LIFELONG LEARNING SUPPORTED BY EPORTFOLIO PROCESS

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Yuliya Bozhko

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Abstract

The concept of lifelong learning is based on the principle of the self-directed pursuit of knowledge or skills that occur throughout ones life. While the 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, and universities in particular, recognise the importance of lifelong learning and define their own strategies to promote it such as including learning attributes in their graduate profiles. Yet, at this stage, lifelong learning support provided in universities is not strong enough to meet learners' needs.

This research project explores theoretical concepts, available technical solutions and lifelong learning support needs of universities. As it is shown in the literature review, theories in this area have already been developed followed by raising awareness and attempts at universities to support lifelong learning. Currently basic level technical solutions are available, such as ePortfolio systems or accommodation of Personal Learning Environments (PLE) into university settings, but their shortcomings are hindering full adoption.

This PhD research proposes a learner-centered e-learning environment which will provide comprehensive support for lifelong learning. This environment will be built on an institutionally focused Learning Management System (LMS) and a learner focused ePortfolio system. While these systems already have some low-level connections, extensions are required to adequately support lifelong learning: students need to be in charge of their own learning progress; they need to be able to choose the environment that serves their needs best and has a smart data workflow to easily connect to their institution's environment; the approach should be streamlined for both, teachers and students.

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List of Abbreviations

DSR - Design Science Research

LMS - Learning Management System

PLE - Personal Learning Environment

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3.1 Literature Review Process

The literature review to support this project was conducted by systematically reading and reviewing books, journals and conference proceedings in the area of research. The main methods to identify relevant literature were recommendations of a domain expert

and a library search. Relevant articles were identified by reading titles and abstracts of selected journals articles and papers in conference proceedings. Where possible the latest ten years of issues of the following journals were looked through: "British Journal of Educational Technology", "International Journal of Lifelong Education", "European Journal of Education", "Lifelong Learning in Europe", "International Journal of Emerging Technologies in Learning", "New Zealand Journal of Adult Learning", "Journal of Computer Assisted Learning", "European Journal of Engineering Education", and "International Journal of ePortfolio". In addition, a keyword search was carried out on the Internet and academic resources (such as Education Research Complete[1], Academic Search Premier[2], Directory of Open Access Journals[3], Google[4], Google Scholar[5]) to cover some conference publications not available in the library. The following keywords and combinations of keywords were used in the search: "lifelong learning", "life-long learning", "e-learning", "ePortfolio", "e-portfolio", and "electronic portfolio".

This review helped to discover previous work in the area, to explore methods which can by applied to this research, to increase the depth and breadth of knowledge of the field, and to identify domain experts and other people working in the same field which could be valuable to contact. Besides finding relevant information in the literature, it was also notable to identify the gaps that currently exist. These gaps are based on facts that although a lot of work has been done on developing lifelong learning theories as well as developing technologies for education and learning, there are little substantial work done on combining these two areas. Reviewing the literature is a continuous process. Therefore, the literature review for this research was updated by actively acquiring and reading the relevant articles emerging in the literature.

3.2 The General Concept of Lifelong Learning

The concept of lifelong learning consists of a variety of meanings, models and ideas (Jarvis, 2004).

The origin of the term 'lifelong learning' goes back to the early 20th century and is contributed to by John Dewey (2004). From his perspective, lifelong learning had to be centered on the individual's ability to take an active role in democratic society. He saw education as a learning process which is influenced by the growth of the individual and society, both interlinked. Deweys key to lifelong learning was in developing active

[1] http://www.ebscohost.com/academic/education-research-complete
[2] http://www.ebscohost.com/academic/academic-search-premier
[3] http://www.doaj.org/
[4] http://google.com
[5] http://scholar.google.com

learning, enabling the individual to reflect and change throughout life, emphasizing that non-formal education was as important as formal education.

The concept of lifelong education appeared in 1972 after Edgar Faures Report Learning to Be for UNESCO. His concept was announced to be the leading one for the reform in education. Faures Report used four principles for the lifelong education architecture (Faure, et al., 1972): vertical integration (education should occur throughout ones life), horizontal integration (acceptance of non-formal and formal education), the democratization of education (more widespread involvement of learners) and learning society (restructuring of educational system).

Now, 30 years after the idea of this lifelong education was introduced, many governments rediscover not lifelong education, but lifelong learning (Boshier, 2000). This shift was not only semantic, but also substantive, which showed that lifelong learning and lifelong education are not the same: lifelong education aimed to develop more humane individuals and communities, while lifelong learning's goal is in retaining and learning new skills that would help individuals adapt to rapid changes in their workplace (Medel-Aonuevo, et al., 2001). Lifelong learning is based on the notion of the individual learner as a consumer. And as a result if consumers do not decide to take advantage of all the opportunities they have then it is only their fault. Therefore, being constructed as individual activity learning depends entirely on personal motivation. Unlike learning, education is a provided service (Boshier, 2000) that requires someone to be responsible for providing resources, developing policies, etc. The emphasis on learning rather than education is significant (Tuijnman and Bostrm, 2002), as it moves focus from the institutions onto the individual.

In terms of purposeful learning activities lifelong learning consists of the following components (Longworth, 2003; Tuijnman and Bostrm, 2002):

- Formal learning (institutionally graded, and hierarchically structured system, often leads to qualification);
- Non-formal learning (organized systematic educational activity external to formal education);
- Informal learning (planned or not planned, but conscious learning from the experience);
- Incidental learning (not intentional, an accompaniment to everyday life, learning during the action).

Some researchers recognize two categories of lifelong learning, formal and non-formal,

leaving informal and incidental parts of it as the elements of non-formal learning (Longworth, 2003).

Boshier (2000) states that at present the formal and non-formal categories are like two parallel lines which seldom touch. Lifelong learning as well encompasses the elements of self-direction, long-term and life-wide learning. Therefore, it should also recognize the fact that learning also takes place outside the formal education system and is guided by the learners themselves (Schuetze and Casey, 2006).

The European Commission defined Lifelong learning in its 2000 report (European Commission, 2000) as:

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Some filler here.

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