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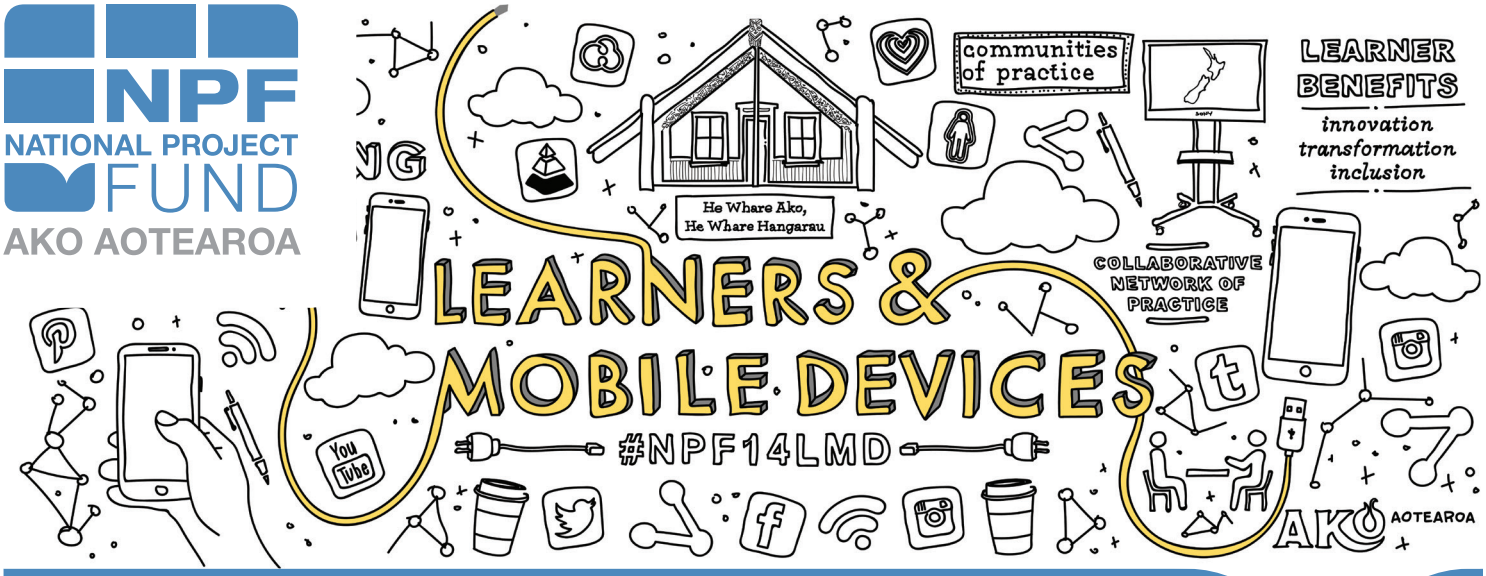

Executive summary

Learners and mobile devices (#NPF14LMD): A framework for enhanced learning and institutional change

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Executive summary

Background
The #NPF14LMD (National Project Fund 2014, Learners and Mobile Devices) project is informed by original research on professional learning models for engaging teaching in mobile learning. This work stemmed from Auckland University of Technology (AUT) with a primary emphasis on student benefits through staff professional learning and the broader context of institutional digital strategy and transformation. The underpinning aim of the entire project was centred on enhancing learner experiences through the use of mobile learning and mobile devices. AUT initiated the project through a range of internal projects on mobile learning and mobile social media and this was developed into a cross-institutional project aimed at pedagogical transformation.

The Centre for Learning and Teaching (CfLAT) at AUT reached out to its networks across six institutions and brought together practitioners interested in pedagogical change and transformation through mobile devices. The project began in 2014 involving over 50 practitioners from AUT, Eastern Institute of Technology (EIT), Massey University (MU), Otago Polytechnic (OP), Unitec Institute of Technology (Unitec), and the University of Auckland (UoA).

Approach
Practitioners were equipped with an iPhone and an iPad and were encouraged to explore the devices for their own practice. Local coordinators were recruited and acted as the link between their institution and the AUT project team, thus forming a wider project team that met regularly over the duration of the project. A further layer of support was provided through the development and establishment of a Community of Practice (CoP) which is a collaborative network of practice that met regularly through social media platforms and face-to-face meetings. CoPs (both local groups as well as a project-wide group) provided several opportunities for professional learning through sharing of information, using and modelling the use of mobile devices, as well as collegial and technological support.

There was variation in mobile devices implementation across the six institutions, however, practitioners generally developed familiarity and some technical confidence in their own use of mobile devices. Challenges were met with some participants moving on from their institutions or being assigned to new roles, as well as some variation in the formation and maintenance of the local CoPs.

Findings
Practitioners experimented with different aspects of mobile learning (m-learning) in their teaching practice and then reflected on their professional learning journeys and the extent to which changes in practice had enhanced learner experiences. Overall, practitioners were challenged to rethink their own pedagogical approaches to teaching and how these might be developed to improve and enhance the learning experiences of their students. Through experimentation, practitioners found ways that m-learning worked for them and aligned to their pedagogical philosophies while also challenging

them to step outside of their comfort zone and try new and innovative tools. CoPs were a key part of their support network which provided a space for sharing and collaboration amongst fellow colleagues.

Māori and Pacific learners

A key aspect of the project was a focus on Māori learners to understand what effective engagement looked like through mobile devices and m-learning. The project focused on Māori learners as this cohort was significantly represented across the six institutions. The project team possessed the appropriate expertise and capability to provide input on Māori perspectives and technologies. Pacific learners, while another important focus of this work, were not engaged in this instance. The leaders of the project lacked the capability and expertise to appropriately weave in Pacific perspectives and understanding thus it was recognised that Pacific learners must be a key focus for future research of mobile learning.

Outputs

This project yielded a rich set of data in various formats. We believe that these outputs will produce tangible benefits for practitioners in the tertiary sector and abroad, in particular, the strategies for teachers and institutions for pedagogical change and transformation. These are briefly mentioned here and are expanded on in much more detail in the report.

1. *Practitioner reflections* – Each practitioner had multiple opportunities to reflect on their pedagogical transformations through m-learning throughout the project. Many did this using the mobile devices (blogs, webinars, Google+, videos and images) as well as academic writing and reporting.

2. *Scalar eBook* - This innovative publication enables the grouping of reflective practitioner contributions into a range of themes and collaboration across users - these features provide a less traditional format of reporting while modelling the use of mobile devices and technologies.

3. *Literature report* - This report provides some commentary on existing literature around Māori learners and pedagogies to help support practitioners as they develop and transform their teaching practices.

4. *He Whare Ako, He Whare Hangarau Framework* - A framework underpinned with concepts of ako and Kaupapa Māori values, interwoven with mobile learning theories, approaches and practices. Tangible strategies have been developed for practitioners to utilise in their pedagogical transformation.

5. *He Whare Ako, He Whare Hangarau app* - He Whare Ako, He Whare Hangarau framework has been developed into an app to model the use of mobile devices and present the ideas of the framework in an innovative way

6. *Survey of learners* – A survey of over 350 learners from across the six institutions discussing their perspectives on the uses of mobile devices for learning.

7. *Key Findings and Practical Strategies* - The following findings and practical strategies for teachers and institutions were developed to support learning and teaching with mobile devices. These are briefly mentioned here and are expanded on fully in the report.

For teachers:

1. Teachers should have access to the same mobile devices as their learners;
2. Teachers should have their technological and pedagogical development supported through a community of practice model;
3. Teachers should be empowered to experiment with new tools and not be afraid to fail;
4. The mobile device should be approached as part of a shift in pedagogy and assessment where technology is integrated with good teaching practice and learning theory;
5. A close collaborative and inclusive learning environment enables teachers to work alongside learners with the implementation of mobile devices; and
6. The use of mobile devices to access content and resources can lead to increased engagement both inside and outside the classroom and familiarity with technologies currently being used in the work environment.

For institutions:

1. Teachers need to be appropriately resourced to enable them to experiment and utilise mobile devices in their teaching practice
2. There should be robust infrastructure to support both current needs and also innovation and experimentation with new technology and spaces
3. There should be appropriate digital strategic directions that account for the needs of the implementation of mobile devices and considers values (that are often overlooked in policy and strategy).

These strategies are aimed towards practitioners and institutions within the tertiary sector but are also applicable to any teachers interested in pedagogical transformation through m-learning.

Future research

The study produced excellent outputs and has contributed to scholarship and to the field for pedagogical transformation through mobile devices and learning. However, further research is required around strategies for learners to engage with m-learning pedagogies and an exploration into how Pacific learners use mobile devices for learning. The study provided opportunities to better understand learners' use of mobile devices and how their learning experiences can be enhanced through pedagogical transformation.