ePortfolios in Higher Education: The University of Alberta experience (0068)

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Introduction

The recent surge in the adoption of ePortfolios (EPs) in the mainstream curricula of higher education is due to the versatility of EPs and their ability to demonstrate learning through the collection, selection, reflection, and presentation of best works over a period of time and in different formats. As Stefani, Mason and Pegler (2007) asserted, ePortfolios support "presentation, personal development, learning, and assessment based on the constructivist paradigm (p. 11). As the need for accountability in the education systems increases, universities are forced to incorporate innovative strategies in the classroom not only to ensure viability but also to demonstrate "value-added education" (Ring, Waugaman, Brackett & Jackson, 2015, p. 311).

Review of the Literature

The portfolio trajectory dates back to the early 1900s with a history in the disciplines of arts, design and architecture. Its present web-based format – ePortfolios or webfolios is an emerging and evolving pedagogical trend in education. Four broad categories of EPs are repeatedly referenced - learning, presentation/employment/showcase, evaluation/assessment (Barrett, 2005; Penny & Kinslow, 2006), and personal development (Malita, 2011; Stefani et al., 2007). Love, McKean and Gathercoal (2004) described the developmental stages of ePortfolios using a five-level taxonomy with each level being an incremental step to the ideal. At the fifth and highest level, there is authentic evidence for assessment, evaluation and reporting. Opportunities are there for learners to receive feedback, reflect on their strengths and weaknesses, and improve their work. Good ePortfolios are aligned to the "designing of authentic assignments, using engaging and active pedagogy, periodic self-, peer- and teacher-formative assessments, and requiring students to reflect on their learning" (Miller & Morgaine, 2009, p. 12).

The Study

The University of Alberta is a comprehensive university with almost 50,000 students in 18 faculties. Mahara, an open-source platform, is used exclusively for the development of ePortfolios and due to interoperability and compatibility with the Moodle platform, there is seamless access for students and faculty.

This research question is *What are the experiences of stakeholders (instructors, administrators, and program support personnel) with ePortfolios?*

Eighteen participants who used EPs in teaching and learning or who intended to use EPs in the future were interviewed. This study is positioned in the constructivist paradigm with an interpretive approach (Denzin & Lincoln, 2008). The researchers listened to the responses of the participants, interpreted their experiences, and constructed meanings.

Discussion of Findings

This section discusses the overarching themes or big ideas which emerged from the interviews of both the users and non-users of ePortfolios and the following two tables provide an overview of the data analysis.

	Purposes and Objectives		**Experience and Awareness**
a.	Evidence of students' learning – repository, assessment of skills and competencies, reflection	a.	Participants had diverse level of experience and earlier exposure – self-taught, trial and error, formal training, online tutorial, research consultation
b.	Showcase/presentation -	b.	Awareness of other platforms – google sites, WordPress, weebly, wikispaces
c.	Personal development	c.	Mahara
d.	Achievement of outcomes (course, program) – technology in education, transition, accreditation, capping exercise		
	Uses and Usability (real)		**Benefits (Real)**
a.	How it is used is same as objectives/purposes Features that support creating, gathering, and storing of artifacts easily	a.	Eportfolio mantra – collect, select, reflect
b.	Features that facilitate interaction, customization and self-expression	b.	Assessment, achieve outcomes (course, program)
c.	Resume building	c.	Develop reflective and lifelong learners
		d.	Employers are able to see developmental path of prospective employee
		e.	Great way for authentic assessment
	Challenges (Real)		**The way forward**
a.	Lack of intuitiveness, robustness, flexibility	a.	Improved usability, and proof of mastery
b.	Analytics & rubrics for assessment	b.	Access – after graduation
c.	Lack technical know-how	c.	Features – interface, rubric, exportability
d.	Frustration with the software not EPs.	d.	Access to best practices and technical support
		e.	Holistic management and administration

Table 1: Big ideas from interviews conducted with Users of ePortfolios

	Possible Purposes and Objectives		**Awareness**
a.	Reflection	a.	From colleagues
b.	Showcase students' work	b.	At staff meetings
c.	Assessment and outcome		
	Perceived Uses and Usability		**Perceived Benefits**
a.	Showcase competencies and skills/Practicum	a.	Eportfolio mantra – collect, select, reflect
b.	Prepare students for career	b.	Valuable tool
c.	Link course and program outcomes	c.	Showcase students work

d.	Assessment tool – formative & summative	d.	Repository for students work
	f. Simplicity and ease of use	e.	Track students learning
	g. Integration with eclass and other external software		*"No advantage"*
	Perceived Challenges		**The way forward**
a.	Accessibility	a.	No time to take on additional task
b.	Evaluation process	b.	Need more information
c.	Do not know enough about it	c.	Training – demonstration, workshops, tutorials
		d.	Knowledge about ePortfolios and Mahara
		e.	Need 'evidence from research'
			Need to explore further

Table 2: Big ideas from interviews conducted with Non-Users of ePortfolios

Conclusions and Implications

The fundamental ePortfolios principles - collect, select and reflect - are the gateway to the development of 21st century workplace skills in students. Skills such as critical inquiry, communication, collaborative learning, technological competence, and creativity are essential to survival both inside and outside of the classroom. However, institutionalized successful ePortfolios is not as easy and Meyer and Latham (2008) state that successful implementation "requires strong support from university administration and a broad spectrum of stakeholders involved in the decision making and planning" (p. 35).

The assessment elements of eportfolios cannot be over-emphasized. Faculty members should have easy access to generic rubrics that can be adapted in different departments/faculties. It is essential that there is access to interactive training materials and guides to best practices on how to frame ePortfolios and improve assessment of student learning. Tutorials and other training tools should provide strategies for motivating and encouraging other users (faculty and students).

Recognizing that most participants believed in the value of eportfolios, it behooves educational institutions to select an eportfolio platform that is user-friendly, flexible, and aesthetically pleasing but also has a professionally satisfying ePortfolio interface. The functionalities should provide easy access to and manipulation of internal and external artifacts. At the same time, the ePortfolio should be exportable and sharable especially for postgraduate purposes.

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