Chapter 9: Conclusion and recommendations

9. CONCLUSION AND RECOMMENDATIONS

While the Australian ePortfolio Project was an intensive research project, it is believed that the data collection activities undertaken from late 2007 to mid-2008 effectively captured the views and experiences of the different stakeholder groups engaged with ePortfolio practice in higher education in Australia. It is acknowledged that the picture presented represents a snapshot in time, and that the interest in ePortfolios is growing. The specific range of research methodologies was selected in order to ensure the reach was as broad as possible. A mixed method of surveys, focus groups, semi-structured interviews and symposium activities enabled the research team to consider many different perspectives of ePortfolio activity, including university managers, academic developers, educational technologists, teaching staff, government policy makers, representatives of the schools and vocational education sectors, employers and recruiters, and of course students themselves, both those new to ePortfolios and those with considerable experience with them.

The research findings revealed that there was a high level of interest in the ePortfolios in the context of higher education, particularly in terms of the potential to help students become reflective learners who are conscious of their personal and professional strengths and weaknesses, as well as to make their existing and developing skills more explicit. The value of ePortfolios in the graduate recruitment process was recognised, as well as the need for interoperability across the different areas of education and employment, which resonates with the current government policy focus on integration between vocational and higher education and the articulation of employability skills.

Findings from the audit provided evidence that there were some interesting examples of good practice in different institutions, although this tended to be distributed across the sector. The main research findings indicated that:

- The greatest use of ePortfolios was recorded in coursework programs, rather than research programs, with implementation generally reflecting subject-specific or program-based activity, as opposed to whole of faculty or university activity.

- Staff use of ePortfolios tended to be sporadic but was more common amongst academic staff than professional staff.

- There was considerable exploratory interest in ePortfolios in tertiary education, with respondents reporting current investigations into, plans for and imminent implementation of ePortfolios for learners.

- A wide range of tools was being used: the learning management system was the most common application, but paper-based systems, student web pages, blogs and wikis featured. There was often an element of choice of tool, which underscored the climate of experimentation.

- The main uses for the ePortfolio by learners were the two dimensions of collecting evidence of learning and reflecting on their learning activities, generally in combination.

- There was an even balance between formative and summative assessment of the ePortfolio, with assessment focusing on different aspects: the ePortfolio as final product, the artefacts in the ePortfolio, and student reflection on the process of developing their ePortfolio.

- Responsibility for implementation frequently rested with the individual teaching unit, although a centralised model of coordination by ICT services, careers and employment or learning and teaching support services was occurring.

- ePortfolio policy was mainly the responsibility of the learning and teaching support division, with some emergent examples of collaboration across the institution; a good proportion of respondents revealed, however, that there were as yet no formal policies.

- Strategic direction was primarily offered by central learning and teaching divisions. In some cases, joint responsibility was attributed to committees encompassing academic interests, careers and employment and ICT services.
Successful practice highlighted the need to embed or integrate ePortfolio activities into the curriculum; to have the clear commitment and buy-in from academic staff; to have a sound ICT infrastructure, adequate funding and overt support from champions; and to develop strong linkages with university strategies and policies.

There was an express desire to draw on best practice to share ideas, knowledge and experiences across the institution and across the sector. The Australian ePortfolio Symposium held in February 2008 was acknowledged to be an important first step in this process.

The data captured in the audit findings were augmented by the qualitative information gathered through the focus groups and semi-structured interviews. It was apparent that the role of ePortfolios is most clearly acknowledged at the practice level, in the immediate learning context where students interact directly with the teaching staff. However, at the present time, the implementation and use of ePortfolios in Australia is fragmented, especially when compared with Europe, the UK or the Netherlands, so that further development is required to achieve leading-edge practice.

There is, nevertheless, a strong interest in progressing towards more widespread adoption of ePortfolios in higher education, with awareness that collaboration within and across institutions, as well as within and across the disciplines and the professions, offers the potential for cohesive strategies for development. Progressive growth in practice cannot happen in isolation, but will require support through relevant policy development.

In environments where government and academic policy has been determined with the express goals of bringing together the dimensions of integrated education and learning, graduate attributes, employability skills, professional competencies and lifelong learning, the stimulus for ePortfolio practice is increased. In such contexts, the correlation between the attributes of a skilled and productive workforce and the quality of learning outcomes from academic institutions has been recognised. Evolving education and employment policy in Australia, together with initiatives such as the Australia 2020 forums and the Review into Australian Higher Education, may provide impetus for discussion amongst the stakeholders about the potential for ePortfolios to weave some of the disparate policy strands together.

Survey respondents, focus group participants and delegates at the Australian ePortfolio Symposium agreed that guidance and support were required for progress to be made in the short to medium term. The concept of communities of practice was identified as one of the mechanisms that would be of significant value, to encourage the sharing of good practice as well as lessons learned, for example, through case studies and information resource kits. The research team acknowledges that, given the timeframe for the project, it was not possible to develop detailed case studies of ‘best practice’ in the use of specific ePortfolio tools or to illustrate excellence in the use of ePortfolios by learners to demonstrate the attainment of specific professional standards. The project team is currently finalising the development of a series of toolkits to contextualise some of the work undertaken by JISC in the UK through a series of guidance notes targeted, for example, at academic managers, educational technologists, ICT managers, teaching staff and students, and also employers.

The research clearly indicated that not all ePortfolio practice is at the same level of maturity. The guidance notes therefore need to relate to these different levels of maturity, which will, in turn, support the development of detailed case studies. The work by Becta (2007) presents a range of models to assess maturity, covering institutional policy, curriculum ICT policy, connectivity to support ePortfolio development, interoperability, institutional embedding, staff commitment and engagement, and learner commitment and buy-in. These maturity descriptors have been adapted for the immediate context of ePortfolio initiatives in Australian higher education (see Appendix) so that stakeholders can consider and discuss the level of their preparedness to implement or scale up an ePortfolio system.

In concluding the Australian ePortfolio Project, a number of recommendations are presented to help progress ePortfolio practice in higher education. The project investigation identified four individual, yet interrelated, contexts where strategies may be employed to support and foster effective ePortfolio practice (see Figure 9.1):
Learners provide the overarching context for the use of ePortfolios; to support the achievement of learning outcomes and gain an understanding of the learning process itself. Active engagement with ePortfolios can help learners transition into employment or into further education by providing evidence of their achievements, and can scaffold their career development over a period of time, but there also needs to be strong institutional and pedagogical frameworks of support. It is important that there is open dialogue and collaboration between the stakeholders across this range of contexts, ideally with a common vocabulary and shared understandings to reduce confusion about both the ePortfolio product and process.
The current policy environment of the Federal Government seeks to enhance the quality of education, encourage widened access to education opportunities, and stimulate integration between vocational education and training and higher education in order to support innovation and productivity to ensure ongoing national economic development and growth. Indeed, internationally, ePortfolio policy and practice seek to draw together the different elements of integrated education and learning, graduate attributes, employability skills, professional competencies and lifelong learning, ultimately to support an engaged and productive workforce. The recent proposal for an Australian Higher Education Graduation Statement seeks to provide an internationally acceptable format for presenting institutionally authenticated information about learners, while an ePortfolio can help them better understand the value of their achievements, not only through their academic studies, but also through formal and informal learning activities in other areas of their lives.

**Recommendation 1**

It is recommended that the government departments with responsibilities for education engage with peak industry, professional and employer bodies to develop a shared understanding of the potential of ePortfolio practice to articulate employability skills.

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**Recommendation 2**

It is recommended that government policy recognise ePortfolio practice as a strategy to build an integrated relationship between higher education and the vocational education and schools sector, in order to support the individual's lifelong and lifewide learning needs and to increase the potential for career progression.

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**Recommendation 3**

It is recommended that the higher education sector acknowledge the role of the Australian Higher Education Graduation Statement as an authenticated document reporting student achievement, compiled and verified by the academic institution at the time of graduation, while further acknowledging the value of the ePortfolio process to articulate the integrative aspects of student learning.

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Learner mobility within and between education, training and employment sectors requires processes that will allow data about individuals to be both exported and imported across different systems and services with the assurance that the data is both secure and accessible. Technical standards and interoperability issues developed through international collaboration (for example, the eFramework for Education and Research, and the IMS Global Learning Consortium) represent a key aspect of ePortfolio practice, supporting the exchange of information and data across institutional, sectoral and jurisdictional boundaries.

**Recommendation 4**

It is recommended that Australian ePortfolio stakeholders continue to develop the collaborative relationship with partners in the eFramework for Education and Research initiative in order to ensure that aspects of ICT in education and research are developed and implemented strategically.

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Recommendation 5

It is recommended that the international information standards for ePortfolio practice be adopted as an Australian technical framework, in order to facilitate the exchange of information and data across institutional, sectoral and jurisdictional boundaries.

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It is important for academic managers to have a broad understanding of the benefits and value that ePortfolios can bring to learning, teaching and career development processes, so there is scope for an ePortfolio culture to become an integral aspect of the academic environment. Those engaged in the institution's learning and teaching policy environment need to be conscious of the potential of ePortfolios, when integrated into current and future eLearning strategies, to contribute to student-centred learning strategies, transparent learning outcomes and the relevant employability skills for graduates. Significantly, the successful adoption and implementation of ePortfolios require strong alignment between the strategic, tactical and operational areas of academic management.

Recommendation 6

It is recommended that academic policy in higher education institutions recognises the value of ePortfolio practice as a component of different pedagogies that enhance the quality of learning and teaching across the institution.

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Many early adopters of ePortfolio practice have recognised the potential of the ePortfolio process, when it is embedded in learning and teaching activities, to help students move beyond the state of knowing what they have learned to consider how they have learned. By reflecting on their own learning and achievement, learners are encouraged to plan for their personal, academic and career development. Currently, ePortfolio practitioners in higher education are eager to break away from their sense of isolation and work collaboratively across disciplines and institutions to further their knowledge and understanding. There is scope to develop a community of practice that will provide valuable channels of communication between educators with shared interests and ideas, and encourage scholarship and research. Compared with many other countries such as the United Kingdom, United States of America and the Netherlands, Australia is in the early stages of ePortfolio practice and research. There is scope to undertake investigations into the impact of ePortfolios on key areas on learning outcomes within and beyond university.

Recommendation 7

It is recommended that the various stakeholders in higher education who are interested in ePortfolios utilise the ePortfolio Toolkit (under development) to guide and inform their practice.

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Recommendation 8

It is recommended that ePortfolio stakeholders establish a Community of Practice to share learning and experiences of quality ePortfolio practice in higher education, in order to foster scholarship and research and to provide a forum for dissemination about good practice.

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**Recommendation 9**

It is recommended that a regular Australasian conference be convened to explore and discuss ePortfolio research and practice.

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**Recommendation 10**

It is recommended that the Australian Learning and Teaching Council adopt a leading role to foster and support further research into the educational benefits of ePortfolio practice.

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This report has presented the project team analysis of the national and international contexts of ePortfolio development, as well as the issues and challenges associated with ePortfolio practice. The different stakeholder groups have been identified, with consideration given to their respective roles and responsibilities, encompassing both policy and practice. There are many discrete building blocks in effective ePortfolio projects that represent the different stakeholder groups and the diverse dimensions of organisational culture, pedagogy, technological and academic support, as well as educator and learner commitment. One single building block, however substantial, does not guarantee success, but the various building blocks need to be both aligned and interconnected, with strong governance providing a clear rationale for and commitment to the initiative, especially to ensure sustainability as pilot projects are scaled up into faculty-wide or institution-wide systems.

If the higher education sector is to effectively fulfill its role in producing skilled professionals who, through continuous learning, career progression and coherent employability strategies, will play a significant role in the future success of the Australian community and economy, then the potential of ePortfolios to bring together educational technologies and quality learning processes, and to provide evidence of individual achievement and employability skills, should not be ignored.

It is hoped that the opportunities offered through this investigation will enable clearer focus to be given to the policies and strategies required at both the sectoral and institutional levels to progress ePortfolio practice in Australia.