Contrasting approaches: Institutional or individual ownership in ePortfolio systems

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The traditional approach to the provision of e-learning systems is one of institutional control and ownership. In the context of electronic portfolio systems in support of lifelong learning this approach needs to be questioned, as the characteristics of lifelong learning are in conflict with institutional ownership and control. Lifelong learning, with its aspects of life-wide and self-directed learning, needs to put the learner in charge of system and data. Institutional learning linkages are still important, but the role of the institution has to be one of support instead of control. To retain the advantages of institutional types of ePortfolio systems while at the same time matching the lifelong learning paradigm the suggestion is made to separate system provision from the educational relationship by hosting the ePortfolio system with an external provider.

Keywords: ePortfolios, electronic portfolios, lifelong learning, tertiary education, ownership

Introduction

This contribution will explore issues around the ownership of e-learning systems and data. The traditional approach educational institutions use for their learning management systems puts the institution and its staff in control. With the advent of electronic portfolio systems (ePortfolio systems) for lifelong learning it needs to be questioned if this approach is still suitable or needs to be replaced by a new approach that puts the individual learner in charge. To motivate the discussion this article first describes the characteristics of lifelong learning and a supporting ePortfolio system. This is followed by outlining the role of institutions in this context and by describing how institutions traditionally approach the provision of e-learning systems. From there the article outlines the contradictions between ePortfolios systems for lifelong learning and traditional system provision and introduces a new approach to system provision that modifies the role of the institution considerably.

Lifelong learning supported by ePortfolio systems

Lifelong learning refers to the need for continuing learning at the completion of formal education, throughout the working life and beyond. Lifelong learning encompasses the aspects of life-wide and self-directed learning. Life-wide learning emphasises the value of experiences and opportunities outside the formal education system. Self-directed learning refers to a learner taking charge of their own learning by setting directions within their formal education and life-wide learning areas. Various terms are used in different combinations to describe the abilities, qualities and skills expected from a present day graduate who is prepared for lifelong learning: problem solving, critical thinking, and reasoning skills; practical ingenuity; information and technology literacy; self-management skills in completing tasks on time, bringing forward initiatives and coping with change; communication, teamwork, collaboration, and leadership skills; language skills beyond first language; understanding of professional and ethical responsibilities; appreciation of human diversity, cultures and business practices; awareness of environmental impact; understanding of importance of lifelong learning and ongoing professional and personal development (Aller et al., 2005; Bouslama et al., 2003; Dowling, 2006; Lohmann et al., 2006; McMasters, 2006; Muffo, 2001; Overton, 2003; Said et al., 2004).

Lifelong learning can be effectively supported by a portfolio approach. At the core of portfolio work are the collection of evidence and reflection. Evidence encompasses many different documents in terms of document nature, like work samples, evaluations or observations, and document formats, like text documents, photos, graphics or multimedia recordings (Abrami & Barrett, 2005; Beck, Livne, & Bear, 2005; Gerbic, Grey, Moore, & Bernay, 2007; Heath, 2002; Heath & Cockerham, 2001). It is essential that the evidence presented is connected with reflective thinking, outlining the meaning of the evidence and

the criteria for selection (Kimball, 2005). Reflection is a critical element of portfolio practice (Heath, 2002; Klenowski, Askew, & Carnell, 2006) and needs to be of ongoing nature (Kimball, 2005; Pinsky & Fryer-Edwards, 2004).

The traditional portfolio consists of a folder containing paper documents. It is natural to now move to electronic or ePortfolios. Besides the general advantages of electronic systems like storage capacity and ease of organising material there are a number of additional opportunities (Kahn, 2004):

- Variety of media: audio and video recordings can be included and accessed via just a few clicks, allowing for the inclusion of primary sources;
- Linking and background material: links between electronic documents facilitate non-linear browsing of material; rich background material can be easily bound into the portfolio without cluttering the main flow;
- Sharing and publishing: electronic material can be easily duplicated and distributed; this can be used for sharing in confidence or with a wider audience.

A wide range of tools can be used for ePortfolio purposes. This includes specialised ePortfolio systems but as well general purpose tools that can assist in the collection of evidence and reflection. The institutional context mainly sees the use of specialised ePortfolio systems. Such systems have a learner management component similar to learning management systems (or are integrated into learning management systems). The institution is in control of setting up user access rights. There are usually different levels of access rights for students and instructors and students might be grouped around course structures.

Role of institutions in supporting lifelong learning

Lifelong learning focuses on the individual lifelong learner. Educational institutions, who accompany a learner on a specific part of their lifelong learning journey, play an important role in supporting lifelong learning. This link is evident from governmental policy directions and directions stated in institutional documents. For example, the Tertiary Education Strategy of the New Zealand Ministry of Education expects tertiary institutions to contribute to "Success for all New Zealanders through lifelong learning" (TES, 2008, p7). The graduate profiles of many degree programs explicitly mention the lifelong learning skills a graduate will possess (Davies & LeMahieu, 2003; McAlister & Alexander, 2003). This emphasises the responsibilities of educational institutions in supporting lifelong learning. The questions arising from here are how institutions fulfil these responsibilities and what e-learning system approaches are being employed.

Institutions like Queensland University of Technology (see http://www.studenteportfolio.qut.edu.au/) and The University of Warwick (see http://www2.warwick.ac.uk/study/csde/gsp/eportfolio/) have selected institutional ePortfolio systems. These systems are made available centrally and support on technical and conceptual levels is provided. The ePortfolios at Queensland University of Technology are directed at all students. Specific emphasis is put on assisting students with the transition into employment. Graduate capabilities are highlighted. At Warwick the focus is set on facilitating and documenting research skills. The portfolios are available to research students and are to facilitate exchange with other researchers, employers and the community.

The College of Sciences at Massey University has issued a draft policy on lifelong learning (see http://sciences.massey.ac.nz/eportfolios/lllPolicy.asp). The college acknowledges that it can play an important role in the development of lifelong, life-wide and self-directed learning skills and practices. It recognises that this development must occur beyond its sphere of influence. While the college provides support to learners, ultimate responsibility for learning lies with learners themselves.

Of particular interest to this article is the use of e-learning systems to support an ePortfolio approach. To prepare this discussion the next section explores parameters of the provision of traditional e-learning systems to be able to compare against the requirements of a lifelong learning approach.

Traditional approach to e-learning system provision

Over the past decade the use of learning management systems to support teaching and learning has become common place in educational institutions. The provision of these systems, which are the main form of e-learning systems offered, is characterised by the following parameters.

- Ownership: The institutions own the installation of the learning management systems they provide. They grant access to students and instructors. The institutions own the services and the data stored. They regulate access and usage via their e-learning and information technology policies.
- Responsibility: The institutions carry the responsibility for the availability of the service in terms of features and system uptime. They look after safety and security issues. They provide help desk services for students and instructors. The institutions are responsible for the content stored in their systems and need to guard their systems against inappropriate material.
- Course structures: Usage of a learning management system is structured in terms of courses. Shared work areas are setup for all students enrolled in a course and the associated instructors. The interaction within the e-learning environment is regulated by the course structures. Sharing beyond course boundaries is not supported and access to learning material and interactions is restricted to the course duration, as set by the institution.
- Hierarchy: Institutional systems contain a hierarchy. The instructor in charge of a course sets the parameters for student interaction, for example by the types of tools made available. The instructor has access to all student data and can monitor student participation, for example by studying student access patterns. The students are restricted in their interaction within the system, both for their own use and for their interaction with peers.

Overall it can be said that learning management systems mirror the institutional side of the learning landscape. The systems follow course structures as set by the institutions, direct learners and put instructors in charge of defining the learning interactions. A number of institutions, like Queensland University of Technology and The University of Warwick mentioned earlier, have transferred this institutional approach to the provision of ePortfolio services. The next section of this article points to contradictions between the institutional approach and the lifelong learning paradigm.

Contradictions between traditional approach and ePortfolio lifelong learning requirements

ePortfolio systems setup following a traditional institutional approach have strengths, like central storage, access and security, and weaknesses, like focus on institutional needs, no sense of ownership for the individual and conflicts with lifelong learning needs (Herman et al., 2008). Many of the strengths of traditional centralised e-learning system provision remain valid for ePortolio systems. Yet, the contradictions between centralised, institution-owned services and the lifelong learning paradigm need to be explored further.

- Institutional affiliation is temporary: As expressed by the name, lifelong learning is associated with the lifetime of the learner. It makes therefore sense to locate one's lifelong learning efforts and records within a system that will be available long-term. Lifelong learning will contain many phases and transitions, and the affiliation with any one institution will only be of temporary nature. This contrasts with the idea of using an institutional system that will only be available as long as a learner is enrolled with a particular institution.

- Lifelong learning cannot be compartmentalised into course structures: While lifelong learning is supported by the work done in individual courses, it clearly crosses the boundaries between courses. Development should occur focussing on skills, regardless of in which unit of a course they are gained. This is contrary to a traditional system approach, where learning support occurs divided by course boundaries. The lifelong learner should be encouraged to reflect based on skills and competences, to develop a holistic view of their abilities and subject area.

- Lifelong learning requires privacy: Lifelong learning, like any form of learning, requires to work through less positive experiences. It means admitting to mistakes, analysing these and preparing for improvements. This will only be possible in a system environment in which the student feels in charge and knows that their data and reflections are protected from others. This conflicts with an institutional system, where not only technical staff have access rights but, based on the hierarchy between instructor and student, instructors often are able to access all learner data.

- Lifelong learning includes life-wide learning: A core aspect of lifelong learning is the inclusion of learning opportunities and experiences that occur outside the formal education system. Work placements, community involvement or other extra-curricula activities offer rich settings for lifelong learning. Yet, institutional e-learning systems are commonly governed by policies that explicitly restrict the use of these institutional systems to institutional contexts.

- Lifelong learning requires self-direction: Lifelong learners need to take charge of their own learning. They need to recognise what skills and competences are important, where they stand in terms of their development and how best to move forward. While guidance is welcome, it is important that guidance does not develop into restrictions or too much hand-holding. With an institutional system there is the danger that the instructors take charge of the learning processes and undermine the self-direction of the learner.

It is important that the lifelong learner develops a sense of ownership of the system they are using and that data they are producing. They need to be ensured long-term access and, while institutional help is welcome, have to know that they are in charge of their learning.

New approach to systems provision

Following on from the contradictions of a traditional institutional e-learning systems approach and the needs of lifelong learners a new approach to systems provision needs to be found. This approach should retain as many advantages of institutional systems as possible, such as comprehensive support, a safe learning environment and connections between learners. The suggestion for a new approach to retaining advantages while better supporting lifelong learning is to stay with the use of an institutional-type ePortfolio system but to have this system hosted outside institutional structures. What needs to be found is an external provider for an ePortfolio service. The individual learner has a business relationship with this provider that offers access to ePortfolio tools in a safe environment. The learner is in full control of their own data, has the environment for developing their own learning communities and can access system features and data long-term. The learner, while being a student, still has an instructional relationship with a tertiary provider who gives learning support, defines points of contact and determines deliverables for assessment purposes. In difference to the traditional approach the business and instructional relationships are separated. The learner is in charge of the lifelong and life-wide aspects and has ownership of all data stored in the ePortfolio system. The institution does not have responsibility for either the long-term or life-wide aspects. It only forms a relationship with the learner during their time of enrolment and only for their learning related to their programme of study. This setup corresponds well with the temporary nature of the relationship between tertiary institution and learner and the restriction of the relationship to formal learning.

The approach suggested here is currently explored in the New Zealand ePortfolio landscape. The ePortfolio system Mahara (http://www.mahara.org/) is hosted by a private company who provides an ePortfolio service, accessible via the website http://myportfolio.ac.nz/. MyPortfolio connects learners across New Zealand. After establishing an account a learner has access to a full set of ePortfolio tools and long-term access to data they create. During periods of study at a tertiary institution a learner can share artefacts and reflections with instructors, while staying in full control of access right.

Concluding remarks

The shift to a new form of systems provision for ePortfolio systems, as proposed in this article, is challenging. It challenges institutional and instructor understanding of being in charge of learner activities, of being able to control access and data stored by individual learners. The role of the institution changes from controller of access to facilitator of an environment that is connected with the learner long-term but has institutional links only for a specific period of time. The challenge for the instructor is to provide enough guidance so the learner can develop their skills and competences. The instructor needs to provide contact points, at which the learner is required to give insight into their learning activities. The learner is provided with more possibilities – and responsibilities – to connect with others to create learning communities that will include fellow students, friends, advisors and lecturers as peers.

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