Summary: ePortfolio (eP) as the basis for a campus-wide electronic portfolio

An electronic portfolio (eP) is a digital learning record that permits students to document their learning process and their growth over time. An eP gives students a means to organize, summarize and share their ideas, information, papers and other artifacts that demonstrate learning, critical reflection and change. When shared with faculty, mentors, or advisers, the electronic portfolio serves as a teaching and evaluation tool to promote development of learning goals and evaluation of individual and group progress toward established learning outcomes.

This report will focus on the eP developed at UVIC in the Faculty of Education that now serves as a model for cross-program use of an eP platform. The Uvic eP platform has been successfully infused into Faculty of Education undergraduate programs with currently over 1100 users and has been piloted in the Schools of Nursing and Social Work.

The following benefits can be transferred from the eP platform to UVic strategic goals:

1. Supports UVic’s Strategic Plan for experiential and lifelong learning.
2. Creates a mechanism to articulate and value for community-based knowledge and for recognizing service learning as a transformative process for students.
3. Enables ongoing and systematic mentoring space around program requirements through instructor-to-students and peer-to-peer exchanges.
4. Allows University programs to gather evidence addressing learning objectives creating continuous feedback loops that strengthen academic accountability.
5. Integrates learning from across courses in relation to program requirements offering a way to combat fragmentation between disconnected courses.

Objectives of eP would be to:

1. Provide assessment that values life-long learning and experiential learning.
2. Enable an assessment process that values engagement.
3. Promote the use of dynamic and sophisticated ways of knowing and representing that enable current social networking skills to inform knowledge creation.
4. Facilitate students’ abilities to create a rich and authentic résumé.
5. Develop strategic integration with e-learning systems at UVic to support the efficient use of resources such as the proposed integration with MOODLE.
Background

UVic's eP is an online, open source tool that allows students to document examples of professional competencies and learning experiences, reflect on and articulate their learning, and provide external viewers access to mentor and comment evidence presented (see Fig 1). The eP tool was created by Tim Hopper, Associate Professor of Education, and Kathy Sanford, Associate Dean, Faculty of Education, through a SSHRC funded grant. The tool and the learning process it supports have been adopted by the Faculty of Education program-wide at the undergraduate level, has been taken up Vancouver Island University, and has been piloted and is currently being implemented at the graduate level by the School of Social Work and the School of Nursing. A project within University Systems was presented and approved in early 2009 for an ePortfolio/MOODLE integration. This integration will occur in fall 2010/spring 2011 when MOODLE 2.0 is tested and ready for service.

Figure 1 Matrix, reflection entry and example reflection page

Higher Education and Learning

Traditionally, higher education tends to silence students’ voices and lends no warrant to the authority of their experiences. In higher education generally there is concern in relation to fragmentation between courses, maintenance of a theory-practice divide, and reporting of research that does not connect to the “real world” of students. Innovations in higher education programs are too often nullified by the structural fragmentation and competing agendas that typify traditional programs of higher education.

In Hopper and Sanford (2009) an action research methodology was used to support and report on the evolution of the innovated ePortfolio process in the UVic teacher education program. This study noted the competing agendas and resistance to technology, however in line with Wetzel & Strudler’s (2005) review on ePortfolios in five major US universities, the gradual development of pedagogical practices that drew on the potential of the ePortfolio was noted. These two studies indicate that eP practice can be infused into existing academic programs to create a genuine vehicle for ongoing, systematic and transformative learning.

How it works

The UVic eP enables students to demonstrate how they have addressed professional competencies to meet certification within a simple matrix structure. The present eP platform created over the last five years in the Faculty of Education has gone through much transition, from an html template to now a sophisticated MySQL database within a PHP interface that
generates html ePs as required. The assessment structure allows instructor-to-student and student-to-student feedback (see Fig 2 showing exchanges). In addition, the eP allows cross-course comparison of artifact selection and student progress, plus a focused overview of reflective writing by students on selected artifacts. The features of eP have been created over time from pedagogical needs, instructor input and student feedback.

Figure 2: Show exchanges between instructor and students
Modeling a MOODLE commitment to social constructionism, the eP allows peer-to-peer interactions with user choice over what to select as evidence and what the evidence addresses. Built-in versioning allows ongoing edits of reflective writing to be made but with a continued record of changes. Increasingly, as software platforms supports instructors allowing students’ to use multi-media tools (i.e., video, images, hypertext) to represent and create learning experiences, the eP platform allows students to gather these dynamic learning artifacts into a meaningful network that leads to rich insights on how to address problems, inform issues and ultimately create new knowledge.

Figure 3 Instructors interface to give feedback and view student artifacts
Strategic Benefits
Institutionally, the eP project has received support from a variety of departments and units including the Learning and Teaching Centre, and Learning Systems. Learning Systems has been assisting with technical developments for a number of years, and is quite familiar with the code base, administration and support needs of the program. With this broad support, it has the potential to fill, consensually, a central need for a stable, pedagogically sound, student ePortfolio solution at UVic; in this case, locally grown, but with wide interest externally. eP is already in the adoption phase at Vancouver Island University, with similar interests in using the platform from Faculté St. Jean at University of Alberta, and Sherbrooke University, Quebec. As an open source product, the eP has been adopted, modified, and suited to the needs of the various programs, based on user feedback, and has substantial academic and institutional backing.

Future Technical Development and Support
There has been discussion to target a 2-3 year window in which to assess the growth and uptake of ePortfolio, and to consider: 1) either an enterprise application development of the eP; or 2) an integration of eP with an existing open source ePortfolio suite such as Mahara (2009), to create a strategic ePortfolio solution campus-wide. These solutions would require a degree of re-write of the eP application whilst maintaining key features, to create a single installation of the software that can service several programs with different standards, or the same program with revised standards in subsequent years. Currently, each program requires its own eP platform instance.

In the meantime, we continue to receive feedback from both our existing and new users on necessary feature sets to improve functionality and to simplify use. These ongoing developments are crucial to the continued use and future adoption of the application across campus and with our partners. We have already outlined a number of technical developments that would meet evolving demands, as well as allowing University Systems to develop familiarity and expertise with the technical framework and code base (same for both MOODLE and eP). This familiarity would assist greatly in coming years with both the MOODLE/ePortfolio integration and the enterprise level ePortfolio solution.

References