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IMPROVING SUPPORT FOR
LIFELONG LEARNING IN
UNIVERSITIES THROUGH
ENHANCED EPORTFOLIO SYSTEMS

A THESIS PRESENTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE
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Abstract

Lifelong learning is seen as a self-directed pursuit of knowledge or skills that occur throughout one's life. While this concept is not new, the importance of lifelong learning skills, in addition to academic and subject knowledge, has been increasingly emphasised in the workplace and public policy over the last decade. Higher education institutions, universities in particular, recognise the importance of lifelong learning and define their own strategies to promote it. Such strategies include the development of institutional graduate profiles which represent the core learning outcomes, skills and qualities, that students should acquire during their university education.

The problem identified and addressed in the current research is the lack of comprehensive technical support solutions for lifelong learning in universities. Currently, only basic level support is available in form of ePortfolio systems or incorporation of Web 2.0 tools into university settings. However, the shortcomings of these systems and tools, are hindering their full adoption, and as such the necessary support for lifelong learning is not available.

Through a literature review process followed by stakeholder interviews, this thesis analyses the needs for supporting lifelong learning in universities. According to this analysis, better support is required for reflection, communication and collaboration, development and showcasing of lifelong learning skills, and tracking of learning progress. These identified needs are then translated into requirements that are used to create a prototype system that extends a current ePortfolio system, Mahara, with new features, to provide institutional support for lifelong learning.

A number of studies, involving both lecturers and students, are conducted to evaluate whether the prototype will bring strong improvements towards providing comprehensive support for lifelong learning in universities. The results indicate that the new features can be successfully adopted by students to help development and understanding of lifelong learning skills, address institutional graduate attributes, track learning progress, as well as manage and share this knowledge with others. In addition to these student-focused results, lecturers responded positively to incorporating the prototype into their teaching. Lecturers see the opportunities for employing the new features to provide students with the guidance through their lifelong learning journey at the university.

Additional research in various fields needs to be conducted towards full support of lifelong learning in universities. This research provides a foundation for comprehensive technical support. It draws attention to the influence that technology has on teaching and learning, encourages cooperation between stakeholders, and shows the importance of listening to the learner's voice.

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Publications and Presentations

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List of Abbreviations

API – Application Programming Interface

CLI – Composite Learning Index

DSR – Design Science Research

ELLI – European Lifelong Learning Indicators

ER – Entity Relationship Diagram

GNU – a recursive acronym for “GNU’s Not Unix!”

HCI – Human-Computer Interaction

IT – Information Technology

LMS – Learning Management System

OECD – Organisation for Economic Co-operation and Development

PLE – Personal Learning Environment

QDAS – Qualitative Data Analysis Software

UNESCO – United Nations Educational, Scientific, and Cultural Organization

URI – Uniform Resource Identifier

VLE – Virtual Learning Environment

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