomes.

## Part 2 Publications

Part 2 contains the published output of this research, 13 publications in total, the appendices, and bibliography. Papers 1-7 form the output of the **preliminary research**. Their purpose was to verify and update key issues in the literature, and establish a rationale for the selection of key stakeholders for the phenomenological research. Papers 8-13 form the output of the **phenomenological research**. Their purpose was to present the *local* themes of this research through written interpretations documenting key stakeholders' EOT experiences with other key entities.

## Section 7 Publications

Paper 1 Tuapawa, K. (2013). *Educational Online Technologies in Blended Tertiary Environments: A Review of Literature*. Paper presented at the International Conference on Educational Technologies 2013 (ICEduTech 2013) Kuala Lumpur, Malaysia, November 29-December 1, 2013. <http://files.eric.ed.gov/fulltext/ED557168.pdf>

Paper 2 Tuapawa, K. (2017). Educational Online Technologies in Blended Tertiary Environments: Experts' Perspectives. *International Journal of Communication and Information Technology Education*, 13(3).

Paper 3 Tuapawa, K., Sher, W., & Gu, N. (2014). Pentexonomy: A Multi-Dimensional Taxonomy of Educational Online Technologies. *International Journal of Web-Based Learning and Teaching Technologies*, 9(1), 41-59.

During 2015, IGI Global, publishers of the IJWLTT journal advised the author that this paper had been selected for inclusion as a chapter in a new book entitled "Revolutionizing Education through Web-Based Instruction". Paper 4, which is a revised edition of Paper 3, contains new references, and insights from feedback with blended learning experts.

Paper 4 Tuapawa, K., Sher, W., & Gu, N. (2016). Pentexonomy: A Multi-Dimensional Taxonomy of Educational Online Technologies. In M. Raisinghani (Ed.), *Revolutionizing Education through Web-Based Instruction* (pp. 225-252). Hershey, PA: IGI Global.

Released in March 2016, this book was a comprehensive, multi-disciplinary exploration of the emerging digital opportunities available to educators. It presented contemporary theoretical frameworks as well as practical research findings that supported the use of new computer-assisted teaching techniques.

Paper 5 Tuapawa, K. (2017). Identifying Key Stakeholders in Blended Tertiary Environments: Experts' Perspectives. *International Journal of Communication and Information Technology Education*, 13(4).

Paper 6 Tuapawa, K. (2016a). Challenges Faced by Key Stakeholders using Educational Online Technologies in Blended Tertiary Environments. *International Journal of Web-Based Learning and Teaching Technologies*, 11(2).

Paper 7 Tuapawa, K. (2015). *Resistance to Change Concerning the Use of Educational Online Technologies in Blended Tertiary Environments*. Paper presented at The Fourth International Conference on E-Learning and E-Technologies in

Education (ICEEE2015), Surya University, Tangerang, Indonesia, September 10-12, 2015. <http://sdiwc.net/digital-library/resistance-to-change-concerning-use-of-educational-online-technologies-in-blended-tertiary-environments.html>

- Paper 8 Tuapawa, K. (2017). Interpreting the Experiences of Students Using Educational Online Technologies to Interact with Teachers in Blended Tertiary Environments: A Phenomenological Study. *Australasian Journal of Educational Technology*, 33(1).
- Paper 9 Tuapawa, K. (2016b). Interpreting the Experiences of Students Using Educational Online Technologies to Interact with Students in Blended Tertiary Environments: A Phenomenological Study. *International Journal of Online Pedagogy and Course Design*, 6(4).
- Paper 10 Tuapawa, K. (2017a). Interpreting the Experiences of Students Using Educational Online Technologies to Interact with Content in Blended Tertiary Environments: A Phenomenological Study. *International Journal of Distance Education Technologies*, 15(3).
- Paper 11 Tuapawa, K. (2016c). Interpreting the Experiences of Teachers Using Educational Online Technologies to Interact with Students in Blended Tertiary Environments: A Phenomenological Study. *International Journal of Communication and Information Technology Education*, 12(4).
- Paper 12 Tuapawa, K. (2017e). Interpreting the Experiences of Teachers Using Educational Online Technologies to Interact with Teachers in Blended Tertiary Environments: A Phenomenological Study. *International Journal of International Journal of Web-Based Learning and Teaching Technologies* 12(3).
- Paper 13 Tuapawa, K. (2017f). Interpreting the Experiences of Teachers Using Educational Online Technologies to Interact with Content in Blended Tertiary Environments: A Phenomenological Study. *International Journal of E-Learning and Educational Technologies in the Digital Media*, 3(1).

## **Section 8 Appendices**

These sections provide additional documentation that supports the main body of research.

## **Section 9 Bibliography**

An aggregation of all bibliographic references cited in this study.