Australian ePortfolio Project – Stage 2

ePortfolio use by university students in Australia: Developing a sustainable community of practice

Final project report December 2009

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Australian ePortfolio Project

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Final project report: December 2009
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<td>Australian ePortfolio Project</td>
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Executive summary

This report documents Stage Two of the Australian ePortfolio Project (AeP2), to specifically explore the current scope of national and international ePortfolio communities of practice in order to identify the factors that have contributed to their success and sustainability. The study has built on Stage One of the Australian ePortfolio Project (Hallam, Harper, McCowan, Hauville, McAllister, & Creagh, 2008), which outlined the broad range of issues and challenges, as well as significant opportunities, that face the higher education sector in terms of ePortfolio practice, to determine how the emergent community of ePortfolio researchers and practitioners in Australia might be advanced.

The overarching aims of this project were to focus on building the Australian community of practice through an online forum and further symposium activities. Through the research activities the project sought to generate the following major outcomes:

• Develop a forum within the ALTC Exchange to support an ePortfolio community of practice.
• Develop strategies to encourage interest in and engagement with community of practice activities.
• Develop and promote resources to support the diverse stakeholders in ePortfolio practice.
• Collaborate in the establishment of a cross-sector ePortfolio community of practice.
• Host a second Australian ePortfolio Symposium (AeP2) to disseminate the findings from the Australian ePortfolio Project; to explore innovative practice in ePortfolio use in higher education; to articulate policy developments, and to stimulate discussion on international ePortfolio issues.
• Host an associated trade display as a forum for strengthening the higher education sector’s understanding of the features and functionality of ePortfolio platforms.
• Develop resources to support an ePortfolio symposium model that may be adopted for future events.

The project extended from December 2008 to July 2009. The AeP2 team successfully achieved the desired outcomes for the project, which contributed to strengthening the sense of community through the following initiatives:

• A second Australian ePortfolio Symposium (AeP2) was hosted to disseminate the findings from Stage One of the Australian ePortfolio Project, exploring innovative practice in ePortfolio use in higher education, articulating policy developments and stimulating discussion on international ePortfolio issues.
• An associated trade display was held as a forum for strengthening the higher education sector’s understanding of the features and functionality of ePortfolio platforms.
• A forum was developed within the ALTC Exchange to support an ePortfolio community of practice.
• A range of strategies was developed and implemented to encourage interest in and engagement with community of practice activities.
• The AeP Toolkit was developed and promoted to support the diverse stakeholders in ePortfolio practice.
• There was effective collaboration with colleagues in the vocational education and training sector to contribute to a cross-sector ePortfolio community of practice.
• Initial plans are in place to hold an ePortfolio symposium event in 2010 in collaboration with other ALTC projects and the e-Portfolios — Managing Learner Information business activity team with the Australian Flexible Learning Framework.

Accordingly, the project team was able to maintain the significant national and international profile gained during the initial AeP project and to disseminate information about ePortfolio practice to a broader audience.
The project commenced with a review of the literature to define and explore existing models of communities of practice and to identify best practice frameworks that might guide the development of an Australian online ePortfolio community. The themes and issues identified in the literature guided the research process. The data collection activities examined the requirements for the development of a community of practice, considered from the perspectives of the different stakeholder groups, including academics, learning designers, learning and teaching and ICT support staff, careers and employment services, human resources managers, academic managers and the learners themselves.

The project activities encompassed a survey of stakeholders, a program of semi-structured interviews with community managers and a series of case studies depicting successful ePortfolio communities. The survey of ePortfolio practitioners sought to determine the potential value of an ePortfolio CoP, the preferred focus for and the desired features of such a community, as well as the options for the technical and social architecture of an online forum. Through the semi-structured interviews it was possible to examine current examples of CoP activity, to identify the critical success factors and the challenges faced by individual ePortfolio CoPs, so that the attributes of good practice could be presented.

The data collected in the interviews contributed to the development of 14 case studies, which have been beneficial in illustrating the diverse nature of CoPs in Australia and overseas.

The report presents a rich picture of national and international ePortfolio communities of practice, with an examination of the factors that have contributed to their success and sustainability.

The survey findings indicated that there is strong support for a CoP to support ePortfolio practice in the Australian higher education sector. There is a high level of interest in the concept of a hybrid forum that blends the benefits of an online community with opportunities for face-to-face meetings (for example, through further symposium events in the future). The focus of a new community could include a range of areas of interest, including pedagogy, technology and software tools, and policy. There is clear consensus that, at least in the early days, an ePortfolio CoP would benefit from the guidance and facilitation of a funded community manager, rather than being a purely organic entity. A CoP was seen to be an important initiative that would help consolidate current levels of interest and foster and strengthen the networking and relationships that were already emerging amongst those involved in ePortfolio learning.

While the semi-structured interviews provided insights into the distinctive aspects of the different communities based in Australia, New Zealand, the United Kingdom, the Netherlands and the United States of America, they also revealed considerable commonality of views and experiences. While the balance of virtual and face-to-face communication varied across the CoPs, there was a shared understanding about the critical success factors, with a clear need for the commitment of a funded facilitator in the early days of the community, in order to stimulate member engagement and to organise regular activities to assist and build the networks and relationships.

There was agreement about the challenges faced by CoPs, with technological issues, difficulties in maintaining member engagement and the workload of the facilitator all cited as barriers to community development. Nevertheless, all facilitators expressed a clear desire to ensure that their CoP not only had a strong and vibrant future, but that the different communities should work together to strengthen the role of ePortfolios as a tool for learning and teaching and for career development.

The AeP2 project encompassed six key areas of activity that have contributed to building a sense of community amongst local ePortfolio stakeholders:

- The AeP Toolkit, comprising a suite of six published concept guides about ePortfolio practice (see Appendix 1).
- The AeP2 Symposium, as a face-to-face forum to explore and discuss innovative practice.
- The AeP2 Showcase, to develop shared understandings about the features and functionality of the ePortfolio platforms available in Australia.
- The AeP2 Technical Issues and Opportunities meeting to consider the topics of policy, standards and interoperability.
- The ePortfolio Practice Group, established as an online community space within the ALTC Exchange (http://www.altcexchange.edu.au/eportfolio-practice).
• The ALIA/AeP2 LIS ePortfolio Pilot Study, introduced as an example of an industry-wide opportunity for ePortfolio practice to support learning and career development.

These activities all helped the diverse stakeholders in ePortfolio practice to come together and share ideas and experiences. They have also enabled the development and consolidation of relationships within and across academic institutions, between the tertiary and the vocational education and training (VET) sectors, as well as between the various disciplines and professions.

The AeP2 project, which has continued the momentum achieved through Stage One of the Australian ePortfolio Project, was particularly targeted: to establish, facilitate and encourage an Australian community of practice (CoP) for ePortfolio researchers and practitioners, and to introduce a regular Australasian conference to provide a forum in which to explore and discuss ePortfolio research and practice. The recommendations from the study are equally targeted: to promote the sustainability of ePortfolio CoPs and to encourage further stakeholder commitment to a regular face-to-face forum or conference.
Recommendations

Recommendation 1
It is recommended that the various stakeholders in higher education who are interested in ePortfolios utilise the Australian ePortfolio Toolkit to guide and inform their practice.

Recommendation 2
It is recommended that Queensland University of Technology takes responsibility for the management and/or facilitation of the ePortfolio Practice Group within the ALTC Exchange.

Recommendation 3
It is recommended that the current distributed model of ePortfolio communities of practice be continued, with member needs tailored to meet geographic, software platform, or discipline/profession/industry requirements.

Recommendation 4
It is recommended that, within individual academic institutions, ePortfolio communities of practice are encouraged and supported in order to develop common goals and shared understandings between the different ePortfolio stakeholders.

Recommendation 5
It is recommended that individual academic institutions, through their teaching and learning research funds, foster and support further research into the educational benefits of ePortfolio practice.

Recommendation 6
It is recommended that academic consortia such as the Australian Technology Network (ATN) sponsor cross-institutional research initiatives that will contribute to the development of a sound evidence base to support effective ePortfolio practice.

Recommendation 7
It is recommended that cross-sector collaboration continues through the e-Portfolios — Managing Learner Information business activity coordinated by the Australian Flexible Learning Framework, to ensure that international information standards for ePortfolio practice are adopted as an Australian technical framework, in order to facilitate the exchange of information and data across institutional, sectoral and jurisdictional boundaries.

Recommendation 8
It is recommended that the ALTC establish partnership and/or sponsorship arrangements that continue the branding of future ePortfolio forums as ALTC events held in association with other ALTC project or fellowship activities.

Recommendation 9
It is recommended that the 2010 Australian ePortfolio Symposium (AeP3) is planned to facilitate cross-sector collaboration between the higher education and vocational education and training sectors, in conjunction with ALTC-funded projects and fellowships and the Australian Flexible Learning Framework, in order to develop the interests in all stakeholders interested in the use of ePortfolios to support graduate employability, employability skills and learner mobility.
1. Introduction

1.1 Overview

This final report discusses the research undertaken with the Australian ePortfolio Project (AeP) to build on the initial examination of the use of ePortfolios in Australian higher education, in order to determine how the emergent community of ePortfolio researchers and practitioners might be further advanced. The report documents Stage Two of the Australian ePortfolio Project (AeP2), to specifically explore the current scope of national and international ePortfolio communities in order to identify the factors that have contributed to their success and sustainability.

The principal aims of the project have been to establish, facilitate and encourage an Australian Community of Practice (CoP) for those engaged in ePortfolio practice in Australian universities and to introduce a regular Australasian conference to provide a forum in which to explore and discuss ePortfolio research and practice. The project has been funded by the Australian Learning and Teaching Council (ALTC) and, as such, has required an explicit focus on the needs of the higher education sector. Nevertheless, the project has continued the momentum achieved through Stage One of the Australian ePortfolio Project, which had highlighted that there was a strong interest in the adoption of ePortfolios both across and between institutions and education sectors. The AeP2 project has enabled the development and consolidation of embryonic relationships between the tertiary and the vocational education and training (VET) sectors, as well as relationships between the various disciplines and professions.

1.2 Background

The final report from the Australian ePortfolio Project, released in October 2008 (Hallam, Harper, McCowan, Hauville, McAllister, & Creagh, 2008), outlined the broad range of issues and challenges, as well as the significant opportunities, that faced the higher education sector in terms of ePortfolio practice. This underscored the need at one level to establish an environment to support policy development not only within and across institutions, but also in the education and employment sectors, and at another level to ensure that those individuals who were interested in ePortfolio learning could engage in effective practice. The AeP final report argued that it was important for the different stakeholders — learners, teaching staff, IT and teaching and learning support staff, academic managers, professional bodies and employers — to have a broad understanding of the benefits and value that ePortfolios could bring to learning, teaching and career development processes, so there was scope for an ePortfolio culture to become an integral aspect of the academic environment. These different stakeholders needed to be conscious of the potential of ePortfolios, which, when integrated into current and future eLearning strategies, could contribute to student-centred learning, transparent learning outcomes and the relevant employability skills for graduates.

The AeP report also noted, however, that while the research findings had revealed a strong interest in the exploratory use of ePortfolios by university students, there was, in fact, little cohesion within individual institutions. Academic staff expressed their desire to escape from their sense of isolation and to work more collaboratively across disciplines and across institutions to further their own knowledge and understanding. It was felt that there was scope to develop a community of practice that could provide opportunities for communication between educators with shared interests and ideas, and could encourage scholarship and research.

At the end of 2008, the AeP project team was granted further funding by the ALTC to address the idea of an ePortfolio community of practice for the higher education sector. The principal objectives of the AeP2 project were to:

- Establish, facilitate and encourage an Australian community of practice (CoP) for ePortfolio researchers and practitioners.
- Introduce a regular Australasian conference to provide a forum in which to explore and discuss ePortfolio research and practice.
1.3 Scope of the study

Interest in the concept of communities of practice has been growing in the education sectors in recent years, drawing on the theories of Lave and Wenger (1991), which proposed that learning is 'situated', and thus linked to the processes of participation in communities of practice, which may gradually increase in the degree of engagement and complexity. In Stage One of the AeP project, it was found that 'compared with the diverse examples of ePortfolio communities that have been established [internationally] ... Australia has as yet seen very little activity' (Hallam et al., 2008, p. 128). At that time, activities were limited to a small number of mainly university-based ePortfolio symposia, forums and workshops; the establishment of a discussion group within the Education Network Australia (edna) online network; and activities in a range disciplinary communities within the ALTC Exchange. Anecdotal evidence gathered during the initial AeP project had indicated that there was considerable interest in both face-to-face and virtual forums for collaboration, but it was felt that, to date, little was directly known about the key factors of communities that might be suitable for an Australian academic context.

The AeP2 project was therefore established as an applied research project, charged with the responsibility to build on the strong interest in ePortfolios raised during 2008 and to introduce some community activities to continue the dialogue about ePortfolio research and practice in Australian education. The project extended from December 2008 to July 2009, with the principal tasks being to:

- Critically review the academic literature that discusses and analyses current community of practice activities.
- Survey the delegates to identify the key issues associated with their perspectives of communities of practice.
- Conduct interviews with the facilitators and active members of ePortfolio communities of practice internationally to identify the main principles of good practice.
- Develop a forum within the ALTC Exchange to support an ePortfolio community of practice as a virtual community group.
- Host the AeP2 symposium (9–10 February 2009) as a face-to-face forum for stimulating interest in and engagement with an evolving community of practice.

Accordingly, the project team was able to maintain the significant national and international profile gained during the initial AeP project and disseminate information about ePortfolio practice to a broader audience.

1.4 Structure of the report

This report discusses the research activities that represent the different components of the AeP2 project. Chapter 2 contextualises the project through a review of the literature to consider the academic writings on communities of practice in general and ePortfolio communities of practice in particular. The inclusion of a conjectural overview on CoPs has been necessary to assist in relating theoretical perspectives to the research findings. Specific attention is paid to the concept of the community lifecycle, which helped the project team better understand the different phases of community activities. Five main themes were considered in the literature review:

1. Aims and objectives of CoPs
2. Typical — or indeed unique — characteristics
3. Critical success factors for flourishing communities
4. Challenges faced by CoPs
5. Issues impacting on community sustainability.

These five themes were utilised to provide the focus and the structure for the AeP2 research activities.

The research methodologies are reviewed in Chapter 3 to consider the approaches used for data collection, including a survey, semi-structured interviews and case studies. The body of the report then presents an analysis of the different stages of the research project.
Chapter 4 provides a review of the diverse community activities undertaken under the auspices of the AeP2 project: the development of the AeP2 Toolkit with the series of six concept guides (see Appendix 1) for ePortfolio stakeholders, the AeP2 ePortfolio Symposium, the AeP2 ePortfolio Showcase, the AeP2 Technical Issues and Opportunities meeting, the industry study referred to as the ALIA/AeP2 LIS ePortfolio Pilot Study, and the embryonic ePortfolio Practice Group within the ALTC Exchange. The AeP2 project therefore reached out to a wide range of stakeholders to stimulate discussion on the pedagogical aspects of ePortfolios, the issues of technical standards and interoperability, the features and functionality of the various ePortfolio software platforms, and the use of ePortfolios in professional education and career development. These activities brought interested parties together in both face-to-face and virtual contexts.

Chapter 5 has a local perspective, presenting the findings from the survey of the broader AeP community, to identify the respective understandings about an ePortfolio community, the level of current or anticipated engagement with CoPs and the general needs, wants and expectations for an online ePortfolio community as a forum within the Australian higher education sector. These topics are then broadened in Chapter 6, which provides the synthesised findings from a series of semi-structured interviews conducted with the managers and/or facilitators of existing ePortfolio CoPs (based in Australia, New Zealand, the Netherlands, the United Kingdom (UK) and the United States of America (USA)) using the five key themes examined in the literature review and the concept of the CoP lifecycle to guide the discussions. Each individual community of practice is subsequently profiled in a series of case studies that are incorporated into Chapters 5 and 6.

1.5 Summary

This introduction has presented the context for the AeP2 project by giving an overview of the aims of the project, the scope of the research and the structure of the report that discusses the findings. Importantly, the project has built on and widened the interest in the initial project, which provided a range of stakeholders with a detailed examination of the issues and challenges associated with the use of ePortfolios by university students in Australia. Two of the ten recommendations presented in the Stage One report highlighted the need to consider strategies that might establish greater cohesion and to encourage the sharing of practice and research; these two recommendations represented the foundations for the AeP2 research activities to identify the factors required for the organisation of a sustainable ePortfolio community in Australia and the introduction of a regular conference or forum where ePortfolio learning can be explored and discussed.

The research process commenced with a literature review to examine the concept of communities of practice, together with the factors that contribute to the success of a sustainable community. These theoretical perspectives then informed and guided the research activities themselves.
2. Literature review

2.1 Overview

A community of practice (CoP) is conceptualised in the literature as the informal aggregation of individuals drawn together by common interests. Communities of practice are most commonly defined as ‘groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis’ (Wenger, McDermott, & Snyder, 2002, p. 4). This review of the literature allows for both a broad consideration of the concept and context of communities of practice as well as a closer inspection of the issues associated with their development, participation and community processes. Attention is paid to online networking as a channel of communication for communities and, in particular, how this may be a determinant in the development of online communities of practice. The review also explores current ePortfolio communities that have a national or international focus.

2.2 Communities of practice

An exploration of the concept of communities of practice reveals not only the theoretical framework that supports their development, but also a number of characteristics and lifecycle factors that can contribute to the success and sustainability, or indeed to the atrophying and demise, of these organic groups.

2.2.1 Communities of practice — what are they?

While the term ‘community of practice’ is relatively recent, the concept is by no means novel. Wenger (1998) acknowledges that all individuals participate in some type of community, be it through family, geography, interests and hobbies, or in their work lives. It is the theories associated with communities of practice, first introduced by Jean Lave and Etienne Wenger in 1991, that have enabled the original observations around social learning to deepen, thereby establishing an understanding of the managerial perspectives of communities as applied within the field of organisational development.

Since Lave and Wenger’s initial work in the 1990s, these theories have been considered in many diverse contexts, with the central elements linked to the idea of groups of people who ‘informally share, develop and diffuse learning, knowledge and practice’ (Churchman, 2005, p. 11). Other researchers have since applied the theories of communities of practice in a knowledge management context, specifically in commercial settings (Hildreth & Kimble, 2004). Ultimately, a community is defined by its practice, with the members recognising and sharing a common knowledge and commitment to that practice.

According to Wenger (1998, p. 5), who is widely regarded as one of the principal scholars in the field, the concept of the CoP emerges from a social theory of learning, which identifies four key components of learning:

- meaning (learning as experience)
- practice (learning as doing)
- community (learning as belonging)
- identity (learning as becoming).

CoPs may be used to support each of these components. While Wenger (1998) postulates that effective learning takes place across time, the key to a successful CoP might not be simply the passage of time (for example, a minimum time span), but rather the facility to sustain sufficient mutual engagement that will enable such learning.

The importance of collaboration between learners is central to social constructivist learning theories, with one specific aspect of social constructivism being the concept of situated learning, where learners become involved in activities that are directly relevant to the application of their learning (Brown, Collins, & Duguid, 1989). These ideas are central to the model of situated learning developed by Lave and Wenger (1991), which proposed that learning involves a process of engagement in a ‘community
of practice’. The authors argue that learning is a process of participation in communities of practice, participation that is ‘at first legitimately peripheral but that increases gradually in engagement and complexity’ (p. iii).

### 2.2.2 Characteristics

Wenger (1998) notes that the key features of a CoP are associated with two primary indicators: firstly, that people with a strong sense of identity are tied to a particular community, and secondly, that the practice itself is not formalised. Additional indicators that can be ascribed to a CoP highlight the need for continuing mutual relationships, a rapid flow of information, the diffusion of innovation amongst the members and a shared, evolving language with common perspectives reflected in this language.

The literature identifies the various patterns of the evolution of CoPs, often prefaced by a description of the scope of practice or situation that brought them into existence. Wenger et al. (2002) claim that all CoPs share three common fundamental elements — domain, community and practice — that provide the CoP with an appropriate knowledge structure.

- **The domain** creates a common ground and a sense of common identity. A well-defined domain legitimises the community by affirming its purpose and value to members and other stakeholders.
- **The community** creates the social fabric of learning. A strong community fosters interactions and relationships based on mutual respect and trust. Community is an important element because learning is a matter of belonging as well as an intellectual process.
- **The practice** is a set of frameworks, ideas, tools, information, styles, language, stories and documents that community members share. This body of shared knowledge and resources enables the community to proceed efficiently in dealing with its domain.

(Wenger et al., 2002, pp. 27–28)

Within the CoP the form that such learning and engagement takes will evolve, as individuals and the community as a whole negotiate practices and methods of participation. Wenger (1998) has noted that CoPs are also characterised by a shared repertoire that includes routines, words, processes and symbols that have been adopted over time by the community.

### 2.2.2.1 Lifecycles

Wenger (1998) indicates that CoPs have lifecycles and that these will often differ from those of more formal group work situations. The CoP lifecycle, when compared with a project, will generally not have clear start and end dates but may continually evolve. The literature presents examples of adaptations of the lifecycle to suit particular models of CoPs.

Corso, Martini and Balocco (2008) suggest a ‘roadmap’ model for the business CoP whereby each phase serves as an input for the following stage in a cyclical pattern, while Gunawardena, Hermans, Sanchez, Richmond, Bohley and Tuttle (2009) provide a Web 2.0 approach to the CoP lifecycle, with a wiki tool as a central domain in which learning and engagement occur in a spiral model. Cambridge, Kaplan and Suter (2005) discuss the design and cultivation of CoPs in the higher education context with a step-by-step guide, adapting the community lifecycle suggested by McDermott (2002) to present a sequence of phases:

- **Inquire**: Through a process of exploration and inquiry, identify the audience, purpose, goals, and vision for the community.
- **Design**: Define the activities, technologies, group processes, and roles that will support the community’s goals.
- **Prototype**: Pilot the community with a select group of key stakeholders to gain commitment, test assumptions, refine the strategy, and establish a success story.
- **Launch**: Roll out the community to a broader audience over a period of time in ways that engage newcomers and deliver immediate benefits.
- **Grow**: Engage members in collaborative learning and knowledge sharing activities, group projects, and networking events that meet individual, group, and organizational goals while creating an increasing cycle of participation and contribution.
• **Sustain**: Cultivate and assess the knowledge and “products” created by the community to inform new strategies, goals, activities, roles, technologies, and business models for the future.

(McDermott, 2002, as cited in Cambridge et al., 2005, p. 2)

In summarising the literature around CoPs, Corso et al. (2008) observe five distinct stages of community development: **potential, coalescing, maturing, stewardship and transformation**. The authors note that often a CoP will start as a loose network that holds the potential to become more connected. As members build connections, they combine together into a community. Once established as a community, it often grows in both membership and in the depth of knowledge their members share. As they mature, communities tend to go through cycles of high and low activity. During this stage, communities often take active stewardship of the knowledge and practices they share and consciously develop them.

CoPs may develop in a variety of ways: geographically (local, regional, national, international), sectorally, around specific issues (standards, pedagogy), institutionally, or by discipline area. Disciplinary communities of practice, such as those developed by the UK Higher Education Academy (HEA), are of particular significance where qualifications need to be aligned with professional standards (Hallam et al., 2008). However, cross-sectoral communities may also be vital, particularly when considering policy and infrastructure issues; for example, when the broader education sector — encompassing the school, vocational and higher education areas — collaborate to achieve common goals that may have impact at the sector level.

At an organisational level, CoPs can help produce effective outcomes in terms of knowledge management processes, by ensuring a broader awareness and sharing of the knowledge contained within an organisation (Wenger, 1998). It is also important to note that while CoPs are, to a certain extent, influenced by the overarching context in which they operate (be that an industry sector, a discipline or a geographic sphere) they also grow organically as a result of the interaction of the community’s participants.

Wenger amplifies this to indicate that:

> … it is only as negotiated by the community that conditions, resources, and demands shape the practice. The enterprise is never fully determined by an outside mandate, by a prescription, or by any individual participant.

(Wenger, 1998, p. 80)

### 2.2.2.2 Participation

In many situations, a CoP cannot be regarded as a formally constituted group, meaning that membership is a voluntary activity (Hildreth & Kimble, 2004). As highlighted by Wenger et al. (2002), CoPs differ from other types of organisational networks such as project or operational teams. CoP participants are not formally assigned to the group, nor are their roles defined. Probst and Borzillo (2008) add that while project teams often have a clear delineation of the members’ roles and activities, this is unlikely to be the case in a CoP. CoPs also differ from informal networks; while CoP members may share a common interest in developing practices in a specific field, an informal network might not focus on a particular domain and will only exist as long as its members continue to find it of benefit to meet their professional needs (Probst & Borzillo, 2008).

Lave and Wenger (1991) originally viewed assigned legitimacy to a CoP as the individual being accepted through group consensus. Wenger (1998) notes the importance of mutual engagement within a CoP. Members must be enabled to participate, which may require the provision of specific infrastructure (anything from sharing coffee in a face-to-face context to communication via a broadband internet connection). As such, Wenger states that community maintenance, whilst often overlooked, is essential within a CoP.

A factor related to mutual engagement is the reality that diversity in membership is inevitable and indeed desirable within a CoP (Wenger, 1998, pp. 75–76). Individuals will inevitably enter the CoP with quite different professional roles, backgrounds, and knowledge levels, and these characteristics will continue to change with, and perhaps even due to their involvement in the CoP. The infrastructure, norms and practices of the CoP should therefore not hinder or thwart heterogeneity amongst members.
Brokers are members of the CoP who tend to make new connections across CoPs. The role of the broker involves the translation and coordination of, as well as alignment between, differing perspectives, and at its best, it might help to open up new possibilities of learning. Wenger (1998) notes that some people appear to naturally gravitate towards this role, staying on the boundary of the communities of practice rather than taking a more central role.

Wenger’s earlier work (1998) established a comprehensive model for the community of practice concentrated around the promotion of learning. He argued that education should not be restricted to schooling, but should be understood as a shared development process between communities and individuals, enabling new identities to form. Wenger suggested various infrastructures to allow for the formation of identities: (1) places of engagement for people; (2) materials and experiences with which to build an image of the world and themselves (imagination), and (3) ways of having an effect on the world and making their actions matter (alignment). Hartnell-Young and McGuinness (2005) summarise Wenger’s architecture for learning in their research around an online educational community and claim that it can be applied to those working within one organisation, as well as professionals working across different organisations.

### 2.2.3 Success factors and challenges

Case studies in the literature offer insightful summaries of the key indicators of success and failures in a community of practice. Sustainability is a constant theme in the literature on CoPs, particularly in the business sector where CoPs may be embedded in an organisational context. Stuckey and Smith (2004) examined seven diverse online CoPs to explore those factors that support and drive a community. All seven communities believed that sustainability was only attainable with the continued facilitation of a manager or administrator. In addition, members saw the sharing and publishing of resources as an urgent need among practitioners and viewed the online environment as enriching the connectivity of the community. The authors concluded that:

> To support sustainable growth, the commitment of the core members to invest time, effort and take significant risks must parallel their familiarity with the landscape and understanding of the needs of practitioners.

(Stuckey & Smith, 2004, p. 162)

Probst and Borzillo (2008) drafted what they understood to be the ‘10 commandments’ of a successful CoP after extensive research into 57 CoPs in major European and US companies. This research study also identified some key reasons for the failure of CoPs in intra-organisational networks, which McDermott (2004) had previously defined as those practices that failed to continue the momentum of sharing best practice and knowledge to further ongoing development. In the summary of findings, that is, the ‘10 commandments’, Probst and Borzillo (2008) noted the similarity with those key factors required for change management, although without a specific key management role. The authors included the following key strategies for a successful CoP:

- Align to key objectives.
- Form governance committees around specialised areas.
- Include a sponsor as well as a leader to determine best practice.

Probst and Borzillo (2008) were also able to identify several reasons, similar to those identified by Chua (2006), for the failure of a CoP and these include the following:

- Lack of a core group or membership to sustain the practice.
- Low level of one-to-one interaction (including face to face).
- Reluctance on the part of members to share competencies.

While CoPs are viewed as self-organising, Probst and Borzillo (2008) stressed the requirement for the formation of strategic objectives as a guiding point for practice and the introduction of a sponsor as well as a manager to monitor best practice.

In a discussion of the Dutch experience of CoPs, particularly of the government-initiated practices, Kranendonk and Kersten (2007) believe that a government-managed practice will eventually develop from a management-driven activity into a member-driven practice, particularly in terms of the steering of process and content. The Dutch government initially experimented with CoPs in order to facilitate
various policy targets by providing a pre-determined structure that stimulated public debate and engagement with various issues. Kranendonk and Kersten (2007, p. 947) add that ‘this results in a process of social learning and creates new relationships between the government and the CoP members and also society’. The main conclusions from this Dutch review indicated that a CoP can link a wide range of stakeholders around various and complex issues, and that early management and conceptual guidance can provide specific parameters for involvement.

A challenging CoP may only prove effective in what Churchman and Stehlik (2005) describe as a ‘uniquely configured workplace’ in which the members practice autonomously, engaging in learning activities outside of a traditional management doctrine (p. 12). Universities are traditionally representative of these contexts in regard to their environment of discourse and debate.

However, some caution is reported in the literature around sustaining a CoP once the practice has been established. Chua (2006) details the initiation of an eLearning CoP in a higher education environment that incorporated a specific cohort of staff who had undertaken a course together around instructional design. Four key issues were associated with the failure of the CoP to sustain participant interest over a period of time. Firstly, Chua suggests that there were no regular face-to-face activities (considering all members were employed at the same institution) that might have allowed the group to interact socially and also that online discussion sessions failed to attract a sufficient number of members. Secondly, a weak leadership structure had resulted from only a small group of core members who had initially expressed interest in the CoP. This weak leadership was also highlighted by the lack of a higher management level (or critical friend) to oversee the process. The literature suggests that while initial management is necessary (particularly in knowledge management environments), it does not necessarily guarantee success and that ongoing management should be present (Corso et al., 2008; Nickols, 2003). Finally, Chua suggests that the CoP was guided by specific projects rather than being guided by sets of values and objectives common to all (Probst & Borzillo, 2008; Wenger et al., 2002).

In addition to defining those factors essential for a successful CoP, the literature offers various strategies for the development of a CoP. Corso et al. (2008) identify the relevance of a CoP from a knowledge management perspective and suggest a framework for the design and context of a CoP to cultivate value and generate innovation. Although the framework or ‘roadmap’ offered by the authors relates directly to the business model of a CoP (similar to that offered by Probst and Borzillo (2008) in intra-organisational communities), there are commonalities in regard to a model that could be supported by both intra- and inter-organisational practice. Corso et al. (2008) divide the roadmap into logical phases: strategic concept, governance definition, design, implementation and launch, day-to-day community management, and assessment. Of specific interest is the day-to-day management of the community and the concentrated focus on involvement of members. The research undertaken by the authors suggests that full commitment is attained with various ‘levers’, including the strengthening of individual involvement (social), as well as improvements to the actual quality of individual involvement through the promotion of collaboration and connectivity.

### 2.2.4 Facilitating an online community of practice

Participation in communities also points to other issues associated with involvement and engagement, as discussed in the earlier literature from Wenger. The internet currently provides a flexible platform to support evolving communities of practice to allow fast knowledge diffusion that can be assimilated over a wide area (Hildreth & Kimble, 2004).

A new theme in the literature is the topic of online or ‘internet-mediated’ CoPs. Cambridge et al. (2005) refer to online communities and the ‘technical architecture’ that provides the tool for collaboration and communication (p. 2). Within this online environment it becomes possible to engage with a wider audience and to overcome geographical constraints around communication, both nationally and internationally (Hartnell-Young & McGuinness, 2005).

The progression from the World Wide Web to Web 2.0 functionality has also had a profound impact, with the proliferation of social networking tools and resources. Social networking sites are essentially online spaces that can be customised, to a certain extent, by the user. Social networking activities include specific sites (Facebook, MySpace), social publishing (blogs and websites like YouTube), social bookmarking (Delicious, formerly del.icio.us) and social cataloguing (Folksonomy).
Within the education arena the wiki is viewed as a ‘collective intelligence tool’ (Gunawardena et al., 2009, p. 5). The literature suggests that these social networking tools foster interaction, collaboration and involvement, and ultimately expand knowledge by making connections with individuals of similar interests (Gunawardena et al., 2009; Mason & Rennie, 2008).

Gunawardena et al. (2009) consider the theoretical aspects of CoPs and the alignment of collaborative learning processes with social networking tools. The authors link social networking to Wenger’s three structural elements of a CoP (domain, community and practice), noting that these structural elements apply to social networking just as they do to face-to-face practice. The authors conclude that in the new Web 2.0 environment the wiki is of specific interest to educators as a collective intelligence tool that enables collaborative editing:

Thus, Web 2.0 tools foster interaction, collaboration, and contribution. An essential feature is user generated content enabling sharing, co-creating, co-editing, and co-construction of knowledge reflecting the collective intelligence of the users.

(Gunawardena et al., 2009, p. 5)

On a broader level, Preece (2001) considers both the social and technical aspects of interaction in evaluating the performance of an online community, labelling them ‘sociability’ and ‘usability’. Sociability is concerned with the development of software, policies and practices to support social interaction, including ‘purpose, people and policies’, while usability relates to how the individual engages with the technology (p. 349).

Hartnell-Young and McGuinness (2005) believe Preece’s sociability and usability factors impact on the involvement of a broad range of stakeholders in the educational research arena. In their evaluation of the communities of practice that developed around the implementation of a government scheme in Victoria — the National Quality Schooling Framework (NQSF) — they found that use of an online platform markedly increased the participation of stakeholders, notably in the participation of members from non-metropolitan areas. The education CoP was piloted in 2001 and launched nationally in 2003. The objectives of the NQSF CoP were presented as:

… to support and enhance quality teaching and learning; build a shared understanding of how student learning outcomes can be improved by quality assurance processes grounded in professional practice and evidence-based research; … and engage school communities in evaluating the quality and effectiveness of school practices and programs and their performance across the key dimensions of learning outcomes for students.

(Hartnell-Young & McGuinness, 2005, p. 5)

The main elements in the CoP were the provision of resources in the form of literature, tools and strategies, a web platform to engage teachers and professional educators in interactive professional eLearning communities, and online support services. The principal means of engagement — the website — enabled users to participate in cluster projects around issues of relevance to the education environment and to link to other online education forums (p. 5). Essentially, the CoP meant that teachers could learn about and share resources implemented by other educators in the teaching environment.

Hartnell-Young and McGuinness (2005) point to key findings in their research that may be considered unique to an online CoP. Data indicated that the majority of members would browse the discussion threads rather than contribute. Members often expressed a lack of time for active participation due to their workload and additional administrative responsibilities. In addition, members had varying experience with ICT and some members claimed the lack of access or inadequate bandwidth affected their ability to participate in the community. Teleconference events or regular tele-tutorials were more successful among the non-metropolitan members. Significantly, the role of facilitator in the CoP shifted over a period of time and the authors note that:

…[with] less reliance on facilitators to lead conversations, and more direct exchanges between teachers, the facilitator’s role has shifted from instructor to knowledge builder, entering the conversation at strategic points to clarify discussion or to introduce new knowledge.

(Hartnell-Young & McGuinness, 2005, pp. 10–11)
2.3 ePortfolio communities of practice

Communities of practice have a particular role to play in areas of emerging practice. In certain situations, people might be interested in a specific idea, technology or activity but not yet fully understand or know ‘how to do it’. Churchman (2005) argues that the value of CoPs is particularly pronounced in times of emergent practice or rapid change. Examples of ePortfolio communities of practice have been established in Europe (specifically the Netherlands and the UK) and also in the USA. In both Australia and New Zealand, ePortfolio communities are also emerging within educational institutions or where the use of ePortfolio tools is being explored. CoPs can support ePortfolio research and practice through a range of activities and roles, including:

- Research projects to support innovation, development and evidence-based practice
- Pilot programs
- Special interest groups
- Single issue working groups (e.g. scalability, standards)
- Workshops
- Conferences, symposia and congresses for dissemination, sharing and networking
- Consultancies
- Provision of online portals for collaboration and resource sharing
- Provision of online resources
- Facilitation of dialogue to feed into broader forums (e.g. policy and standards development)

(Hallam et al., 2008)

2.3.1 Europe

The European Institute for eLearning (EIfEL) was established in 2001 as an organisation that could focus on the policies and practices underpinning the ‘knowledge economy’ and ‘learning society’ concepts. EIfEL is a membership organisation that began as a tight-knit community but has since opened up to a broader membership base of both individuals and organisations, and embraces workshops, special interest groups, conferences and consultancy. The organisation has a specific role to play in supporting the initiatives introduced by the European Parliament, such as the Europass, professional qualifications and employment competencies (EIfEL, 2009).

Individual European countries have also produced CoPs around ePortfolio use, such as the Netherlands. The organisation SURF Foundation (SURF) evolved in response to government policy issues in the 1980s, with Dutch universities challenged to develop and introduce ideas associated with the use of information and communication technologies (ICT) in higher education. SURF NL Portfolio is a special interest group (SIG) within SURF, established in 2004, which aims to ‘combine, share and develop further the knowledge in the field of digital portfolios in higher education’ (SURF NL, 2008). Currently, the SURF NL Portfolio team coordinates research projects across the higher education sector to explore the potential for ePortfolios in learning and assessment and to support academics with scalability issues as they move out of the experimental phase of ePortfolio practice to face the challenges of implementation at the institutional level. International collaboration is also a key focus of the NL Portfolio activities. A team of six community members manages the CoP with funding for logistical support provided by SURF. A limited amount of funding is offered for a number of small projects that draw on the distributed enquiry process to resolve a range of questions associated with ePortfolio practice. Knowledge is shared via the NL Portfolio portal, publications, seminars and congresses.

2.3.2 United Kingdom

As with the Netherlands, ePortfolio activity in the UK was also initially stimulated by government policy, with the National Committee of Inquiry into Higher Education, chaired by Sir Ron Dearing (1997), recommending the development of ‘Progress Files’ that consisted of a formal academic transcript and the ability to record and reflect on personal development planning (PDP). The Centre for Recording Achievement (CRA) operates as an Associate Centre of the Higher Education Academy (HEA), with a specific focus on supporting higher education institutions and their communities with the implementation of Progress Files, personal development planning and ePortfolios (CRA, 2009).
Membership encompasses major higher education institutions, smaller organisations and individuals, providing a forum for dialogue about policy and practice in the area of ePortfolios. The organisation has close links to the Joint Information Systems Committee (JISC) and the Quality Assurance Agency (QAA).

An alternative community of practice model — the Scottish PDP Forum — has been established as a geographically based entity. The forum is jointly managed by HEA, QAA Scotland and CRA, with the aims of discussing areas of common interest, sharing effective practice, and identifying other forms of institutional level support (Higher Education Academy, 2008). The members are interested in both discipline-specific and multi-disciplinary research activities and see the Scottish PDP Forum as the opportunity to build links via individual members to other networks such as the National Action Research Network (NARN) (CRA, 2008) and the Inter/National Coalition for Electronic Portfolio Research (I/NCEPR) (2009), as well as to submit collaborative bids for funding or to develop shared resources (for example, toolkits and resources for students). The Midlands Eportfolio Group is an analogous example, supporting ePortfolios as part of eLearning initiatives in further, adult and community education. Similar ePortfolio CoPs in the UK are beginning to emerge, for example, ‘PDP for ePortfolios’ is a young CoP established for practitioners and lecturers involved in the higher education subject area dealing specifically with PDP.

The UK has further avenues of support for specific academic communities through their Centres for Excellence in Teaching and Learning (CETLs) and Subject Centres. Seventy-four CETLs were established in England in 2005 by the Higher Education Funding Council for England (HEFCE). CETLs seek to recognise and promote excellence in teaching, covering a wide range of disciplines and pedagogical research. One example is the Centre for the Advancement of Integrative Learning at the University of Nottingham, which includes an ePortfolio strand that focuses on ePortfolio developments and initiatives (University of Nottingham, 2008).

### 2.3.3 United States of America

The CRA also plays a role in the Inter/National Coalition for Electronic Portfolio Research (I/NCEPR) (2009). This agency was established in the United States in 2003 to promote research on ePortfolio practice at colleges and universities. The coalition was principally founded to engage institutions in collaborative research efforts using a cohort model. Each cohort is composed of about 10 higher education institutions that commit to a three-year research project. Cohorts I and II involved US institutions, but UK and European universities have been involved in Cohorts III and IV. Cohort V (2008–2011) was convened in August 2008.

I/NCEPR conveners facilitate a virtual community of practice through the Electronic Portfolio Action and Communication (EPAC) wiki and blog (EPAC, 2008). The EPAC CoP has been active since 2001 and membership is essentially focused on the use of ePortfolios in learning, teaching and assessment in education. The Electronic Portfolio Consortium, or ePortConsortium (2008), is another collaborative venture established by a group of universities in the USA; it focuses on the ePortfolio application environment and working towards appropriate definitions and standards to support and encourage interoperability and transportability between ePortfolio systems. There are three types of membership: conceptual members (individuals who are interested in the conceptual or technical issues of ePortfolios); invited corporate members (interested in the technical standards); and developing members, such as higher education institutions using the Epsilen ePortfolio software system. The consortium currently has members in 68 different countries, with around 870 corporate members and over 1100 conceptual members. There is a collaboration group site that provides the opportunity for members ‘to discuss and share know how, documents, case studies, and information about ePortfolio initiatives and projects within their institutions’ (ePortConsortium, 2008, para. 1).

In 2009 the Association of Authentic, Experiential and Evidence-Based Learning (AAEEBL) was established as a:

> … a global academic association working toward new designs in learning and assessment, increasing connections among the portfolio community, and building the new learning enterprise.

(AAEEBL, 2009, para. 1)
The Board of AAEEBL has sought international representation, with one director representing the UK and one representing Australia. Although not specifically a CoP, the association has set up committees — smaller groups representing specific areas (K–12, research, standards, conferences) — that operate more organically and align with many of the key indicators of a CoP (T. Batson, personal communication, May 20, 2009).

2.3.4 Australia

Collaborative ePortfolio activities to date have been limited to a small number of largely university-based ePortfolio symposia, forums and workshops. RMIT University is undertaking a trial of an ePortfolio product during 2008 and 2009 and has instigated a community of practice across the institution for internal staff. Staff use a wiki that acts as a space for collaboration, the dissemination of ideas and research and professional development (Botterill, Allan, & Brooks, 2008). RMIT provides education within the higher education sector as well as a college of Technical and Further Education (TAFE) and the CoP brings together staff from both the teaching and professional support services (careers, learning and teaching and student support). The authors add that the CoP will focus on developing:

... collaboration, connectivity, community, culture, capability, content and curriculum across the university, for both staff and students. It is also an important vehicle for developing interdisciplinary and inter-university collaborations.

(Botterill et al., 2008, p. 74)

In addition, collaborative activities are being undertaken by the University of South Australia and RMIT, with a shared interest in the PebblePad ePortfolio platform. The key players have reported that the ePortfolio pilot projects at the two institutions have been championed by the Deputy Vice-Chancellors (Academic) with the belief that ‘a ground-up collaborative implementation’ (Faulkner & Allan, in press) would contribute to the potential to create a culture to support the embedding of ePortfolio practice, with a mechanism to share knowledge and experiences. A bi-annual forum organised by the two universities has further increased interest and added to the profile of the pilot projects. RMIT and the University of South Australia are both members of the Australian Technology Network (ATN) of universities, which has proved a further enabler for effective collaboration, with an established model of knowledge sharing. Staff at these universities have the opportunity to participate in community activities both within and across the universities to consider the discipline-specific issues, platform-specific factors and pedagogical ideas associated with ePortfolios.

The introduction and piloting of PebblePad in more than a dozen Australian universities has led to the emergence of several groups of users. The Australian Pebble Pad Users Group (APpUG) coordinates a CoP which, among other activities, hosts national workshops in the higher education environment for 15 universities trialling or using PebblePad. In conjunction with the AeP2 project, the Australian Library and Information Association (ALIA) is participating in a pilot activity (2009–2010) using PebblePad in a professional career development context (Randle, 2009). A group of Australian library and information students and practitioners has become part of a community that participates in developmental and evaluative activities, meeting regularly (in either virtually or face-to-face contexts) to share and discuss progress with their PebblePad webfolios.

In the context of vocational education and training, Education Network Australia (edna) has facilitated various CoPs around ePortfolios, in conjunction with education.au (edna, 2009). edna also supports ‘me.edu.au networking’, based on a networking site for educators. Members can create a profile of themselves and their educational interests to share and connect with others. The Australian Flexible Learning Framework has instigated a CoP in response to the eLearning strategies that seek to embed eLearning across the VET sector. The VET CoP takes a number of forms, including a website, blog and an annual face-to-face event.

The mission of the ALTC itself is to ‘enhance learning and teaching in Australian higher education’ (ALTC, 2008a, para. 1), with specific objectives that seek to develop ways to identify, develop, disseminate and embed good practice in learning and teaching, especially through national and international relationships. The ALTC Exchange has been developed as an online service that provides ‘learning and teaching resources and facilities to support professional communication and collaboration across the higher education sector’ (ALTC, 2008b, para. 1).
As such, it can support the identification, dissemination and embedding of good individual practice, as well as best institutional practice within the higher education sector, to 'connect people, interest groups and communities of practice' (ALTC, 2008c, para. 1).

2.3.5 New Zealand

The profile of ePortfolios in New Zealand education has continued to increase with the development of the open source ePortfolio system 'Mahara'. Ako Aotearoa, New Zealand’s National Centre for Tertiary Teaching Excellence, works across the tertiary education sector (university, vocational and community) to support and enhance teaching and learning. The Centre also accommodates various CoPs with the provision of an online space to share resources. ‘ePortfolios in New Zealand’ was established in mid 2009 ‘for anyone who’s interested in ePortfolios and associated topics such as reflective learning, lifelong learning’. The community is managed by Ako Aotearoa, but members prescribe how the community should operate (Ako Aotearoa, 2009, para. 1). An example of an institutional CoP is the University of Canterbury, which has developed an internal CoP as part of a pilot project around ePortfolio use in the university.

2.4 Summary

The review of the literature has provided a summary of the integral aspects of communities of practice — encompassing the characteristics, lifecycles, success factors and the challenges faced — in order to emphasise how such communities can be successfully sustained. The technical and social architecture of CoPs has been reviewed within the current context of many CoPs, with a particular focus on communities that support ePortfolio practice. A number of existing ePortfolio CoPs, both national and international, have also been introduced. The project’s research activities seek to set the participants’ understandings and experiences against the theoretical concepts of communities, with the goal of providing sound direction for the future.
3. Research methodologies

3.1 Overview

The first stage of the Australian ePortfolio Project (2008) recognised a sense of isolation amongst the early adopters of ePortfolios in Australia, with a clear desire amongst stakeholders to collaborate and share resources with other practitioners and researchers. The research activities undertaken in this second stage of the Australian ePortfolio Project (AeP2) have consequently focused on determining how interest in ePortfolio practice might be sustained and supported in the longer term. Several research methodologies were used to gather the required research data that should inform potential strategies to ensure the sustainable future of ePortfolios in the Australian higher education sector (for example, through an online community of practice). Initially, the literature review was conducted to define and explore existing CoP models and to consider best practice frameworks that might guide the development of an Australian online ePortfolio CoP. The themes and issues identified in the literature are discussed more broadly in Chapter 2 of this report.

The data collection activities were designed to capture the specific requirements of the Australian ePortfolio Project and to explore the requirements for the development of a CoP, considered from the perspectives of the different stakeholder groups, including academics, learning designers, learning and teaching and ICT support staff, careers and employment services, human resources managers, academic managers and the learners themselves. The various methodologies used by the research team, guided by the relevant theoretical frameworks, are discussed in this chapter.

The main research activities encompassed a survey to elicit the key structural characteristics that might be required for an Australian ePortfolio CoP, semi-structured interviews with facilitators/leaders of existing ePortfolio communities and a series of case studies to examine a number of active ePortfolio CoPs, both nationally and internationally. A second national symposium was hosted by the research team to increase awareness of and interest in ePortfolio practice in Australia and to establish dialogue about the value of CoPs for ePortfolio practitioners. The AeP2 Symposium, which was held in early February 2009, provided a focal point to stimulate engagement in an evolving community of practice. The survey about an ePortfolio CoP was undertaken in mid February after the AeP2 Symposium, and the semi-structured interviews were conducted in May and June 2009. An industry-based pilot activity was initiated in early 2009, with an expectations survey distributed to participants in February, followed up by a progress survey in May. A post-use experience survey will be completed later in 2009, which will, however, be beyond the life of the AeP2 project itself. The series of data collection activities was completed in late June 2009, with subsequent analysis of the data to distil the findings.

3.2 Research objectives

The research proposal prepared by the project team directly addressed two principal recommendations from the first Australian ePortfolio Project (Hallam et al., 2008, pp. v–vi):

**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.

**Recommendation 9**

It is recommended that a regular Australasian conference be convened to explore and discuss ePortfolio research and practice.
The project aims sought to consider the requirements for an Australian CoP for ePortfolio researchers and practitioners and the introduction of a second Australasian ePortfolio conference that might stimulate interest in a regular program of meetings. The overarching objectives of the research activities were to identify the key characteristics and strategies that would promote participant engagement and collaboration within a CoP.

It was anticipated that the AeP2 project would provide a stimulus for further ePortfolio research and practice initiatives in Australia and continue to encourage dialogue and collaboration across academic institutions, across discipline and professional areas, and across the education and employment sectors, both nationally and internationally.

The project sought to generate the following major outcomes:

- Develop a forum within the ALTC Exchange to support an ePortfolio community of practice.
- Develop strategies to encourage interest in and engagement with community of practice activities.
- Develop and promote resources to support the diverse stakeholders in ePortfolio practice.
- Collaborate in the establishment of a cross-sector ePortfolio community of practice.
- Host a second Australian ePortfolio Symposium (AeP2) to disseminate the findings from the Australian ePortfolio Project; to explore innovative practice in ePortfolio use in higher education; to articulate policy developments, and to stimulate discussion on international ePortfolio issues.
- Host an associated trade display as a forum for strengthening the higher education sector’s understanding of the features and functionality of ePortfolio platforms.
- Develop resources to support an ePortfolio symposium model that may be adopted for future events.

The inherent value of the project lay in the opportunities to further develop the relationships already established with stakeholders across the school, vocational, business and professional sectors, as well as with international ePortfolio communities.

### 3.3 Ethical considerations

The Australian ePortfolio Project research activities were approved by the Research Ethics Unit of the Office of Research and Commercialisation at Queensland University of Technology (QUT) and undertaken in accordance with the National Statement on Ethical Conduct in Human Research (NHMRC, 2007). The full ethical clearance granted to the project covers all data collection activities both at QUT and across the diverse locations in Australia and was arranged as an extension of the ethical clearance attained in 2007 and 2008 for the first stage of the Australian ePortfolio Project.

All research participants agreed to take part in the data collection activities on a voluntary basis. Participants were informed that the data collected would be treated confidentially, with anonymity fully assured. They were aware that, at any stage of the activities, they could withdraw as a participant without any negative impact on themselves personally or on any institution they were associated with. Research participants were informed that the full report would be freely available from the project website upon conclusion of the project. The semi-structured interviews were all recorded and subsequently summarised. During the project, the tapes were stored electronically. Upon completion of the project, all electronic files will be deleted. All identifying characteristics were removed from the data collected from the surveys and interviews. Special ethical clearance was sought and granted for the project case studies (as the communities of practice were identifiable), with the permission for use to be given by the subject of each case study.
3.4 Community of practice survey

The survey was developed to identify the key structural characteristics required for the establishment and development of an Australian online ePortfolio community of practice. Specifically, the survey sought to:

- Collect data on the current level of awareness of online professional networking opportunities amongst a select group of ePortfolio users.
- Examine the current perspectives of ePortfolio communities of practice.
- Characterise the key conditions, types of users and uses for an ePortfolio community of practice.

The survey instrument included a definition for respondents to consider in the context of an emergent community of practice. Ultimately, the community could be viewed as a group of people:

… who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge or expertise in this area by interacting on an ongoing basis.

(Wenger et al., 2002, p. 4)

The discussion of the establishment of an online ePortfolio CoP had been a key topic of the AeP2 symposium in February 2009. In the week following the symposium, delegates were emailed to invite them to complete an online survey about their expectations and requirements around the establishment of a CoP. In addition to emailing symposium delegates, the project team emailed those individuals who had been involved with the project team throughout the life of both stages of AeP (2007–2009). This direct sampling approach included a broad selection of ePortfolio practitioners and researchers across different education sectors and within business and professional organisations. A total of 850 individuals were contacted with the invitation to participate in the survey.

As with the first stage of the AeP project, time constraints and the geographical location of respondents called for an online survey that was both cost effective and considered the importance of a high response rate. The Tailored Design Method (TDM) with an emphasis on Social Exchange Theory assisted in the consideration of an appropriate method of design whereby respondents would be likely to respond if they perceived there was a positive outcome or reward for themselves (Dillman, 2007). The project team recognised the importance of the project as an opportunity to sustain the momentum of Stage One of the AeP project, while stakeholders responding to the survey would arguably see the value in contributing to the development of a national ePortfolio CoP.

The online survey used the commercial tool SurveyMonkey (www.surveymonkey.com) allowing for a wide scope of question and response formats (multi-choice, Likert scale ratings, drop down menu selections and open narrative responses). Denscombe (2007) indicates that the response rate to an internet survey may be increased by the visual appeal, formatting and ease of use of the survey; the project team ensured that the questionnaire design adhered to this criteria. An introductory project information page, statement of consent and guidelines preceded the survey questions. The provision of full identifying details (name, email and position) was optional in this survey.

As the research team hoped to align responses with the key themes in the literature around CoPs, as well as to determine the nature of current activity associated with ePortfolio practice in Australia, the survey questions were targeted for the collection of specific data. Questions sought to identify the characteristics required for the development of an online community of practice to support ePortfolio users and covered the following areas:

- respondents’ current use of social and/or professional networking sites
- respondents’ current levels of participation in communities of practice
- respondents’ interest in the geographical and contextual (discipline, sector, technological, policy, pedagogical) focus of a community of practice
- respondents’ structural preferences (organic, managed) for communities of practice
- the key uses and perceived value of communities of practice to members
- general criteria for membership of a community of practice.
Survey respondents were also asked for a range of demographic information related to their ePortfolio engagement (including employment sector and their role in the organisation).

Survey data was examined using QlikView data analysis software (www.qliktech.com). The survey findings are discussed in detail in Chapters 5 and 6 of this report.

### 3.5 Semi-structured interviews

The project team determined that it would be valuable to capture the views of selected individuals who were directly involved in ePortfolio CoPs through a series of semi-structured interviews. As a data collection method, the semi-structured interview allowed for some degree of flexibility around the topic of interest, with the interviewee potentially in a position to speak from experience and to elaborate on specific points of interest (Denscombe, 2007). It was also anticipated that some of these interviews would result in the development of case studies that would present examples of good practice in existing online ePortfolio CoPs. The research activities undertaken during the first stage of the Australian ePortfolio Project had enabled members of the research team to gain firsthand knowledge of several CoPs, particularly in the UK and US, while several new ePortfolio CoPs had since emerged in Australia and New Zealand (see Appendix 2).

Seventeen online ePortfolio CoPs were identified across the USA, the UK, the Netherlands, New Zealand and Australia, with the key administrators or facilitators each sent an email inviting them to participate in an interview about the CoP they were associated with. Telephone or Skype interviews were proposed as the communication channels, given the geographical location of the interviewees. Skype software (www.skype.com) allows voice calls to be made over the internet at little or no cost and can facilitate video communication. A total of 14 out of the 17 CoP facilitators contacted agreed to be interviewed, all via Skype, with all interviews averaging 20 to 40 minutes in length. All interviews were recorded to ensure the accuracy of the summaries; interviewees were made aware that recordings were being made as part of the research process.

Prior to the scheduled interview, respondents were asked to complete a brief online questionnaire (again, with SurveyMonkey) to collect relevant demographic details and structural information about their CoP. One question from the Australian survey was included in order to compare the expectations about CoP use on the part of the AeP2 survey respondents with the uses that were deemed significant by the facilitators of existing ePortfolio CoPs. Specific responses gathered in the pre-interview survey could then be expanded upon in the actual interview itself.

The semi-structured interviews were conducted during May and early June 2009. Prior to each interview, the key questions and discussion points were provided by email. These questions focused on the critical success factors and the major challenges for ePortfolio CoPs. The questions sought to:

- provide information about the purpose or long-term goal of the CoP
- identify success factors in the development of the CoP
- identify the barriers or challenges in the development of the CoP
- compare the value of an organic community with a structured, managed community
- determine how CoPs might be sustained over a period of time.

An abridged summary was prepared from each interview to focus on the specific discussion points and questions. Tape-based analysis (Kreuger, 1994) was then used to review and synthesise the interview data. This approach to summary analysis was appropriate given the tight timelines for the project, yet it also allowed for key points to be summarised together.

### 3.6 Case studies

Environmental scoping around current ePortfolio CoP activity (principally online via websites, e-lists, blogs and wikis) and the information collected in the semi-structured interviews allowed for the preparation of 14 case studies. The initial draft of each case study was forwarded to the leader or facilitator of the CoP for review, to ensure that the information presented was factually accurate.
These case studies provided the project with diverse perspectives around ePortfolio CoPs, particularly in terms of their representation of the different stages of the CoP lifecycle, to enable a critical comparison between the state of play for CoPs in other countries and in Australia. The research team acknowledges that the case studies represent a ‘point in time’ and that, post-interviews, further developments might have occurred.

### 3.7 Summary

The research methods utilised in this project enabled specific data to be collected from a range of stakeholders. The research process allowed the project team to consider the issues that were directly pertinent to the development and sustainability of a community of practice, particularly within the immediate context of ePortfolio practice in the Australian higher education sector. The following chapters present and discuss the research findings.
4. The AeP community of practice

4.1 Overview

The primary goals of Stage Two of the Australian ePortfolio Project (AeP2) were to develop strategies to encourage interest in and engagement with community of practice activities for ePortfolio practitioners and researchers in the higher education sector. The project team sought to build on Stage One of the AeP project in order to invigorate ePortfolio research and practice and encourage dialogue and collaboration across academic institutions, across discipline and professional areas, and across the education and employment sectors, both nationally and internationally.

Chapter 2 of this report presented a review of the literature on communities of practice, considering factors that impact on the effective organisation of both face-to-face and virtual communities. The literature review has informed the current process of research into practice, with the AeP2 project encompassing six key areas of activity that have contributed to building a sense of community amongst ePortfolio stakeholders:

- The AeP Toolkit, comprising a suite of six published concept guides about ePortfolio practice.
- The AeP2 Symposium, as a face-to-face forum to explore and discuss innovative practice.
- The AeP2 Showcase, to develop shared understandings about the features and functionality of the ePortfolio platforms available in Australia.
- The AeP2 Technical Issues and Opportunities meeting to consider the topics of policy, standards and interoperability.
- The ePortfolio Practice Group, established as an online community space within the ALTC Exchange.
- The ALIA/AeP2 LIS ePortfolio Pilot Study, introduced as an example of an industry-wide opportunity for ePortfolio practice to support learning and career development.

In this chapter, these different areas of ePortfolio community activity are reviewed to present a detailed picture of the AeP2 project team’s endeavours to stimulate and foster interest in ePortfolio learning in education. Beyond these formal strategies, members of the project team were also involved in a number of informal community interactions within and across different institutions, in cross-sectoral contexts and internationally.

4.2 The Australian ePortfolio Toolkit

Findings from Stage One of the Australian ePortfolio Project, presented in the final report for the project, revealed that there was a clear need to work towards a shared vocabulary to articulate the main issues in ePortfolio learning and development:

*The literature abounds with definitions of 'ePortfolio': it can be argued that the various definitions encompass similar attributes, but there is no single, collectively accepted definition. Consideration must therefore be given to the different terminology for electronic portfolios presented by designers, users and stakeholders. It is also evident in the current research literature that different terminology is employed to present the electronic portfolio in specific contexts.*

(Hallam et al., 2008, p. 2)

The AeP report also underscored the diversity of perspectives that were intrinsically linked to the multiple stakeholders who could be involved in the implementation of ePortfolios in a higher education setting, including:

*... staff directly involved in learning and teaching (lecturers, tutors, educational developers etc.); academic management (vice-chancellors, deputy vice-chancellors, executive deans, as well as IT/ICT directors etc.); and those involved in human resources (HR, organisational development etc.)*

(Hallam et al., 2008, p. 1)
One of the first tasks for the AeP2 team was to develop an ePortfolio toolkit, comprising a suite of ePortfolio ‘concept guides’, which would address the needs of the different stakeholder groups and encourage common understandings of the issues through a shared vocabulary. The suite includes six titles:

- ePortfolio concepts for learners
- ePortfolio concepts for academic staff
- ePortfolio concepts for information technology & teaching and learning support staff
- ePortfolio concepts for institutional managers
- ePortfolio concepts for employers, professional bodies and careers services
- ePortfolio concepts for staff/employees

To underscore the need for community interaction, each concept guide includes a reminder that the reader is not alone, that other stakeholders need to be involved in the ePortfolio process, and gives details of the related documents provided. The six concept guides, forming the AeP Toolkit, are available on the project website at www.eportfoliopractice.qut.edu.au (AeP2, 2009a).

Each concept guide offers an overview of the key information about ePortfolio practice to define the concept and to introduce the particular audience to some of the benefits of ePortfolios in education and also to the principal issues they needed to be aware of. These principal issues are presented in each concept guide as a series of questions, with associated sub-questions, that are pertinent to the specific audience. Questions for learners focus on the student's interaction with an ePortfolio:

- What is my main reason for creating an ePortfolio?
- How do I go about creating an entry in my ePortfolio?
- Who will have access to my ePortfolio?
- What sort of experiences and artefacts should I include in my ePortfolio?
- What will happen to my ePortfolio in the long term?

Academic staff, on the other hand, may well have different concerns, with questions focusing on teaching and learning issues:

- teaching philosophy
- pedagogy
- curriculum
- tools for learning
- commitment
- resources and support.

Questions for information technology and teaching and learning support staff highlight the area of support that they are involved in: teaching quality, support for learners and for teaching staff, technical standards, privacy and legal issues, information management, and accessibility factors. Institutional managers are prompted to consider questions about institutional culture, institutional policy, strategic direction, resource allocation and management, and quality teaching and learning outcomes. The concept guide designed for an audience of employers, professional bodies and careers services, to consider the issues of employability skills, recognition of prior learning and graduate recruitment. This concept guide includes a number of brief case studies to help illustrate the value of ePortfolios in recruitment and employment. The final concept guide targets staff and employees, covering similar issues to the questions for learners, but contextualised for an employment situation.

The AeP Toolkit has been well received by the Australian ePortfolio community, with positive feedback received about the role the documents have played to bring different groups together within an institution. Academic staff have found that the concept guide for learners has, to some extent, ‘validated’ the introduction of an ePortfolio tool to students who might be skeptical about the reflective approach to learning. All delegates attending the AeP2 Symposium received copies of the five original concept guides [the sixth guide, ePortfolio concepts for staff/employees, was developed post-symposium], and since
then there has been a steady flow of requests for additional copies, with the highest demand for the
guides for learners and academic staff. It should be noted that the concept guides have been published
under a Creative Commons Attribution-Noncommercial-ShareAlike 2.5 Australia Licence, which allows
for further distribution of the information. Under these arrangements, the Australian Flexible Learning
Framework (2009a) has produced a related series of ePortfolio brochures for specific audiences in the
vocational education and training sector.

4.3 The second Australian ePortfolio Symposium

The second iteration of the Australian ePortfolio Symposium, commonly referred to as the AeP2
Symposium, was held at QUT in Brisbane on 9 and 10 February, 2009, with pre-symposium workshops
and a welcome event for delegates taking place on Sunday afternoon, 8 February 2009. More than
200 presenters and delegates attended the AeP2 Symposium, representing a broad spectrum of the
higher education sector in Australia and New Zealand, as well as the vocational education and training
sector, the schools sector, employers and professional associations.

One of the main objectives of Stage Two of the Australian ePortfolio Project was to host a forum
that would offer further opportunities to explore and discuss ePortfolio research and practice, with
the explicit goal of establishing, facilitating and encouraging an Australian community of practice
for ePortfolio researchers and practitioners, as well as to continue the development of an ePortfolio
symposium model that could be adopted for future events. The AeP2 Symposium therefore sought to
build on the significant energy and momentum achieved through the Australian ePortfolio Project itself
— with the first symposium held in February 2008 — in order to further engage those people who were
already working with ePortfolios in education or who wished to learn more about the diverse issues and
tools to develop their interest and understanding.

The theme of the AeP2 symposium was Establishing an ePortfolio community of practice, which aimed to
meet the specific project objectives:

- To disseminate the findings from the Australian ePortfolio Project.
- To explore innovative practice in ePortfolio use in higher education.
- To articulate policy developments.
- To stimulate discussion on international ePortfolio issues.

The AeP2 Symposium was structured to present delegates with new information, as well as to provide
the opportunity to share knowledge and experiences, with a spread of plenary presentations, track
sessions, breakout focus groups and round table discussions. The program was designed to cover
policy, interoperability and practice issues, with the aim of developing strategies to encourage delegates’
engagement with CoP activities. While the program facilitated discussion on the outcomes and findings
of the initial Australian ePortfolio Project in 2008, it also encompassed issues about the educational
impact of ePortfolio use, discipline-specific initiatives, graduate attributes, reflective learning,
Web 2.0 and technological aspects of ePortfolio use. The full program, with slide presentations and
audio recordings, is available on the AeP2 website (AeP2, 2009b). A selection of papers is also being
published in a forthcoming issue of the online journal Learning Communities: International Journal of
Learning in Social Contexts.

The event attracted a number of champions, practitioners and researchers in the field of ePortfolio
practice as speakers and presenters. The keynote presenters included Wijnand Aalderink from the
University of Groningen in the Netherlands, who serves on the NL Portfolio Steering Committee of
SURF NL, and Marij Veugelers, who is Community Manager of the SURF NL Portfolio special interest
group. Their presentation, Creating sustainable ePortfolio development: An update from the Netherlands higher
education community, with an international view, opened the discussion on international perspectives of
ePortfolio practice, which were further developed by Rob Ward, Director of the Centre for Recording
Achievement in the UK, who delivered his presentation, ePortfolio communities of practice in the UK,
via video link. The topics of ePortfolio policy and interoperability in the UK ePortfolio context were
elaborated on in the papers by Peter Rees Jones from JISC-CETIS and Emma Crawford from the
University of Nottingham. Strong linkages with other ALTC projects were made through Simon Barrie
(University of Sydney) and Clair Hughes (University of Queensland), who presented an update on the
ALTC National Graduate Attributes Project (University of Sydney, 2009).
Institutional perspectives in New Zealand also received attention, with plenary presentations from Cathy Gunn from the University of Auckland, who covered *ePortfolios: A bridge from strategy to implementation* and Philippa Gerbic from the Auckland University of Technology, who outlined the *Frameworks for ePortfolio practice*.

In addition to the invited papers, there was an open call for papers to encourage academics and educational technologists to prepare papers that highlighted the diversity, innovation and practicalities of ePortfolio practice in higher education. Presenters’ viewpoints and use of ePortfolios ranged from the student-centred approach to a managerial, structured, top-down approach.

The Australian presenters represented a broad range of educational implementations of ePortfolio practice in Australia, from Ruth Wallace’s work in the Northern Territory on *Empowering disenfranchised learner identities through ePortfolios*, to ALTC Senior Fellow Sally Kift who addressed the issue of *Harnessing ePortfolio to support and enhance the first year experience*, where ePortfolio initiatives encouraged reflective practice and a deeper understanding of learning by students, often incorporated into the assessment requirement of students. Delegates commented that they learnt a great deal about the importance of embedding ePortfolio practice in student learning:

- **Integration in undergraduate education**
  - The need to raise staff awareness and to work at a course/program level to develop ePortfolio concepts and understanding
  - Better methods for promoting student use of ePortfolios with an emphasis on teaching critical reflective practice

Beverley Oliver showcased the innovative implementation of ‘iPortfolios’ at Curtin University with her paper, *Curtin’s iPortfolio: Focussing student reflection on achievement of the triple-i-curriculum*, where small screen technologies (iPods) were being used to capture and encourage the students’ involvement in ePortfolios. The concept of ‘mPortfolios’ (using mobile devices) attracted considerable interest:

- **mPortfolio focus in implementation of ePortfolio**
- **Implementing mobile technology with ePortfolios**

Cross-sector issues were further explored in the paper by Allison Miller from the Australian Flexible Learning Framework, which discussed the document *Managing learner information: Important considerations for implementing e-portfolios in VET* (Australian Flexible Learning Framework, 2009b). Delegates recognised the importance of the extended use of ePortfolios:

- **Opportunities for implementation in different ways, eg capturing mandatory training requirements**
- **The concept of how ePortfolios are a lifelong user experience; seek to make my university aware of this when implementing an ePortfolio**

Many of the issues were explored further in the track sessions, which covered the topics of ePortfolios in the health science disciplines, in law and in education; institutional and academic development strategies; factors impacting on employability; and the industry pilot study in the use of ePortfolios in the library and information services sector, which is discussed in Section 4.7 of this chapter.

The roundtable session ‘Building communities’ provided the opportunity to discuss the preferred focus and the needs of participants in an online community of practice for ePortfolios. The participants provided valuable feedback on their expectations and requirements for the functionality and versatility that an online community should be able to provide. A panel discussion was held at the symposium midpoint to shift the focus away from the individual presentations to the main issues and challenges facing the delegates in terms of the development and sustainability of communities of practice.

The ePortfolio Practice Group site hosted by the ALTC Exchange was also promoted to symposium participants, with members of the project team presenting an overview of the ‘ePortfolio Practice’ online community. Instructions for joining the community were included in the symposium satchel. Discussion of the online ePortfolio community is presented in Section 4.6 of this chapter.
The total number of registered delegates was 246, representing 87 Australian and New Zealand institutions and agencies. As a proportion of delegates had attended the 2008 symposium, the forum provided the opportunity for people to build on the relationships that had begun to emerge in the previous year. The track sessions specifically allowed delegates to meet others who were interested in the same or related discipline areas. Those delegates who had not attended the 2008 event reported that their interest in ePortfolios had been stimulated by their awareness of the AeP project work and that they welcomed the chance to learn more about the topic through the AeP2 Symposium. The project team took advantage of the chance to promote and disseminate information about the Australian ePortfolio Project in general, with all delegates provided with a copy of the AeP final report, together with a set of the Australian ePortfolio concept guides. In terms of international collaboration, the symposium satchel also contained a copy of the resource Effective practice with ePortfolios: Supporting 21st century learning published by the Joint Information Systems Committee (JISC) in the UK.

It was apparent that the symposium effectively sustained the initial strong interest in ePortfolio practice achieved through the 2008 symposium, with evidence of further momentum demonstrated by:

- an increase in attendance numbers from 2008 to 2009
- repeat attendances from the 2008 symposium
- the ability to attract international speakers
- the cross-sectoral representation of delegates.

Delegates noted the ‘surprising number of delegates’ and ‘the amount of activity in the area of ePortfolios’. The symposium effectively addressed concerns about academics ‘working in silos’, with the importance of networking and establishing a community of practice widely acknowledged, both within and across institutions:

Importance of the community of practice, I will seek to extend this at my workplace, with both teaching and support staff

Contacts with some other institutions that I will follow up …

My learning has come from networking with others. Have established some collaborative relationships with others … we have agreed on some actions that I will work on when I return [to work]

Informal networking during the opening wine and cheese evening, the evening BBQ and the lunch gatherings contributed to the atmosphere of collegial sharing, with additional opportunities for delegates to meet more informally to establish some initial interaction at the regional, disciplinary or ePortfolio platform level as a foundation for further community of practice activities.

The symposium therefore not only became a forum to consider and discuss the needs of stakeholders in the implementation of ePortfolio communities, but also for delegates to meet with other practitioners to discuss diverse implementation strategies and the relative strengths and weaknesses of different approaches to the use of ePortfolios in student learning activities. Comments from delegates highlighted the value of the perspectives presented:

... how important it is to 'put the purpose first'- identifying needs and goals, then implementing a solution

ePortfolios need to be tailored rather than one size fits all

... taking a strategic approach and learning from others who have already implemented ePortfolios

Evidence of the value of the AeP2 symposium to the delegates was captured in the evaluation survey conducted at the conclusion of the event. A total of 62 responses were received, with the overall score of 4.29 on a 5.0 scale. Average scores of 5.0 were recorded for the question about the degree of relevancy of the symposium in terms of ePortfolio practice in the delegate’s own organisation, along with the question about the potential for further dissemination of AeP2 information to other colleagues. Positive feedback (average scores of 4.0) was received for all other questions, highlighting the significance of the event as a forum to extend the delegates’ thinking about ePortfolios in education, to support the exploration and discussion of ePortfolio research and practice, with good examples of ePortfolios and ways to implement them in practice that would stimulate new approaches to teaching and/or professional practice. The forum was found to be a satisfying experience that stimulated an emergent community of practice by offering a valuable opportunity to exchange ideas with others and to discuss a range of issues.
Nevertheless, delegates also identified areas for improvement for future ePortfolio symposia, which predominantly focused on the desire to see more case studies and more practical examples of ePortfolio use, especially in academic subjects and programs:

More examples of implementation – what people have tried, what has worked, examples of innovative practice etc. Too much focus on theory and identifying the issues that we are all very aware of. No answers!

Evidence that ePortfolios assist student learning

Findings from the first stage of the AeP project underscored the current lack of research into practice in Australian universities. It is hoped that, by establishing a community of practice, there may be a stronger interest in developing a rigorous evidence base to inform future practice.

It was found that the diverse stakeholder groups tended to seek further information that was directly relevant to their interests:

Management development and academic development strategies

Technical aspects of ePortfolio implementation

The students’ view on how it’s useful, what they like or don’t like; what else they would like to have, first year student view and final year student view across a number of disciplines

Head of institutions, policy issues

Academic staff ePortfolios

Uses other than study – professional development etc

ePortfolios for the general public – outside the academic environment

There was also interest in having increased opportunities for discussion and small group breakout sessions. Delegate feedback will help inform the structure and program of future ePortfolio events.

The symposium, the roundtable sessions, the panel discussion and the informal interactions became focal points for stimulating the delegates’ interest in and engagement with an evolving community of practice. The introduction of the ALTC Exchange online group at the conclusion of the symposium, the availability of the symposium presentations on the AeP2 website and the forthcoming issue of the online journal Learning Communities: International Journal of Learning in Social Contexts have ensured that communication has continued beyond the face-to-face event.

4.4 The Australian ePortfolio Showcase

A further objective for the AeP2 project was to host an ePortfolio showcase, in conjunction with the symposium, as a forum for strengthening understanding on the part of the diverse stakeholders in the higher education sector of the features and functionality of the different ePortfolio platforms. While the AeP project team has argued strongly that the process of ePortfolio learning is an essential aspect of effective practice, ePortfolio products also represent an integral aspect of the topic.

Software vendors were invited to present and demonstrate their products at a pre-symposium event held on Sunday, 8 February. The AeP2 ePortfolio Showcase was promoted to delegates, with around 70 people taking the opportunity to attend the software demonstrations and to speak with the vendors about their educational and technical needs. Presenters represented the following vendors and products:

- CareerHub (http://www.careerhub.info/demo.aspx)
- Desire2Learn (http://www.desire2learn.com)
- PebblePad (http://www.pebblepad.co.uk)
- Sakai OSP (http://threecanoes.com/sakaiosp-services).
The AeP2 showcase was well received by delegates, as recorded by comments in the evaluation survey:

*ePortfolio culture new to me, so terrific introduction. Sunday showcase of software excellent entrée to the symposium*

[The showcase] extended my knowledge of ePortfolios and their uses and the variety of tools available. Also features to look for in ePortfolio software

It was found that the opportunity to view the various software applications and interact with the vendors helped delegates build concrete links between the educational theories and pedagogies underpinning ePortfolio practice and the practical application and building of individual ePortfolios. It should be stressed that it is the process by which the tools are used and combined that effectively defines the ePortfolio experience and captures its potential.

4.5 Technical issues and opportunities in ePortfolio practice

On Sunday, 8 February 2009, a special panel session chaired by Wendy Harper from QUT was held to encourage symposium participants to consider the Technical issues and opportunities in ePortfolio practice. Forty participants attended the session to hear five brief presentations that led into an open floor discussion. The presentations were:

- **E-Portfolio to support recognition of existing skills:** Alison Miller.
- **Standards for what?:** Jon Mason.
- **Apprenticeships: Breaking the glass ceiling to higher education:** Peter Rees Jones.
- **Interoperability and the impact of Web 2.0:** Jerry Leeson.
- **Interoperability for e-portfolios: Lightweight vs holistic approaches:** Owen O’Neill.

The presentations stimulated discussion on a number of technical issues, which fell into the following key themes: standardisation, access, authentication, data and storage, learning and user uptake and collaboration. The topics naturally led to the consideration of the interwoven issues of privacy, sector and outside sector engagement and the changing nature of learning technologies and Web 2.0.

**Standardisation**

One of the most critical technical issues discussed at the meeting was the question of standards of practice, although it was noted that standardisation need not always be a ‘technical’ issue and could encompass policy explications or agreements on paper. The discussion around standardisation was broad ranging and led into other issues, such as the changing nature of technology and the rapid emergence of Web 2.0 technologies.

It was noted that not every aspect of ePortfolios needed to be standardised. Panelists agreed that it would be better to identify the core components of an ePortfolio, rather than aim for a monolithic and inflexible ePortfolio standard. A number of standardisation initiatives were discussed, including:

- **IMS ePortfolio Specification.** This is a creation of the IMS Global Learning Consortium, a US originated, ‘non-profit collaboration among the world’s leading educational technology suppliers, content providers, educational institutions, school districts, and government organizations’ (IMS Global Learning Consortium, 2009).

- **LEAP 2, from JISC/CETIS in the UK.** ‘LEAP2A is the specification, based on Atom, developed and agreed by the partner developers. LEAP 2.0 is a wider, forward-looking framework, assembled by Simon Grant using ideas from many others, and kept up to date to reflect all developments in LEAP 2A. LEAP 2.0 is more clearly directly based on Semantic Web concepts, and does not have the validity of having been agreed or implemented by anyone. LEAP 2.0 therefore acts as a conceptual testing ground, where ideas can be put in place ready for possible agreement and adoption within LEAP2A. LEAP2A is agreed and relatively stable, currently being steadily extended, but LEAP 2.0 constructs that are not part of LEAP2A may be changed or abandoned at any time, when new insight or agreement emerges’ (JISC, 2009a).

- **QualSearch (2009).** Australian electronic verification service that allows for checking of qualifications by institutions.
- **PESC (Postsecondary Electronic Standards)** (2009). An American standards group. The Rome group has representation from PESC and agrees to have 12 standards in common; they may have other local variations but agree on the 12. Vendors have signed up for it.

While IMS was seen as inflexible in its approach to ePortfolio content and moving very slowly, PESC was singled out as moving very quickly. With multiple vendors already on board, PESC was felt to be the most likely candidate to develop standards that could be introduced in the near future. It was noted, however, that PESC had no representation in Australia. Without having international groups involved, the meeting argued that the standardisation process would not deliver the desired outcomes.

A further problem that was explored was the perceived gap between the innovation and standardisation communities. While there was a sense that a great deal of innovative practice was emerging in the web space, there was little confidence that this was percolating through to the discussion on standards. In the past ten years many standardisation activities had been pre-emptive, yet with little of lasting value. The meeting attendees believed that closer consultation was required between innovators and users of ePortfolios. It was also noted that standards needed to be flexible enough to respond to changing demands. It was argued that lightweight standards could potentially make it easier for the users to control the content of their ePortfolios.

**Access**
Another issue discussed was that of access to the ePortfolio on the part of users, often made difficult by the individual approaches of universities to data access. A proprietary approach could be restrictive and often conflicted with how students might want to use the technology, in a ‘take whatever you want and combine it how you choose’ manner. In one example offered, the Mahara approach to free ePortfolio space and interoperability was seen to go a long way towards alleviating these issues. It was also noted, however, that some areas of activity were subject to legislation, so that laws and boundaries needed to be observed. Delegates discussed the current decentralised approach in Australia, noting that there were some initiatives that were currently seeking to introduce greater harmony, as evidenced, for example, by a number of state-based approaches, as well as the National Diploma Supplement, which aimed to have the capacity to include university approved extracurricular activity.

**Authentication, data and storage**
Closely linked to the question of access is that of authenticating data sources to share learner information. It was noted that there was already an ability to share digital objects quickly (for example, almost instantaneous transfer of pictures from mobile phone to the web) and that technical work was making this possible in the context of ePortfolios. Examples offered included one initiative in the UK that is looking at the use of authenticated documents to build a complete learner record; along with a Swinburne University situation where technology is used to take objects from the WebCT Learning Management System to verify them for import into an ePortfolio.

Granularity was identified as a major hurdle, along with the problem that, while technically the incorporation of Web 2.0 functionality was simple, when data is merged with other data, there may be specific issues associated with authentication, as well as access. While these barriers should be acknowledged, each implementation should be looked at on its merits. Other aspects of data that were considered at the meeting were the issues of ownership, privacy and storage. These were seen as not simply individual issues but key for all of the institutions concerned. The relationship between the person, as the subject of the ePortfolio, and the content was significant, and it was critical for users to access content that was understandable and verifiable. This, in turn, raised issues of the longevity of data, with discussion about what the components might look like in five years and whether they would still be usable.

**Learning and user uptake**
Delegates felt that it was crucial not to lose sight of the purpose of the ePortfolio as a technology platform and its various uses in lifelong learning, mentoring, capturing skills and experience, supporting transitions, empowering the user and aiding reflective practice. There was agreement that, from an academic perspective, institutions and their staff and students should be less concerned with the technology per se, but should have a clear focus on reflection and other ways to consider learning for a range of other academic and career purposes. It was felt that too little attention was paid to the learner at the centre of the process.
One way to further learner uptake and usage was to scaffold students using ePortfolios, just as other elements of the curriculum are scaffolded. This could include mentoring, since many students don’t always want to be in a broad freeform ‘open to the world’ space but sometimes want to be in a more scaffolded space where they can get guidance and/or be mentored. Another example of use is the issue with apprentices and ways to assist with skill recognition and help with their progression in their careers and education. In a similar way, ePortfolios could be used for admission to higher education. Potentially, it could help more non-traditional groups gain access to higher education, but it was acknowledged that these groups would need guidance in a world that is strange to them as learners. Again, this brings to the fore a number of issues associated with the authentication of the claims made by learners and the role of digital signatures to authenticate. It was mooted that perhaps an advisor could represent a digital signatory so the learner could take a piece of work to the supervisor, who could identify the digital signature. This could then facilitate entry into higher education, removing unnecessary barriers. Those at the meeting also acknowledged the fact that a considerable amount of learning occurs outside of formal learning structures; there was a clear need to consider the use of ePortfolios to recognise and capture this.

Collaboration
The unifying theme behind all of the issues explored during the session on technical issues and opportunities was the need for continued and effective collaboration, since all the subgroups were grappling with the same questions and problems. There was a desire to raise awareness of ePortfolio practice, not only to ask about the reasons for use and to consider the optimum solutions, but also to help identify the best tools and the best processes. While the meeting recognised the need for an ongoing dialogue about all the issues, it was felt that there was a lack of clarity about who to involve in the particular discussions. The meeting stressed the fact that effective collaboration was critical to the adoption of effective practice. However, the group was reminded that ePortfolios were not to be thought of as the ‘holy grail’ and should not be expected to be the final answer. It was important for ePortfolios to be used in situations where they are most powerful; for instance, in reflection, recognition of prior learning and to provide evidence of learning outcomes.

4.6 The ePortfolio Practice community site on the ALTC Exchange

One of the main objectives for the second stage of the Australian ePortfolio Project was to develop a forum within the ALTC Exchange to support an ePortfolio community of practice. Prior to the AeP2 Symposium the project team worked closely with ALTC Exchange staff to create an online group. The ALTC Exchange has been specifically developed as ‘a new online service that will provide learning and teaching resources and support communication and collaboration across the national and international higher education sector’ (ALTC, 2008d). As such, it is felt to be well placed as a resource to support the identification, dissemination and embedding of good individual practice, as well as best institutional practice within the higher education sector, to support ‘networking and the development of communities of practice across the higher education sector’ (ALTC, 2008e).

Members of the project team explored the functionality of the ALTC Exchange, paying attention to some exemplar sites. While subsequent research activities within the AeP2 project would consider the specific requirements for an ePortfolio community of practice, the value of the symposium as an event where an embryonic online community space could be presented and promoted to prospective members was an important driver for the timing of establishing the virtual space. Bearing in mind that the future participants of the online community would potentially be drawn from a range of sectors and would have varying levels of experience with online communities, it was decided that a basic ‘structure’ for the online community would be required.

The purpose of the ePortfolio Practice community site was not to specifically create new content but to concentrate on providing a virtual space to encourage online interaction between people who were interested in ePortfolios in education. Thus, there was no intention to replicate information about the project itself, which was already available on the AeP2 website, but rather to point interested participants to the information that they needed about the wider context of ePortfolio practice and to provide a venue for interaction.
The stated aim for the community was presented on the opening page of the group site:

This online community is part of the Australian ePortfolio Project which is examining the current levels of ePortfolio practice in Australian higher education. The focus of this ePortfolio community of practice is to enable participants ‘to share knowledge outside of the traditional structural boundaries’ and to work around the potential problems of slow-moving hierarchies in organisations.

(Lesser & Storck, 2001)

Use this online space to contribute, discuss and debate to deepen shared knowledge and expertise through interaction; add to the resources, provide examples, discuss, challenge and support ideas, contribute and be involved. ePortfolio practice is a ‘connection not just a collection’.

(Stuckey & Arkell, 2006, p. 7)

For members of the project team, working with the online community proved to be an example of experiential learning, or a ‘journey of discovery’, to develop their understanding of the features and functionality of the service. Problem-solving strategies were captured in a blog within the ALTC Exchange that could be referred to during the ongoing development of the site. When the evolving site was pilot tested for its usability, difficulties were reported in terms of the overall navigation, especially for those people who were unfamiliar with Web 2.0 utilities. As there were specific concerns about the need to scroll down the screen to locate and view items of information, particularly as the site might ultimately hold a considerable amount of information, the need for increased structure within the site was acknowledged. Consultation with ALTC Exchange staff helped resolve some of the issues and introduce alternative strategies for the structure of and navigation within the site.

The opening page of the group site was developed as a static page, managed by the group owners. The key function of this page was to provide links to the basic concepts of ePortfolios and to the activities and resources associated with the Australian ePortfolio Project (Figure 4.1).

Three further sections of the site were set up using the ALTC Exchange wiki facility; these would allow all members to make contributions to the community. The focus of these sections were resources about ePortfolios in learning and employment; upcoming ePortfolio events, including seminars, workshops, symposia and conferences; and links to other online forums and communities (Figure 4.2).
Contribute and share with the ePortfolio Practice wikis

- ePortfolio Resources
- ePortfolio Events
- ePortfolio Connections

**Figure 4.2: Links to the ePortfolio Practice wikis**

During the symposium, a roundtable session on the topic of ‘Building communities’ encouraged participants to explore their anticipated needs and expectations for a community of practice; the blueprint for the ePortfolio Practice community within the ALTC Exchange was presented to stimulate feedback on the site. It was noted that some participants (who had identified themselves as ‘experienced users’ of online communities) argued that the ePortfolio Practice community needed to be more intuitive for users if interaction was to be encouraged. During the roundtable session some of the issues associated with the future management of the community were raised and discussed.

The ePortfolio Practice community within the ALTC Exchange was introduced to delegates in the closing stages of the symposium. Delegates had received an instruction sheet in their satchels to provide guidance about becoming a member of the Exchange and joining this ePortfolio community. It was stressed that the online group was embryonic and that the future growth of the community was very much in the hands of those who wished to participate and share their resources and understandings.

Finding the ePortfolio Practice Group within the ALTC Exchange can be achieved using the ‘search for groups’ function of the ALTC Exchange. Beyond this, finding specific information about ePortfolios has been enhanced with the addition of ‘tags’ when the entries or resources are added to the site by the owner or group members. The process of ‘tagging’ the entries can be achieved either by using structured headings provided by the ALTC Exchange or by adding user-created headings such those used in the social bookmarking website Delicious and other Web 2.0 tagging applications. The tags ultimately enhance the searchability of the information held in the community site (Figure 4.3).

**Figure 4.3: Tags added to the ePortfolio Events page on the group site**

In the time since the ePortfolio Practice Group was created in February 2009, the community has progressively attracted 46 members. While the wikis were set up with the intent of allowing collaboration about ePortfolio resources and events, as well as stimulating a sense of ownership by the members of the group, it was noted that the initial interaction on the part of a range of group members from the higher education and vocational education sectors did not follow the anticipated structure of the site. Members have preferred to add content directly to the main page, rather than to the topical wikis, meaning that the team failed to avoid the lengthy ‘blog style’ page with the need to scroll through the accumulated content.

Members also have the ability to interact using a forum, to add blog entries that can be made either public or private, or to create further collaborative spaces — this is available through the ‘List members’ and ‘Invite member’ links (Figure 4.4).
However, it has been found that members are not communicating with each other on the site using the forum or any of the other tools available to them. It is possible that they communicate with each other directly outside of the community environment, after making reference to the profiles of members and by making contact through the group by requesting to become a colleague. This can enhance the sense of independence for members, but within the context of the AeP2 project independent activity remains invisible and, consequently, unmonitored from the perspective of the group owner.

Most of the content that has been added to the site has been sourced by members of the AeP2 project team, drawing on announcements from the various lists and from contacts within the sector. The information on upcoming conferences is one such area (Figure 4.5), and although this is located in a shared wiki, to date no other members have added content here. The addition of content of this nature inevitably requires ongoing maintenance to ensure that it remains current and differentiates between upcoming events and past events that might, in turn, have further content in terms of conference papers.

**Figure 4.4: The functions available to members to contribute to the group site**

**Figure 4.5: Notification of upcoming and past events in the group site**
It is felt that the ePortfolio Practice Group within the ALTC Exchange has achieved the principal aim of establishing a new community space for those people interested in ePortfolios in education and learning. While the AeP website has provided a static space with links to the main project resources, the community site offers an additional pathway with enhanced features for interaction between the members. Further research has been undertaken within the AeP2 project to identify the potential requirements of ePortfolio practitioners and researchers for a community space, as well as to examine the critical success factors and the challenges facing existing ePortfolio communities within Australia and overseas. One important issue to consider is the concept of the community lifecycle, which is discussed in the literature review: the ePortfolio Practice Group is inevitably in its earliest days and will need further impetus and interest to become sustainable. It might be found that one ‘common’ ePortfolio community fails to meet members’ diverse needs, meaning multiple smaller, more targeted communities of practice will naturally emerge.

The future of the community, together with recommendations for its ongoing sustainability, will be discussed in the conclusion of this report, drawing directly on the findings from the research into current national and international practice in the context of ePortfolio communities.

4.7 ALIA/AeP2 LIS ePortfolio Pilot Study

One of the principal objectives of the AeP2 research project was to consider the development of strategies to encourage interest in and engagement with community of practice activities. While the ALTC Exchange was established as an online community space, the project team identified the value of establishing and monitoring a community of practice that had its roots in a single industry sector. Working with the Australian Library and Information Association (ALIA), a proposal was drafted for a pilot study on ePortfolio use in the library and information services (LIS) sector. The proposal was made public in a presentation to the ALIA New Librarians Symposium held in Melbourne in early December 2008, with an invitation to the delegates — who were predominantly early career professionals — to consider using an ePortfolio to support their learning and professional development. ALIA promotes its Professional Development Scheme (ALIA, 2009) to encourage members to undertake and track their continuing professional development activities.

Further announcements about the ALIA/AeP2 LIS ePortfolio Pilot Study, with a call for expressions of interest, were disseminated via professional e-lists. The pilot project sought participants who could commit to being involved for two years (2009 and 2010). This study therefore extends beyond the life of the AeP2 project, but the project team, together with the senior staff of ALIA, felt that the optimum project outcomes would require longer timelines than was feasible with the AeP2 project itself. Prospective participants were also asked to be available to attend the AeP2 Symposium to develop an overarching understanding of ePortfolio practice and to participate in a half-day workshop as an introduction to the ePortfolio software. It was also hoped that participants would be supported by their manager and/or mentor so that there was a natural connection to their professional life.

Forty practitioners initially expressed an interest in being involved in the project, which was refined to a final cohort of 26 people. While the cohort was self-selected, there was a natural geographic distribution (Brisbane and South East Queensland, Central Queensland, Northern Territory, Melbourne and Adelaide), with those involved representing professionals (librarians) and paraprofessionals (library technicians) at different stages of their careers; that is, students, new graduates and/or early career (less than five years employment in the LIS sector, mid career (5–15 years industry experience) and senior career (16 years or more in the sector). There was also a good distribution of participants representing the different areas of LIS practice: public, academic, TAFE and special libraries.

The software selected for the ALIA/AeP2 LIS ePortfolio Pilot Study was PebblePad, as it was felt that the platform would comfortably accommodate the cross-institutional nature of the cohort. The staff of PebblePad also strongly supported the initiative, given the use of the ePortfolio software for the ‘Flourish’ study (involving the Chartered Institute of Library and Information Professionals (CILIP)) led by the University of Cumbria in the UK (JISC, 2009b). Importantly, all participants were aware of their involvement in and commitment to the project as a research study. Accordingly, there were opportunities to survey those involved to track their progressive interaction and engagement with ePortfolio over an extended period of time.
During the AeP2 Symposium brief interviews were recorded with the participants to gain insights into their motivations to join the project. The pilot study has included an initial ‘pre-ePortfolio’ survey (February 2009) to capture the participants’ expectations for their ePortfolio activities; this was conducted before they were introduced to the software. A subsequent survey (May 2009) was conducted to track the stages of development over the intervening months. The interim findings from the research are presented in this report but, as noted, the life of the pilot study extends beyond the timelines for the AeP2 project: a concluding report will be prepared in 2010 to present the complete findings of the industry study. The questionnaires, designed to capture both quantitative and qualitative data, were developed and distributed using the online tool SurveyMonkey. The survey questions drew on those used in the research activities during the first stage of the Australian ePortfolio Project, which have notably also been used by a number of other ePortfolio researchers at various academic institutions in Australia and New Zealand, enabling a comparative perspective of participants to emerge.

A total of 23 pilot study participants completed the first ‘expectations’ survey. Questions about the demographics of the ALIA/AeP2 LIS ePortfolio cohort revealed that the participants ranged in age from 21 years to over 45 years; two thirds of the cohort were aged over 36 years, with 26% of participants being 36–40 years, 17% being 41–45 years and 22% over 45 years of age. It is noted that the demographic data reflects the overall picture of the LIS profession, correlating with the national neXus study of the library and information workforce in Australia, which reported that 79% of LIS professionals was in the over 36 years age group (Hallam, 2008). Nevertheless, all participants in the study were female, compared with the actual figure of 85% of the library workforce being female (Hallam, 2008).

The majority of the participants were full-time employees (13), while seven were part-time employees. One was a casual employee and three indicated that they were unemployed, but currently studying; a total of 13 respondents indicated that they were also studying. There was a good spread of qualifications across the higher education and VET sectors: 15 participants held a bachelor degree, 10 held graduate diplomas and three participants held a masters degree. Thirteen participants held qualifications from the VET sector, with seven people reporting that they held a TAFE certificate and five held TAFE diplomas. It should be noted that in the library and information services sector there are different career pathways, with TAFE certificates supporting the training for library assistants and TAFE diplomas for library technicians, while librarianship qualifications are offered by universities at the bachelor, graduate diploma and masters levels. It is often the case that those in the LIS workforce enter the profession as a career change: those with earlier academic qualifications represented a wide range of disciplines including education, science, business, journalism, visual arts, psychology and hospitality. Eight of the respondents listed first qualifications in library and information science.

Participants were able to select the statement or statements that best described their understanding of an ePortfolio. Participants could select more than one response to this question. The statements included:

- It is an electronic tool for self-assessment, a place I can record by education, something like a diary.
- It is an electronic tool for self-assessment, a place I can record my experiences during my employment, something like a diary.
- It is an electronic version of a paper portfolio.
- It is an electronic filing cabinet filled with examples of my work and achievements.
- It is a secure repository for me to collect and store my evidence of my skills and knowledge attainment.
- It is a place for me to reflect upon my learning journey — where I have come from and where I’m going — it’s about the process of learning.
- It is about evidence of skills, but there’s also an opportunity to show the process and to reflect on what this means to me.
All statements were selected, with the lowest score on any statement being 11, indicating that the statements captured the different perspectives of the participants. The highest score recorded was 16, for the statement that an ePortfolio ‘was a secure repository to collect and store evidence of skills and knowledge attainment’. Fourteen participants recognised that an ePortfolio could be a tool for reflection and 14 believed it could chart a journey of learning. All participants chose more than one statement, indicating that they were aware that an ePortfolio could cover a range of professional and educational purposes.

The survey sought responses from the participants on their perceptions of ePortfolios in regard to their education and career. The responses were very positive about the potential role of ePortfolios in learning, acknowledging that an ePortfolio could provide a space to store examples of their work; it would allow reflection and evaluation of learning processes and allow them to reflect on weaker areas; allow the storage of extracurricular activities and would assist them to become more independent learners.

Further questions on the possible outcomes of ePortfolios in career enhancement and education focused on career opportunities, continuing professional development, performance reviews and professional accreditation. Most participants saw advantages in using ePortfolios to organise their work in preparation for future employment and in continuing professional development. Participants recognised that ePortfolios would form a component of their lifelong learning activities; that they anticipated that their involvement with ePortfolios would go beyond the initial pilot project. To a slightly lesser extent, but still with positive responses, the participants valued ePortfolios as contributing to and being part of the performance planning and review process and in making a contribution to professional accreditation and registration.

Three participants had previously used an ePortfolio in postgraduate coursework, two had used an ePortfolio as part of a professional development program and one had used an ePortfolio independently. Twenty-two per cent of participants reported having their own websites, with 50% considering a website to be a type of electronic portfolio. Early indications were that the participants felt enthusiastic at being involved in this project (61%), with an additional 30% indicating that they had positive feelings about their involvement. Eight per cent were neutral or uncertain about their involvement in the ePortfolio project. No participants reported feeling anxious or confused.

Once the participants had attended the half-day workshop, they were given time to explore the PebblePad software and to consider its strengths and limitations for their own purposes. It was stressed that the goal was to enable the participants to formulate their own ideas about how they would use PebblePad, which was arguably a different approach to other more prescriptive scenarios of ePortfolio practice (for example, in academic coursework). The participants were not required to use the ePortfolio for any specific tasks or assessment activities.

Each participant began to use PebblePad to design, collate, format and present their professional portfolio to suit their own needs. Face-to-face user group meetings were held for the Brisbane and South East Queensland cohort on a monthly basis, with at least one user group held in all the other regions during the period March–June 2009. Participants shared ideas, assets and activities using the ‘gateway’ (shared space) feature of PebblePad. The face-to-face meetings were collegial and constructive, taking a ‘show and tell’ approach to encourage all participants to share their developing ePortfolios with the rest of the group. Those who were having technical problems were assisted, while the chance to view the ePortfolios of other participants proved an incentive to test out new ideas. A second survey was conducted in May 2009 to track the progress made and to capture the diverse range of applications to which the participants had applied the PebblePad software to build their ePortfolios.

In the second survey the aim was to track the changes in perceptions of the participants, as well as to try to capture the new and evolving skills that the participants may have developed. Participants’ revised understandings of ePortfolios were captured in the second survey. The data revealed that there had been a shift in thinking since the participants had begun using PebblePad and sharing their ePortfolios in group meetings. Less value was placed on the ePortfolio as a ‘product’, that is, as a secure repository or an electronic version of a paper portfolio, with the emphasis moving to a clearer understanding of the ‘process’, with 17 respondents responding positively to the statements:
It is a place for me to reflect upon my learning journey — where I have come from and where I’m going — it’s about the process of learning.

It is about evidence of skills, but there’s also an opportunity to show the process and to reflect on what this means to me.

The participants were asked to provide responses to questions on how ePortfolios might be of benefit in their education and career. Ninety per cent agreed or strongly agreed that their ePortfolio was helping them with their career development. The majority of the participants (95%) indicated that they valued the ePortfolio as a space to store examples of their extracurricular activities (for example, volunteer work, life experience) that were relevant to their current and future careers. Almost three quarters reported that they were becoming more effective and independent learners, although one quarter remained neutral.

The survey probed into the features and functions of the PebblePad software that the participants had explored and used. All of the functions were listed and the participants were asked if they had used them, to what extent and if they had not used the functions, whether they intended to at some stage in the future. It was interesting to note that while not all participants had used all the functions of PebblePad, none indicated that they never intended to use them. This indicated that the participants were still exploring the uses and functionality of the software. All of the features of the PebblePad software had been used, some more than others. The features which were used ‘very often’ were My Assets, the CV and the Search function. As the participants accumulated assets or artefacts in their ePortfolio, the search feature becomes more crucial to finding the assets in their store. Overall, 75% of the participants had used the CV feature, with the other 25% planning to do so, indicating that at this stage all of the participants were committed to completing a CV using the PebblePad software. The other features that the participants were making the most use of are shown in Table 4.1.

<table>
<thead>
<tr>
<th>Feature</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thought</td>
<td>90</td>
</tr>
<tr>
<td>My assets</td>
<td>85</td>
</tr>
<tr>
<td>Action Plan</td>
<td>75</td>
</tr>
<tr>
<td>CV</td>
<td>75</td>
</tr>
<tr>
<td>Webfolio</td>
<td>71</td>
</tr>
<tr>
<td>Experience</td>
<td>70</td>
</tr>
<tr>
<td>Activity</td>
<td>68.5</td>
</tr>
<tr>
<td>Ability</td>
<td>67</td>
</tr>
<tr>
<td>Blog</td>
<td>67</td>
</tr>
<tr>
<td>Gateway</td>
<td>65</td>
</tr>
<tr>
<td>Achievement</td>
<td>57</td>
</tr>
<tr>
<td>Profile</td>
<td>52</td>
</tr>
</tbody>
</table>

Table 4.1: Pilot study participants’ use of the features and functionality of PebblePad

Some participants had become quite creative in their presentation, embedding links to YouTube videos, adding images and enhancing the interface.

Professional development was recorded as the primary focus of the ePortfolio for 85% of the participants. Their comments demonstrated the professional and personal development they had undergone while involved in this project:

To outline all I have achieved in an orderly yet attractive way and to outline all my goals for the future.

Preparing for ongoing assessment – for employment recognition purposes.

To collate all of my professional development activities into one document, so as to become more focused on professional development.
I want to keep a record of what I have learnt, experienced, achieved over the three years of my Graduate Librarian position. I think this will be very valuable in the future when I am applying for other positions. It will also allow me to look back on and reflect on my learning.

I want to make this ePortfolio to assist me work out what career direction want to pursue and to prepare for any job selection criteria I need to develop and any job applications I wish to prepare.

Personally this has given me a sense of achievement in regards to what I have accomplished so far as a librarian. This is important when you change careers. I feel I am on the right path.

While the Profile feature was reported to be the least used feature at the time of the second survey (May 2009), subsequent work has been undertaken within the pilot study to introduce the participants to the feature. The Profile feature enables ePortfolio users to review and provide evidence of their skills, abilities or competencies. For the ALIA/AeP2 LIS ePortfolio Pilot Study, a profile has been set up to allow the participants to rate their current levels of professional and generic skills. One of ALIA's policies — known as the ‘core knowledge statement’ — covers the areas of core knowledge, skills and attributes (ALIA, 2005). The different areas of knowledge and skills have been mapped to the PebblePad Profile tool and made available to participants via the gateway. This allows participants to audit their professional skills and to consider areas for further development. A number of participants have added further structure to their ePortfolio based on the areas of core knowledge by developing content and attaching evidence of their achievements. An ancillary research project will also use the pilot cohort to review the validity of the specific areas of core knowledge and skills (last reviewed in 2005) to determine the relevancy to current library and information practice.

Comments from some participants indicated that they would like the PebblePad software to be part of their workplace. One participant reported that she ‘would like to expand content in ePortfolio to cover the breadth of current work role and record all the projects that I am responsible for’, highlighting the fact that some participants were ready to make the ePortfolio platform a meaningful tool for their workplace, beyond their own personal use. Participants realised that the process of introducing the software as a workplace tool or application would require changes to their organisation’s work practices that went beyond their individual roles. However, some participants had taken the opportunity to share their ePortfolios with mentors and/or managers and to engage with their broader environment of their workplace or institution. The majority of participants reported positive responses and feedback:

They have been very interested, as they have little experience with ePortfolios. They have made it part of my job description to keep my portfolio and have been reading the assets that I add to my webfolio.

Positive and enthusiastic

Very encouraging

My manager has been very positive and supportive of the project. She was very impressed with what I have created so far. My mentor had prior experience with ePortfolios and PebblePad which assisted me in getting motivated to be part of the project in the first place. She is very supportive and excited about my participation in the project.

Nevertheless, some less positive comments indicated that there was still some reticence about the potential value of ePortfolios to employers:

Mixed – initially, one senior manager very against it, although not sure why. Middle management and immediate supervisor quite interested and supportive, although all in my own time, no funding available.

Some interest, but little interaction. Time is the biggest factor.

The respondents were questioned about who they had showed their ePortfolio to and what responses they had received. Forty per cent had showed their ePortfolio to their managers. One respondent stated that they were ‘very impressed and surprised at how easy it is to access even without being a user’. Forty-five per cent of the participants had showed their ePortfolios to their mentors, with positive developments occurring:

Wanted to know all about ePortfolios and how they are being used. Used a report on a meeting I had prepared to include in own report and was surprised at how easy it is to access.
Sixty per cent of the participants had showed their ePortfolio to their colleagues, with a further 20% indicating that they planned to. Comments were positive, including ‘Where can I get one’. Half of the participants had showed their families their ePortfolios, and while they showed an interest, the comments were less constructive. Only 22% had showed their ePortfolios to friends. Comments here were positive, again with an interest in having an ePortfolio too. Seventy-five per cent of participants reported that they found it beneficial to show their ePortfolios to others, commenting that they valued the feedback and suggestions that were made.

The participants could see great potential for the PebblePad software. Comments for features that they would like PebblePad to incorporate indicated that there was much more that could be done to incorporate ePortfolios into the professional lives of the LIS participants. Comments for further functionality included:

- Better formatting for blogs and RSS feeds
- Being able to embed PowerPoint presentations
- Chat facility
- Shortcut bar to allow quick access to the functions frequently used
- Easy linking to Web 2.0 applications such as Facebook

Finally, the participants were asked to indicate how they now felt about their involvement in the ePortfolio project. While the number feeling enthusiastic had dropped to 30%, 60% were still positive. One participant was still feeling anxious about the project and ePortfolios in general. All participants indicated that they considered the primary focus of their ePortfolio would be for professional development, and all anticipated continuing to work with their ePortfolios once the project had finished.

Participants have been keen to disseminate information about their ePortfolio activities, with articles published in recent issues of the ALIA journal *InCite* (Cook & Ramm, 2009; Osborn, 2009; Randle, 2009). A collaborative multimedia presentation by a number of participants was developed using PebblePad as the presentation medium, and this presentation was given at the Library and Information Association New Zealand Aotearoa (LIANZA) conference in Christchurch, New Zealand, in October 2009 (Hallam, 2009).

Most of the participants reported that they had made positive gains in their professional and academic focus with the use of the ePortfolios. A number of participants had already used their ePortfolios to attain a new job or a promotion with their current employer. There was a clear appreciation for the face-to-face meetings, which had been found to enhance the collegial, sharing and supportive nature of the group. Much was gained in these sessions as the participants learned from each other and from sharing their ePortfolios. The value of the face-to-face group activities and workplace support, as an example of an active community of practice, should not be underestimated in the context of ePortfolio learning.

Although the participants in this project were drawn from the LIS sector, most have come into LIS from another profession. Participants have anecdotally acknowledged that the range of previous education and employment is a strong, positive aspect of the pilot project, with a belief that the application of ePortfolios could suit other fields of employment beyond the library and information services sector. As ALIA, the professional association, has expressed interest in learning more about the value of ePortfolios to support members’ involvement in the professional development scheme, this pilot project has the potential to stimulate new member services. A final report on the ALIA/AeP2 LIS ePortfolio Pilot Project will be released at the end of 2010.
4.8 Summary

The AeP2 project has effectively enabled a range of community building activities to take place, with the publication of six concept guides in the AeP Toolkit, and a second ePortfolio Symposium, with the associated ePortfolio Showcase and the Technical Issues and Opportunities meeting, providing face-to-face interaction. A virtual community space has been established within the ALTC Exchange, and an industry-specific community of practice has emerged through the ALIA/AeP2 LIS ePortfolio Pilot Study in the library sector. These activities have all helped the diverse stakeholders in ePortfolio practice to come together and share ideas and experiences.

In addition to these formal community activities undertaken under the auspices of the AeP2 project, members of the project team have also been involved in other ePortfolio community activities. Given the interest shown in PebblePad by a number of Australian universities, a user group has been established as a forum for support. The user group meetings have been a combination of face-to-face interaction and video conferencing. The AeP2 project team has worked collaboratively with colleagues in the VET sector, through the Australian Flexible Learning Framework, with representation on the reference group that has been established to ensure key stakeholders contribute to national and cross-sectoral agreement on ePortfolio standards, policy and business rules. Meetings have also been held with the emerging international body, the Association for Authentic, Experiential and Evidence-Based Learning (AAEEBL). Beyond this, the AeP2 research activities, particularly the case studies discussed in the following chapters, have ensured ongoing collegial relations with ePortfolio communities within Australia and overseas.
5. Developing a national ePortfolio community of practice for the higher education sector in Australia

5.1 Overview

The following two chapters present the core research findings for the second stage of the Australian ePortfolio Project (AeP2), which sought to investigate the context for establishing and sustaining an effective community of practice (CoP) to support ePortfolio practice in Australia. It is hoped that the findings from the AeP2 research might help inform the development of a sustainable ePortfolio CoP for those involved in Australian higher education.

As noted in Chapter 3, the major research activities encompassed a national survey around the expectations for an ePortfolio CoP, interviews with people who were already participating and had the role of community leader or facilitator, and a series of case studies to profile successful CoPs.

- The national online survey provided insights into the expectations of ePortfolio stakeholders in Australia for the development of a CoP to foster and support ePortfolio practice. Respondents, principally from the higher education sector, helped frame their understanding of a proactive CoP that could accommodate the current context of ePortfolio use in Australia.

- Interviews with community facilitators and administrators enabled the research team to analyse the operations and activities of current ePortfolio CoPs. ePortfolio CoPs were identified across the US, the UK, the Netherlands, New Zealand and Australia. The interviewees proved to be a rich source of data to provide insights into their experiences with a CoP and to highlight the common and divergent characteristics, critical success factors, challenges and issues that could be encountered in ePortfolio communities.

- Case studies from a number of ePortfolio CoPs further assisted in ‘bringing to life’ these experiences and to provide the colour and texture of existing ePortfolio CoPs.

This chapter provides an overview of the demographic picture of the survey respondents, leading into a discussion of the research findings from the perspectives of the use made of online and/or social networking sites, current participation in communities of practice and the desired models for an Australian community of practice to support ePortfolio use in higher education. In Chapter 6, a number of ePortfolio communities of practice are examined to develop a clearer understanding of the issues and challenges associated with such entities in both Australia and overseas. Further depth and richness is provided by the series of case studies that are interspersed throughout the two chapters.

5.2 Communities of practice in an Australian context

In order to identify the characteristics required for the development of a community of practice amongst ePortfolio users, it was important to target a representative selection of active ePortfolio users in the higher education sector in Australia. The relevant information was gathered using an online survey that was distributed by email to a list of individuals who had been associated with the Australian ePortfolio Project during Stage One and/or Stage Two of the projects (2007–2009). The survey questions were mainly aligned with the key themes about CoPs in general and about current ePortfolio practice in particular, as identified through the literature review.

5.2.1 Demographic profile of the survey respondents

Around 850 names were included on the list of people with whom the research team had had contact through both stages of the Australian ePortfolio Project. However, as the target respondents were also requested to forward the email request to other people who might be interested in the research,
there was, in fact, no clearly identifiable number of potential subjects for the survey. In response to the email distributed to these contacts, a total of 154 individuals completed the survey. Most respondents identified themselves as residing in Australia (n=141), with all states and territories represented, although the main breakdown came from the eastern states — Queensland, New South Wales and Victoria. Thirteen respondents identified themselves as residing outside of Australia or intentionally left this question blank. The international respondents reported that they were associated with institutions and organisations in either New Zealand or the Netherlands.

Responses given to the demographic questions indicated that of the 154 people who completed the survey, the majority were aged between 40 and 60 years (82%). While around almost one third of respondents (n=47) had been using ePortfolios for over two years, a quarter (n=37) had only been exposed to ePortfolios for less than six months. The remaining respondents had been using ePortfolios for periods of between six months and two years.

The majority of respondents came from the higher education (HE) sector (70%), with 9% drawn from the vocational education and training (VET) sector and the remainder representing schools, employer groups, professional associations or cross-sectoral organisations. Within these sectors, the professional roles of the respondents were predominantly academic staff (n=54), followed by those working in eLearning (n=31) and management (n=15). It should also be acknowledged that a small number of respondents (n=11) indicated that they were students or used the ePortfolios in their learning. Figure 5.1 presents the professional contexts of the respondents’ roles in their work with ePortfolios.

Figure 5.1: Professional roles in ePortfolio work

The discipline areas of the various respondents were broken down to reflect the traditional academic discipline areas within higher education. Of the key discipline areas of respondents who were academic staff (n=54), education was predominant in the use of ePortfolios, at 28% (n=25). The health sciences and law were the next most common disciplines (7% each), with business, information technology and the social sciences also represented (4% each). Therefore, while a significant number of respondents indicated their use of ePortfolios was predominantly in the context of teaching and learning across the range of different disciplines, there was also evidence that their interest in ePortfolios extended beyond any specific discipline area (n=45).

5.2.2 Use of online social and professional networking sites

The data revealed some interesting variations in the use of online social and professional networking sites. Of the 152 respondents to this question, 27% (n=41) used online social networking sites on a daily basis, while around 22% (n=34) access these sites every week. Twenty per cent (n=31) reported that they had never participated in any online social networking activities. Ten respondents (6.6%) stated that while they had not used online social networking, they did plan to do so in the future. Figure 5.2 presents the breakdown of the frequency of use of social networking. A significantly smaller number of respondents were using online professional networking/community sites (n=18) daily as compared to social networking sites.
However, in terms of weekly access, the number of respondents using professional networking sites was similar to the number using social networking sites. Again, about 5.3% of respondents reported that they not yet used professional networking but were planning to do so in the future. Ultimately, respondents were more likely to be using social networking sites on a regular basis (daily) than professional networking sites.

Figures 5.2 and 5.3 present the differences between the use of online social and professional networking tools.

**Figure 5.2: Use of online social networking sites**

- 27% Every day
- 20% Every week
- 16% Every month
- 8% Less than once per month
- 7% Never used one
- 7% Haven’t used one yet, but planning to

**Figure 5.3: Use of online professional networking sites**

- 21% Every day
- 18% Every week
- 12% Every month
- 23% Less than once per month
- 5% Never used one
- 5% Haven’t used one yet, but planning to

Interestingly, those working outside of the HE sector were more likely to access both online social and professional networking sites on a daily or weekly basis. Table 5.1 highlights the differences in online use of networking sites by respondents from the different sectors. It was interesting to note that of the respondents from the VET sector (n=15), more than half worked in eLearning and 20% in management roles, compared with figures for those in the higher education sector of 16% in eLearning and 10% in management roles. There could be value in undertaking a further investigation to determine whether, for example, there might tend to be a higher level of engagement with online networking activities amongst people who are working directly in the eLearning environment, as opposed to those working as teaching staff.
Table 5.1: Percentage comparison of those participating in online networking: HE and non-HE

<table>
<thead>
<tr>
<th></th>
<th>Access daily (%)</th>
<th>Access weekly (%)</th>
<th>Never (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Social networking</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HE sector</td>
<td>19</td>
<td>20</td>
<td>25</td>
</tr>
<tr>
<td>Non-HE sector</td>
<td>43</td>
<td>26</td>
<td>6</td>
</tr>
<tr>
<td><strong>Professional networking</strong></td>
<td></td>
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</tr>
<tr>
<td>HE sector</td>
<td>7</td>
<td>15</td>
<td>17</td>
</tr>
<tr>
<td>Non-HE sector</td>
<td>21</td>
<td>32</td>
<td>19</td>
</tr>
</tbody>
</table>

For those participating in online social and professional networking sites or communities, the most common communication tools were email discussion lists or groups (e-lists/e-groups) with almost one third of respondents (n=47) noting this was their most frequently used method. This communication tool was followed closely by the use of Web 2.0 tools (for example, Flickr, Twitter, Delicious) with around one quarter of respondents (n=37) claiming the most frequent use. Other frequently used online tools included live presentations or workshops and teleconferencing. Respondents rated live chat room and bulletin boards as the most infrequently used.

### 5.2.3 Participation in a community of practice

The vast majority of survey respondents (92%) saw themselves as currently participating in a community of practice (CoP), as defined by the AeP2 Project, within either their personal life or their professional life. Four types of interaction were identified by the project team as being the most common: face-to-face, telephone, video conferencing and online interactions. Of those that identified themselves as being part of a CoP, online interactions — including email, blogs and online communities — were identified as being the most common interactions. The least used interaction identified was video conferencing. It should be noted that the number of those identifying face-to-face interactions as commonly used was slightly less than online interactions (see Figure 5.4).
5.2.3.1 Models

An initial selection of survey questions sought to determine how respondents viewed a potential ePortfolio CoP. Initial questions were directed at their interest in the geographical scope of the practice, for example, CoPs with a regional, national or international focus. This was evaluated by examining the ‘agreed’ or ‘strongly agreed’ responses. Across these questions the highest proportion of respondents who ‘agreed’ or ‘strongly agreed’ supported the idea of a national perspective for an ePortfolio CoP (n=132), rather than a regional or an international focus.

Respondents were then asked to identify their level of interest in different contexts for an ePortfolio CoP, encompassing the following:

- discipline-based
- cross-sectoral (HE, VET, schools, employers)
- technology/software tools
- policy
- pedagogy.

Of these five principal contexts, the highest interest (75%) was in a context focus on pedagogy (strongly agree or agree n=116). Almost 60% (n=89) indicated that they supported the idea of a CoP that had a strong focus on technology and software tools. Overall, there was a high proportion of ‘agree’ and ‘strongly agree’ responses to the policy context for the ePortfolio community (52%, n=80), reflecting a necessity to formalise the context of ePortfolio use.

An examination of the data across the sectors with a comparison of the ‘agree’ and ‘strongly disagree’ responses for each specific context made it possible to identify the respective priority areas for each sector. Those respondents who identified themselves as being in the HE, VET and schools sectors expressed the greatest support for a pedagogy focus for an ePortfolio CoP. In contrast, respondents representing employer groups, while smaller in number, were eager to see a technology/software tool focus for a CoP. Representatives of professional associations, identifying themselves in the career or eLearning sector, felt strongly that the focus of a CoP should be discipline-based, directly reflecting their professional focus. Those who had selected the ‘other’ group for their professional role, identifying themselves as participating in careers, ICT, management and eLearning, responded most favourably to the focus being cross-sectoral.

An additional question in the section of the survey about potential models for CoPs asked respondents to consider the organisational aspects of a CoP. Survey respondents were asked about the importance of face-to-face contact (forums, meetings) on a regular basis; 57% (n=88) recorded ‘agree’ or ‘strongly agree’. Respondents representing professional associations indicated that they were extremely keen to participate in face-to-face events, highlighting the value of forums such as the AeP symposia to engage interested parties beyond the education sector.

Questions were asked about whether respondents would support a funded ‘community manager’ or whether they felt that a community should be completely ‘organic’ (that is, without a moderator or manager). Figure 5.5 indicates the level of agreement to the proposition that the CoP should accommodate a funded manager or moderator, with almost three quarters (n=111) responding with ‘agree’ or ‘strongly agree’.
These responses can be contrasted with the subsequent question as to whether an ePortfolio CoP should exist without a manager or moderator. Figure 5.6 indicates that only 18% (n=28) of respondents envisaged a successful CoP with no central manager.

Of all sectors, the VET respondents recorded the highest responses of ‘agree’ or ‘strongly agree’ for the involvement of a manager or moderator, whereas the schools sector was more supportive of an organic CoP (67% agreed or strongly agreed). Interestingly, when the responses for those people least experienced with ePortfolios (less than six months) were compared with those most experienced (more than two years), there was a common preference for a managed online ePortfolio CoP as compared to an organic community.

5.2.3.2 ALTC Exchange

While just over half of the survey respondents had heard of the ALTC Exchange online professional networking site (n= 92), only 23% (n=36) had actually used the site. This indicated a general awareness of the emergent professional networking opportunities currently available to the higher education sector, but that only sporadic use had been made of the site to date.

5.2.4 Online ePortfolio community of practice

While the preliminary questions in the survey sought to explore the context and organisation of a CoP, the questionnaire subsequently aimed to gather information about the types of activities that users of an ePortfolio community of practice would be interested in within the context of the CoP.
5.2.4.1 Uses of an ePortfolio community of practice

The survey presented a selection of uses and opportunities that could be offered to members of an online ePortfolio community of practice, including opportunities to:

- collaborate with others
- locate/obtain resources made available by other practitioners
- upload resources to share with others
- participate in special interest groups
- network with colleagues and practitioners
- disseminate information
- find out about special events (symposia, conferences, workshops)
- participate in online workshops or web forums.

A series of questions were posed about the potential uses, with respondents able to select their answer based on a Likert scale of ‘strongly agree’ through to ‘strongly disagree’. The data was aggregated for the number of ‘strongly agree’ and ‘agree’ responses across the questions.

While all respondents noted the value of the proposed uses, those who had been using ePortfolios for less than six months either ‘agreed’ or ‘strongly agreed’ to the following three uses:

- the opportunity to network with colleagues and practitioners
- the opportunity for collaboration
- the ability to find out about special events.

Those using or dealing with ePortfolios for more than two years valued:

- the opportunity for collaboration
- the ability to find out about special events
- the capability to locate/obtain resources made available by other practitioners
- the opportunity to participate in special interest groups.

The main difference between the two groups was noted in the desire for new ePortfolio users to network and collaborate with other users, whereas those with experience appeared more interested in finding out about relevant events and being able to locate and obtain resources to support their ePortfolio practice.

Similar findings were noted when the HE sector was examined separately, with academic staff who had less than six months experience with ePortfolios (n=14) compared to academic staff with more than two years experience (n=19). As an example of these differences, Figures 5.7 and 5.8 summarise the variations in the perceived use of an online ePortfolio CoP for networking purposes, with experienced ePortfolio practitioners strongly supporting the idea.

![Figure 5.7: I would use an online ePortfolio community of practice to network with other practitioners or colleagues (HE sector, academics with less than six months experience with ePortfolios)
Different priorities for the use of an online ePortfolio CoP were noted when the sectoral data was reviewed. Although small, representatives of the employer sector (n=3) were interested in using a CoP for the purpose of information dissemination.

Representatives of the HE sector (n=108) indicated their interest in using ePortfolios for the purposes of:
- locating and obtaining resources made available by other practitioners
- disseminating relevant information
- obtaining information around special events.

Respondents in the VET sector (n=15) viewed their key uses of an ePortfolio CoP as:
- collaboration with others
- networking with colleagues and practitioners
- finding out about special events
- disseminating information.

The schools sector (n=6) prioritised the following uses:
- disseminating information
- collaboration with others
- networking with colleagues and practitioners.

Although the number of respondents in some sectors was arguably very low compared to the HE sector, there was a strong degree of agreement about the potential value of an online ePortfolio CoP to disseminate current and relevant information.

5.2.4.2 User conditions

There were also a group of questions to examine three specific conditions of use for online ePortfolio CoPs, with respondents asked to select the most meaningful option:
- I would use an online ePortfolio community of practice only if I knew someone else who was using it.
- I would use an online ePortfolio community of practice only if I received training in its use first.
- I would use an online ePortfolio community of practice only if it did not require special training.

Over 61% of respondents (n=95) either disagreed or strongly disagreed that they would only use an online ePortfolio CoP if they knew of someone else using it. The data was common for both new users (less than six months experience) and established users (more than two years experience). However, it was noted that the small group of respondents representing employers (n=3) indicated that they were more likely to use the CoP if they know someone else who was using it.
In relation to the condition of training, only 6% of respondents agreed or strongly agreed that they would be more likely to use an online ePortfolio CoP if there was prior training available. This suggested that they either felt confident about their abilities to operate in an online environment or they anticipated that online CoPs would be relatively intuitive to use. Again, the education sectors (HE, VET and schools) appeared more confident about their use of an online CoP.

While the majority of respondents did not see the requirement for prior training in the use of an online ePortfolio CoP, there was ambivalence about the use of a CoP that did not require any special training. Figure 5.9 graphically presents this ambivalence, with fairly even proportions of responses agreeing/strongly agreeing, disagreeing/strongly disagreeing and remaining neutral.

![Figure 5.9: I would use an online ePortfolio community of practice only if it did not require special training](image)

It was found that respondents from the employer groups and professional associations were more inclined to support the need for special training around the use of an online ePortfolio CoP, compared to those in the education sectors.

### 5.2.4.3 Types of users

The final section of the survey sought to clarify the range of stakeholders who might participate in an online ePortfolio community of practice. Respondents were asked to determine, using a Likert scale to reflect the degree of agreement or disagreement, who they believed an online ePortfolio community of practice should be open to. Each potential user group was identified in separate statements, for example, ‘I believe an online ePortfolio community of practice should be open to employers’. The following users were identified:

- learners
- teachers
- learning and teaching support staff
- IT support staff
- careers advisory staff
- human resources staff
- employers
- professional bodies
- ePortfolio tool developers.

Higher percentages were recorded across the sectors for the involvement of:

- teachers
- learning and teaching support staff
- IT support staff.
The lowest level of agreement was noted for participation in a CoP by learners and by human resources staff. Respondents from the VET sector highlighted the need for teachers and IT support staff to be involved, while those in the schools sector placed employers and professional bodies ahead of teachers. However, when the data was analysed from the perspective of professional roles, there was consensus amongst the three main cohorts of academic staff, eLearning staff and institutional managers to suggest that the two key groups of stakeholders of a CoP should be teachers and learning and teaching support staff.

5.2.5 Comments and ideas from respondents

There were two open-ended questions in the survey that allowed respondents to contribute their own views about a potential online CoP to support ePortfolio practice in higher education. The first question invited respondents to provide their ideas and opinions about the type(s) of activities that could be incorporated in an ePortfolio CoP. The main focus of the comments related to the possible scope of activities and the range of potential stakeholder groups:

- These are all different groups with different interests. You may need to set up different spaces for each as well as spaces with combined memberships. E.g. employers and students may be a good or poor mix, depending on the circumstances.
- Ideally, it should attract & involve a diversity of stakeholders - you need to be inclusive about those stakeholders who work in the standardisation space.

Staff in government departments were nominated as a further stakeholder group to be included in an ePortfolio CoP. Respondents proposed that the scope of the CoP should include:

- Product reviews & surveys
- Evaluation of ePortfolio concepts from each stakeholder’s perspective
- Technical standards for ePortfolio communities of practice implementations
- Creating a career strategy in the e-portfolio
- Embedding resources published separately e.g. Slideshare, Youtube

The survey allowed for some general discussion around the desired goals for an online ePortfolio community of practice, enabling respondents to present their previous experiences with, or ideas for, an online ePortfolio CoP. The comments were wide ranging, covering the need for support for a CoP, ideas about how the CoP might evolve, the concept of ‘a common purpose’ for members and issues associated with the commitment of time as a member. Beyond this, respondents presented their views about value of the AeP symposia to the education sector and the importance of continued collaboration between interested parties. The topic of the development of an online ePortfolio CoP attracted a number of comments about who might serve as moderator and the level of moderation required:

- I believe face to face events like the AeP2 symposium are key to successful community building and maintenance. The challenge of fostering online communities is yet to be fully addressed …
- Plan to include regular ‘real time’ events online using virtual classrooms - bring the discussions into a truly web 2.0 domain. This will keep an AeP CoP alive between f2f symposiums and generate groups of special interest groups.
- A community of practice works best when it is organic and emerges from a community of practice in the real world. Note the uptake of facebook by comparison to any University led network. A good community of practice would add to the existing measures rather than replicate them.
- It is crucial that, at least in the initial stages, there is a funded project manager to drive the community.
- CoPs tend to need a sense of organisation, direction, purpose, and facilitation.
- I believe some sort of moderator or champion is useful in ‘seeding’ a COP, encouraging activity, and providing stimulus …
To maintain interest, they must be useful and active. People are time poor, so info / resources must be relevant to practitioner needs, so maybe a few different focussed areas, e.g. technical, pedagogy, showcasing etc

To widen the appeal to practitioners other than Universities, the practicalities of coordination, collaboration and connectivity need to be discussed openly. Viewpoints from all areas of education need to be heard.

I think there is a key distinction between an Online Community of Practice and a Network of Practice (NOP). It will be important for any initiative to identify whether it intends to truly go beyond a NOP and how.

Overall, the survey findings indicated that there was strong support for a CoP to support ePortfolio practice in education.

5.3 Summary

The AeP2 project team was satisfied with the good number of responses received for the survey about the potential for an ePortfolio CoP in Australia. Given that there was, at the time, no ‘dedicated’ CoP in the area, the questions had been developed to encourage respondents to consider what they felt would be an appropriate model for a CoP. There was undoubtedly a high level of interest, particularly to consider a hybrid forum that blended the benefits of an online community with opportunities to meet face to face, for example, through further symposium events in the future.

The focus of a new community could include a range of areas of interest, including pedagogy, technology and software tools and policy. There was clear consensus that, at least in the early days, an ePortfolio CoP would benefit from the guidance and facilitation of a funded community manager, rather than being a purely organic entity. It is believed that the timing of the survey, following immediately on from the second symposium, contributed to the interest in and engagement with the subject, with many respondents keen to continue the positive professional momentum and energy stimulated by the symposium and to further develop the contacts they had made. A CoP was seen to be an important initiative that would help to consolidate current levels of interest as well as foster and strengthen the networking and relationships that were already emerging.
Case study 1

Australian Flexible Learning Framework: E-portfolios
Community of Practice

Website:  tp://www.flexiblelearning.net.au/e-portfolios
Blog:  http://www.flexiblelearning.net.au/e-portfoliosblog
Contact:  Allison Miller, E-portfolios Business Manager, allison.miller@tafesa.edu.au

Context

Since 2005, the Australian Flexible Learning Framework, the e-learning strategy for the Australian vocational education and training sector (VET), has conducted research into the role ePortfolios can play in supporting learner mobility and lifelong learning. In 2008 the Framework established the E-portfolios — Managing Learner Information business activity to focus on infrastructure (services, resources and standards) with the aim of developing a sector-wide approach to business and technical standards and policy.

The current research activities have principally been guided by an E-portfolio Reference Group that encompasses a broad membership base. As well, a VET E-portfolios Community of Practice (CoP) has been established and facilitated by the Australian Flexible Learning Framework in response to those practitioners and early adopters working in this area who can share best practice. Membership is informal and includes teachers and learning and teaching support staff in the sector, as well as ePortfolio tool developers.

Aims and outcomes

Broadly, the VET CoP aims to encourage the adoption of ePortfolios by connecting areas of good ePortfolio practice and supporting those early adopters who may feel isolated in their current ePortfolio activities. The technical architecture of the community is principally a website and blog, but dissemination activities include workshops, conference presentations and forums in both a virtual and face-to-face context. A yearly event is planned to facilitate interaction between the various stakeholders. Both the website and the blog link to current ePortfolio resources and information specific to the business activity and the VET sector, as well as ePortfolio activities and initiatives within Australia (for example, AeP).

Critical success factors

Funding and the organisational context and support has made a significant impact on the development of the CoP. Facilitation and administration is funded by the Australian Flexible Learning Framework, who has determined the information needs of the community around raising awareness and disseminating the current ePortfolio activities in Australia.

Key CoP ‘personalities’ can also provide the stimulus for discussion and the sharing of knowledge. Hearing from those who have travelled down the implementation path and utilised ePortfolios in their specific context can provide a sense of relevance and purpose for community involvement.

Challenges

How people utilise the CoP has required consideration. Different technological and social platforms are offered in the CoP, for example, some members prefer RSS feeds; some are comfortable participating in an online forum, while others prefer workshops. Information and resources have been arranged in various formats to accommodate the various levels of members’ technical knowledge so that they do not feel alienated by the nature of the online environment.

Sustainability

Sustainability will be determined by the continued relevance of ePortfolio progression in Australia. The VET CoP currently sits as an awareness raising process within the current business activity of the Australian Flexible Learning Framework. Management has already considered the CoP as a relevant activity and has supported facilitation via funding of an administrator and various dissemination activities. Developing and sustaining relationships with ‘aggregators and agitators’ will help develop ideas and activities for the group. Activities and resources are also carefully considered so as to accommodate the long-term member and the newly arrived individual, and bring together the two with common interests.
Case study 2

Personal learning plans and ePortfolio

Website: edna Groups — password access only
Contact: Pru Mitchell, Senior Education Officer, and Cecily Wright, Education Officer Education.au: pmitchell@educationau.edu.au, cwright@educationau.edu.au

Context

The new South Australian Certificate of Education (SACE) has developed a module for senior secondary students around a personal learning plan (PLP) (http://www.futuresace.sa.gov.au/plp.htm). Evidence of learning is to be provided through various formats, with electronic portfolios suggested as one of the options. Various school associations received funding for 2009 from the Australian Government Quality Teacher Programme (AGQTP) (http://www.qualityteaching.deewr.gov.au) to consider ePortfolios in the school sector.

In order to prepare teachers to make use of ePortfolios in secondary schools, Education.au (http://www.educationau.edu.au/jahia/jsp/index.jsp) was asked to put together a professional learning activity for South Australian teachers around using ePortfolios and implementing PLP in their schools. Hands-on workshops introduced teachers to the concepts, using the edna Groups Moodle learning management system as a social space to accommodate resources and course material. This online membership space provides access to pre-readings, website links, workshop presentations, polls and news and introduction forums.

Aims and outcomes

Although not essentially emerging from a community of practice (CoP) ethos, the group operates within a community framework and describes their online environment as a ‘space for collaboration and discussions between members of the ePortfolio Professional Development program’. The ePortfolio group has linked the aims of their professional development project with two of the specific outcomes of the AGQTP (summarised below):

AGQTP Outcomes

- Outcome (1): Teachers will have strengthened the currency and depth of their pedagogical knowledge and skills.
- Outcome (4): Teachers will have engaged productively in collegial networks that extend and support knowledge and skills

Aims of this project

- To build knowledge and skills related to ePortfolios
- To create and extend online collegial networks
- To further develop ICT skills and capabilities
- To trial the processes involved in creating an ePortfolio

Critical success factors

While the CoP is more structured and directed than other organic entities, the online activities have helped engage the group throughout their development, particularly as the teachers were able to develop their own ePortfolio or digital tool as a way of understanding the process. What is noted is that both the facilitators and the community members are coming from a position of ‘investigation’ around ePortfolios and are able to share and collaborate. Feedback and reflection on the workshops and activities will also assist in the development of future activities.

Challenges

The varied ICT skills of the community members have been a significant challenge in this inaugural activity. While the introduction of ePortfolios is in itself often a new concept, the idea of working and contributing in an online community has provided further challenges for some participants. The direction and guidance from the facilitators has proved invaluable in this aspect of the CoP.

Sustainability

Plans are in place to continue the provision of professional development workshops in the future around ePortfolio options in SA secondary schools, and the facilitators envisage that the community will continue with participation of some of the foundational members. Additionally, these members will bring their new-found knowledge to the next influx of members. Maintaining the momentum in the community has relied heavily on the organisation and facilitation of Education.au and on making connections and sharing information with various organisations using and implementing ePortfolios.
RMIT University: Introducing ePortfolios

Website:  http://www.rmit.net.au/eportfolio
Contact:  Meaghan Botterill, ePortfolio Project Leader, RMIT University  meaghan.botterill@rmit.edu.au

Context
As part of RMIT’s e-Learning Advancement Program (REAP) the ePortfolio tool PebblePad is being trialled. REAP aims to improve e-Learning and the use of Information and Communication Technologies (ICT) at RMIT and enhance active learning opportunities for students’ (REAP website). Consequently, the use of wikis, blogs and ePortfolios constitutes a large amount of the interest in online learning environments, assessment and career development.

The PebblePad trial (2200 licences at this stage) has resulted in the development of a CoP essentially focused around professional engagement with the scholarship of learning and teaching and is supported through an internal staff wiki that operates as a space for the collaboration and dissemination of ideas, pedagogy and research as well as a professional development site (Botterill, Allan, & Brooks, 2008).

Aims and outcomes
The PebblePad trial began in mid 2008 and will finish at the end of 2010, extending across different areas of the university in line with the strategic goals of the institution as a whole and professional support services. Principally, the trial aims to support the introduction of ePortfolios into teaching and learning across the university. The development of the CoP has provided staff with a means of organisational support and connectivity across RMIT.

Due to the diverse location of the CoP across campuses, both local and international, engagement is supported through electronic means (email and Skype), as well as face-to-face events (lunches and forums) at different campuses. Notification of and dissemination about events are supported via email and the wiki. Professional development days, both internal within RMIT and externally with the Australian PebblePad Users Group (see Case study 5), have also assisted to build the CoP and foster inter-university relationships around ePortfolios.

Critical success factors
Essentially, there is a sense of security amongst the CoP members who might otherwise have felt isolated in the trial. The voluntary nature of the community has meant that the trial participants have been able to take ownership of their projects, feel they can contribute and are engaged in the learning process. The CoP has successfully allowed for the sharing of knowledge and experience amongst staff working in quite diverse contexts.

Challenges
As a dual sector university, RMIT accommodates both the vocational education and training (TAFE) and higher education (university) sectors. Aligning the various teaching staff across the sectors around the utilisation of an ePortfolio can be problematic. However, PebblePad has been able to accommodate the two different frameworks of graduate attributes (higher education) and competency standards/employability skills (TAFE) and the CoP has fostered strong connectivity amongst the staff.

Sustainability
External motivators have been as important as the internal motivation around the CoP. Regular national symposiums and events have kept the discussion around ePortfolios in Australia current, particularly in the educational context. RMIT’s ongoing commitment to evidence-based assessment and career readiness has also justified the role of ePortfolios. Scaffolding and instigating support for staff using ePortfolios via a CoP is a means of producing early adopters who might ultimately support and champion ePortfolios in the future.
ePortfolio Practice: ALTC Exchange

Website: http://www.altcexchange.edu.au/eportfolio-practice
Contact: Ann Gillespie and Gillian Hallam, Exchange facilitators and members of the AeP2 project

Context
This online community was set up as part of the Australian ePortfolio Project’s second stage (AeP2) and launched to prospective members during the second Australian ePortfolio Symposium in early February 2009. The site is hosted by the Australian Learning and Teaching Exchange (ALTC), a professional networking site that enables members to ‘contribute, collaborate, and share knowledge about innovative teaching and learning practices in higher education with like-minded professionals’ (http://www.altcexchange.edu.au). The main purpose of the ePortfolio Practice community site was to provide the beginnings and structure for online involvement and interaction. Interested participants are pointed to relevant information and resources about ePortfolios in higher education.

Aims and outcomes
Six months have passed since the ePortfolio Practice Group was created, and as AeP2 nears completion the group has around 40 members, specifically from the higher education and vocational education sectors.

The members are able to add additional areas to the wiki to enhance the interactive nature of the group. Members can also interact using a forum and adding blog entries that can be made private or remain publicly available. Short-term objectives have been around increasing awareness, for example, to highlight initiatives that various institutions are involved in, such as pilot projects, examples of early adoption, etc. In the longer term it is anticipated that the site will support those members interested in sharing information.

Critical success factors
A broad spectrum of members became involved during and immediately after the Australian ePortfolio Symposium. This ensured that diverse interests were discovered to help colour and add to the information base about the current use of ePortfolios in Australia. Ultimately, a key role was played by the facilitator, under the auspices of the AeP2 project, to assist in laying down the foundations and starting points for novice ePortfolio practitioners.

Challenges
The functionality of the ALTC Exchange is very structured and communication between members has not been as seamless as with other online technologies. Consequently, members have not been as actively engaged in the forum as had initially been anticipated, relying instead on the group facilitator to post resources to the Exchange and to manage the site.

Sustainability
As the AeP2 project concludes, the role of facilitator of the ePortfolio Practice Group on the ALTC Exchange will no longer continue. The ability to sustain a group such as this, without ongoing funding or staffing, will ultimately depend on any future activity that might continue the current momentum in ePortfolio use nationally. The impetus to drive such a group may come from individuals with a passion to coordinate the information resources to meet a wide cross-section of needs and requirements. Changes to the technological infrastructure of the ALTC Exchange may also have the potential to reduce some of the barriers to participation and networking.
Case study 5

Australian PebblePad User Group (APpUG)

Contact: Meaghan Botterill, meaghan.botterill@rmit.edu.au

Context
With the growing awareness of the benefits associated with the use of ePortfolios in education across Australia, there has been an increase in ePortfolio software systems and applications. One product, PebblePad (developed by the University of Wolverhampton, UK), is currently being trialled or run with site licences in 15 universities across Australia. This has offered an opportunity to develop a Community of Practice (CoP), the Australian PebblePad User Group (APpUG), to support professional development and inter-university collaboration across areas such as research, learning and teaching, discipline-based networking and resource development.

Aims and outcomes
The inaugural meeting of APpUG was held at RMIT University in December 2008. An invitation was extended to all institutional PebblePad users to attend either in person or through video conferencing. The aim of this CoP is to extend practice and praxis across the use of ePortfolios in universities, as well as provide a professional network of PebblePad users for collaboration and knowledge sharing across technical, pedagogical and professional practices.

Due to the geographic distribution of members of the CoP across Australia, engagement is supported through both information and communication technologies (ICT) and face-to-face events (such as phone, email, Skype, video conferencing, a PebblePad blog and forums or conferences at different institutions). Notification of and dissemination about events are supported via email and the blog. To increase relevance beyond general information sharing across PebblePad, the events also have a thematic session, for example, Career Development Learning, in order to extend professional capability and inter-university knowledge, networking and resource sharing.

Critical success factors
The networks established through this CoP have been a critical success factor. The importance of the face-to-face events for meeting people and knowing what is occurring in their institutions has helped to facilitate inter-university collaboration across research, resourcing and technical support. These networks have also been critical for linking disciplinary groups together across the different institutions. Again, this fosters collaboration, while also allowing the sharing of exemplars from the different institutions. It is also important to have people willing to develop the CoP as it theoretically sits outside of their institutions.

The personal involvement of the PebblePad developers has, to date, also been a critical success factor in this CoP. The face-to-face events have coincided with their visits to Australia so far and have contained both product information and pedagogical insights. However, in their absence, it has been important to develop other ways of maintaining the CoP. Organising events that address specific ePortfolio initiatives, for example, ‘ePortfolios and Engineering Accreditation’ and ‘ePortfolios for the recording of Recognition of Prior Learning’ have been successful. The CoP has successfully allowed for the sharing of knowledge and experience amongst staff working in quite diverse contexts.

Challenges
The primary challenge is sustainability. As PebblePad is being trialled in most of the universities, an institutional decision to adopt another ePortfolio program will impact dramatically on this CoP. Thus, the ability to move the CoP away from simply one around PebblePad as a product to a more sustainable ePortfolio CoP might help to alleviate this issue if it arises.

Sustainability
Connectivity is the key to sustainability. Participation in other external initiatives and events, such as AeP, and undertaking collaborative work across different institutions, for example, joint research papers and presentations, will help to strengthen the CoP. Furthermore, regular communication and participation in APpUG events will also sustain and strengthen the CoP and maintain its relevance and currency.
ePortfolios in the library and information services sector

Website: PebblePad Gateway — closed website
Contact: Gillian Hallam, community facilitator, g.hallam@qut.edu.au

Context

Digital portfolios, or ePortfolios, are being introduced into a number of professional disciplines to support professional accreditation and professional development. One of the major goals of Stage 2 of the Australian ePortfolio Project (AeP2) was to encourage ePortfolio stakeholders to establish a community of practice (or several communities of practice) to share learning and experiences of quality ePortfolio practice. In conjunction with the Australian Library and Information Association (ALIA), the AeP2 project team is running a two-year (2009–2010) pilot project within the library and information services (LIS) sector to consider the use of ePortfolios in learning and career development by library and information professionals. Self-selected participants include librarians and library technicians, whose roles range from students and recent graduates through to LIS professionals in the later stages of their careers, with direct support from educators, mentors and employers.

Aims and outcomes

The principal aim of the pilot program was for individual LIS practitioners to develop an ePortfolio to focus on career planning, professional development and performance review activities, enabling them to establish a rich portfolio of reflective evidence on their own learning and development over a period of time, and importantly, build a community of practice within the discipline.

The ePortfolio software tool PebblePad was chosen for the pilot, and participants were encouraged to seek the support of their employer to take part in the program. The second Australian ePortfolio Symposium, held in Brisbane in February 2009, included an introductory workshop for the LIS ePortfolio cohort. Three surveys have been developed around the pilot: an initial expectations survey, a further survey during the course of the pilot and a final survey to capture the actual experiences in the concluding stages of the AeP2 project in mid 2009. Participants in the LIS pilot project will be able to continue to use the PebblePad ePortfolio platform until the end of 2010.

To date, the community of 26 participants from all over Australia has come together regularly for face-to-face meetings in their regional groups (South East Queensland, Central Queensland, Melbourne, Adelaide and Northern Territory) and have communicated virtually via the PebblePad Gateway application.

Critical success factors

The community’s face-to-face meetings have enhanced the collegial, sharing and supportive nature of the group. Most of the participants have already made positive gains in their professional and academic focus with the use of the ePortfolios and their participation in the community. Some had used the ePortfolios to attain new jobs and career promotions. Building formative relationships, not only around using the ePortfolio but also around their shared professional interests will be a lasting outcome of the CoP.

Challenges

The participants self-selected from the library and information sector and thus their roles and demographical profiles were diverse. The geographical location of the participants also required a strong organisational role and this has been facilitated via the PebblePad Gateway application, which allows members to communicate online and share notes from the regional meetings.

Sustainability

Although a pilot project, the community has been provided with an opportunity to be directly involved in an initiative that seeks to address learning and development issues in vocational and higher education, and in the workplace within the LIS sector in Australia. At a higher level, the project will help the LIS sector to be acknowledged as a leader in the arena of professional development and lifelong learning, with the potential to nurture further communities around ePortfolio practice.
6. ePortfolios and communities of practice: Current national and international practice

6.1 Overview

While the survey activity provided the AeP2 project team with insights into the possible scope, features and functionality that ePortfolio practitioners might seek in an online community of practice, it was also considered important to capture the current context of active ePortfolio communities both nationally and internationally, as well as to examine the experiences of those involved with the different forums, with the goal of developing an understanding of the issues associated with successful CoPs. Of the 17 online ePortfolio CoPs identified across the USA, the UK, the Netherlands, New Zealand and Australia, 14 contributed to the project, with the managers or facilitators openly discussing their experiences and views about establishing and maintaining an active ePortfolio CoP. These managers or facilitators of the CoPs participated in a semi-structured interview that included a series of exploratory questions, in order to:

- provide information about the purpose or long-term goal of the CoP
- identify success factors in the development of a CoP
- identify the barriers or challenges in the development of a CoP
- compare the value of an organic community with a structured community
- determine how CoP’s might be sustained over a period of time.

The interviews were recorded, with the data subsequently analysed and synthesised to identify the common themes plus areas of distinctive practice. In addition to the issues presented in this chapter, case studies around the 14 communities feature in both this and the previous chapter to contextualise and articulate individual practice. For each of the case studies, a draft document was sent to the interviewee for review to ensure that the key ideas had been accurately presented. It should be noted that these case studies capture the attributes of the community at a particular point in time.

In this chapter, the information gathered through the interviews is analysed. The characteristics of the different CoPs are introduced to highlight the aims and objectives of the various communities, as well as the technical and social architecture for the groups. It is acknowledged that a community, at different stages, can be mapped to the various stages of a CoP lifecycle, so that there are distinct differences in the attributes of a new and emerging CoP and a well-established and mature CoP. Following a discussion of the uses and opportunities of the various communities, the facilitators’ views of the critical success factors and of the challenges they have faced are reported.

6.2 The aims and objectives of ePortfolio communities

It was found that there were varied stimuli for the development of the ePortfolio communities that were subject to examination. While some communities evolved from the particular business activity of the host organisation itself, the majority were established as a result of a shared interest in a specific ePortfolio context, most frequently with a concern for the pedagogical issues. In line with much of the discussions in the professional literature, most of the ePortfolio CoPs identified were formed in a voluntary manner, rather than prescribed by business entity or an organisation (Hildreth & Kimble, 2004). However, it was noted that two communities were initiated as part of a professional development opportunity within the specific education sector, with the members’ mutual interest in using and piloting ePortfolio tools. In these two cases, it was acknowledged that the facilitation of the CoP was achieved through a funded role that had a predetermined end point. Overwhelmingly, each ePortfolio CoP reiterated the central ideas of Lave and Wenger (1991) with learning being the central process of engagement.
CoP facilitators were asked to identify the key aims and objectives that had driven the establishment of the CoP. Whether instigated by the organisation or motivated by factors of common interest, all facilitators saw the formation of the CoP as a means of bringing together knowledge and practice around ePortfolio use. Interviewees were asked to identify the primary purpose of their ePortfolio community. The following points succinctly summarise their responses:

- To encourage and support the adoption of ePortfolios.
- To build knowledge, networks and collaboration around ePortfolios.
- To share both knowledge and effective practice in ePortfolio use.

All interviewees acknowledged that there was a growing interest in ePortfolios both within and beyond the education sector and that the establishment of an organisational, regional or national forum to support this interest was required. Several respondents identified the need to build relationships between those working with ePortfolios as the primary stimulus for the development of a community:

... we need to bring staff together from the various areas and empowering them and supporting them in their effort.

... to share effective practice in an efficient manner and to build networks of practitioners.

Saw the need for a CoP that combined the ideas of face-to-face activities and online email lists to the ePortfolio activity

For some communities this notion of bringing together individuals with a common interest was in a more embryonic stage, with facilitators directly responding to an emerging awareness of ePortfolio practice:

... a quiet mailing list, people pose questions and let others know about events Mailing list is general and incorporates a wide variety of people ... so you do get a breadth of opinion and I think that can be quite good ... we’re a real mixed bag.

Concern was expressed that many practitioners, especially those who saw themselves as early adopters, were working in relative isolation, so that a ‘community’ could bring together those already working with, or possibly contemplating working with, ePortfolios to offer a non-threatening and supportive environment.

During consultation we discovered there were a number of people working in isolation and saw the need to connect with others.

... connect good ePortfolio practice, to support early adaptors who felt isolated, to encourage the adoption of ePortfolios.

... staff need this type of support institutionally plus we can link people together to discuss issues – don’t want them to feel isolated.

... wanted a private space to learn – feel safe and share resources.

Beyond this, the notion of formalising a particular interest in the national arena was recorded in the feedback from CoP facilitators. Cambridge et al. (2005, p. 1) stressed the value of sharing best practice and generating new knowledge so that community members might ‘advance a domain of professional practice’. Responses in the interviews indicated that involvement in a CoP could ultimately contribute to the development of a more formalised agenda around ePortfolio development:

Need to provide a national forum to share ideas, network and provide opportunities to share practice …

... constant lobbying and advocacy effort to build this up as a profession

... attempting to define ePortfolio work as a profession

... getting more people who are involved in the aspect of developing an outcome space.

It was recognised that collaborative activities could potentially engage a wider cohort, either within a faculty or institution, or across disciplines or professions.
6.3 Characteristics of ePortfolio communities

The 14 ePortfolio CoPs profiled for the research varied in age and maturity. Interestingly, most (n=10) had been active for less than 12 months. One CoP had been operating for a period of one to three years and three had been active for more than three years (one since 2001). The more mature CoPs had evolved from their original iteration: one example had begun with members who had an interest in the technical perspectives of developing and building ePortfolios. This CoP has now changed to adopt more holistic perspectives, enabling members to consider the wider learning and teaching contexts of ePortfolios. A second example is a CoP established as a professional association with various chapter and committee groups that are arguably more closely aligned to the theoretical example of a CoP presented in the literature that might encompass specialist areas of ePortfolio activity, or indeed, a regional interest group.

There is wide discussion in the literature around CoPs about the notion of a self-sustaining or ‘organic’ community, and the concept of a community that is more structured, most likely centred on a core individual or group (Wenger, 1998). Eleven of the 14 CoPs identified had a position of facilitator, whose role was to administer the community. The position was funded either as part of the general business processes of the institution or through membership fees. All those who interviewed saw their commitment to the CoP — whether paid or unpaid — as an ongoing obligation, reflecting ‘a passion about a topic’ (Wenger et al., 2002, p. 4). Some interviewees reiterated this strong sense of commitment:

I am paid to do this role which suits my professional life which is really busy … worth it because I enjoy it and it fits into my professional role. The more time you have assists in putting professional effort into things

… needs to be a facilitator but that individual needs to have a particular passion for the community or it will be put aside as just another job

While the role of the facilitator was viewed as a vital component of an active CoP, those interviewed all felt that the CoP should eventually become self-sustaining, with members driving both the agenda and future directions of the practice:

… planned this so it would be self-sustaining and we would be more in the background – our members would eventually drive it

… have the community members lead the discussion rather than ‘force’ something on them

6.3.1 Membership

Interviews with the facilitators indicated that, in general, membership of their ePortfolio CoP encompassed representatives from the education sector. CoP members were essentially teachers, learning and teaching support staff and ePortfolio tool developers. Figure 6.1 presents the categories of membership of the profiled ePortfolio CoPs.
The data collected in the interviews echoed the expectations revealed by the AeP2 survey respondents who essentially saw membership as being relevant to those in the teaching and learning context; that is, teachers and ICT and learning support staff. However, it was noted that the number of members was very wide ranging, often being dependent on the actual age of the community. The more recently established groups included an example with only 12 members, while one long-established community boasted over 850 active members.

In considering the concept of membership, and in particular ‘active’ membership, a term that was mentioned repeatedly in the interviews was the ‘lurker’. In the context of the internet, the ‘lurker’ has been defined as an individual who will view, but not participate in, online communities such as newsgroups, message boards or online forums (Wikipedia, 2009). Early research on the internet environment indicates that around 90% of users participating in online groups are happy to ‘lurk’ (Preece, Nonnecke, & Andrews, 2004). While interviewees all discussed the incidence of lurkers or listeners, especially if they were involved in a young community, they did not necessarily view their presence as a negative activity:

Lurkers are a common phenomenon … dip in and out of things due to time constraints There is nothing wrong with lurkers … they are soaking things up … they do want the information – it can be a matter of confidence … have to accept that some people will always be lurkers … goes in waves in regards to use – people come in and out, some track emails and if they see something of interest they come in

Due to the fact that the specific context of the ePortfolios is a relatively new phenomenon in education, it was found that some members often participated in other ePortfolio CoPs, so that the ‘active’ membership fluctuated.

6.3.2 Lifecycles

The interviews allowed for the discussions to explore some of the issues associated with the lifecycle of each CoP. Within the literature, individual CoPs have been plotted along a specific roadmap or lifecycle, with one example presented by Nickols (2003) following a sequence of stages: Committing, Initiation, Operating, Winding down, Conclusion. At the conclusion of all the interviews, however, it was felt that, given the focus on sustainability, the CoP lifecycle discussed by Cambridge et al. (2005; adapted from McDermott, 2002), was more suited to the context of the ePortfolio communities.
The model utilised by Nickols is arguably more suited to a CoP within the context of a business organisation, whereas Cambridge et al. (2005) have plotted the phases of the CoP to reflect the community lifecycle within the arena of education. Figure 6.2 illustrates these phases:

![CoP lifecycle model](image)

Figure 6.2 : CoP lifecycle model (adapted from McDermott, 2002, as cited in Cambridge et al., 2005, p. 2)

Using this model as a guide, the interview data was interpreted to present those CoPs that had been operating for 12 months or less as clearly being at the Prototype–Launch stages, while the CoPs that had been active for a longer period of time represented the Grow–Sustain phases. Those in the Grow–Sustain phases had developed mission statements or preambles to guide their community and essentially had attained the ‘critical mass’ of members that Cambridge et al. (2005) identified as being crucial in regards to sustainability.

One interviewee discussed the benefits of this critical mass:

*It’s rather like a colony of ants or a hive of bees, the population changes over but the jobs keep getting done because you’ve got enough people doing each role*

The research data gathered through the interviews therefore supported the theoretical framework proposed by Cambridge et al. (2005).

### 6.3.3 Technical and social architecture

Discussions with the interviewees revealed that there was often a geographical focus for the diverse CoPs, with, for example, a regional, or indeed national, context defining the community, although several of the larger CoPs reported that they had either international members or sub-groupings of members. The geographical nature of the group frequently determined the type and frequency of face-to-face events. It was found that one group had been able to hold regular face-to-face interactions due to the geographical proximity of the members. However, another community had initiated their community online, with no physical interaction: the community had yet to meet as a group within a face-to-face context.

Cambridge et al. (2005) argued that ePortfolio CoPs existed principally within a specific technical and social architecture or ‘community container’ (p. 2). In terms of community communication, the technical architecture of the communities that were reviewed ranged from an email list through to a wiki space, blog spot or website, and tended to utilise software platforms and packages such as Wetpaint, Moodle or Google Groups. It was found that communities often used a variety of communication methods to accommodate the different needs and interests of the members:

*As an active group we have created a CoP around a number of different forms – blog, website and an annual event*
In the preliminary survey conducted prior to the actual interview, the interviewees were asked to select which aspects of the online community were the most critical. The list of uses and opportunities was the same as that presented to the main survey respondents; that is, the chance to:

- collaborate with others
- locate/obtain resources made available by other practitioners
- upload resources to share with others
- participate in special interest groups
- network with colleagues and practitioners
- disseminate information
- find out about special events (symposia, conferences, workshops)
- participate in online workshops or web forums.

The interviewees were asked to rank their responses according to a Likert scale of ‘very important’ through to ‘unimportant’. The responses were aggregated around the highest number of ‘very important’ and ‘important’ across the primary uses. Those uses claimed to be of highest importance to the interviewees CoP were to:

- participate in online workshops or web forums
- participate in special interest groups
- have the opportunity to upload resources to share with others.

Figure 6.3 indicates the relative importance of according to what CoP facilitators felt were significant for their community members.

![Relative importance of the different uses of the ePortfolio CoP](image)

**Figure 6.3: Relative importance of the different uses of the ePortfolio CoP**

As a comparison, the Australian survey responses around the expectation of uses for the ePortfolio CoP indicated that the three top uses were to:

- find out about special events (symposia, conferences, workshops)
- locate/obtain resources made available by other practitioners
- collaborate with others.

The different views presented in the respondents’ expectations and in the facilitators’ experiences highlight the fact that ePortfolio CoPs had reached the stage where members are actively participating in events, engaging in special interest groups and sharing relevant resources. Thus, the expectations survey indicated a preliminary phase that focused more on exploration and inquiry, with the goal of identifying opportunities for collaboration and access to resources and information on upcoming events.
6.4 Success factors for communities of practice

Interviewees were asked to share their views about what they understood to be the key success factors for their ePortfolio CoP. The facilitators were able to identify three significant factors that they commonly understood to contribute to a successful community experience:

- funded facilitation and the specific role attributed to an administrator
- membership engagement and inclusivity
- diversity of community activities.

The interviewees provided their insights into these three factors.

6.4.1 Funded facilitation

The literature on CoPs considers the importance of a facilitator who is able to make a commitment of time to support and foster the engagement of community members (Stuckey & Smith, 2004). Interviewees discussed the critical role of a facilitator:

… our experience is that it needs a lot of mediation

Need a leader – need a community manager, without the work I do there is not a community.

… a facilitator is critical – particularly around raising awareness

Interviewees pointed to a reliance on a facilitator who could support the community until it became self-sufficient and met the diverse needs of the community members. In considering models of potential online communities, the Australian ePortfolio CoP expectations survey sought to determine the respondents’ perceptions about the value of a funded manager to facilitate the CoP. The responses were found to align closely with the comments provided by the interviewees about the requirements for a moderator.

6.4.2 Member engagement

The need to engage members on an ongoing basis is also regarded as a critical factor that can directly contribute to the success of any community of practice, as discussed by Cambridge et al. (2005) and reiterated by Chen and Ittelson (2009). The development of relationships around respect, trust and commitment has been found to assist in members sharing their experiences and ideas:

Empowerment and the idea of ownership – that they are part of something that they can contribute – this is important

… ensuring people feel valued, welcome and engaged in the network …

Ultimately, active engagement was viewed as being advantageous to members who sought a sense of belonging and connection:

Engaging members ultimately assists in people feel they have a voice in how the bigger picture is formulated – mutual support network and having the link into policy development gives them an amplified voice in their constituency

… giving people a heads-up on current information – informed and slightly ahead of the game

getting the continual buy-in, refreshing what the priorities are – providing opportunities for members to discuss and investigate the issues that are really important to them

The sense of commitment and connection is intrinsically the attribute that can ensure that the group becomes an authentic community.
6.4.3 Community activities

The sense of belonging also translates into the activities undertaken within the community. Interviewees agreed that the value of participation in any CoP was directly linked to the activities on offer to its members. Cambridge et al. (2005) refer to this as ‘an integrated thoughtful combination of face-to-face meetings, live online events, and collaboration over time within a persistent Web environment’ (p. 2). Facilitators agreed that a great deal of effort was required to maintain relevant and up-to-date community architecture:

Need to have a variety of things going on.

... also, keep it fresh – there is definitely more activity when I put something new in or advertise something – putting on events keeps the activity

... we see surges every time we have an event – special guest for an online forum or the like

Face-to-face activities have kept the group together – about half of the group have contributed to the online forum. Online activities helped engage the group – this was a directed activity.

However, interviewees also cautioned against having too much activity; this was commonly discussed in relation to email lists where members might feel swamped by the constant interaction in the group. It was felt that it was very important to find the right equilibrium in terms of the amount of online activity:

... large number like to get information periodically, but you could lose them if you are bombarding them ...

Need to find a balance between having too much activity and too little – keep refreshing things regularly – this keeps people interested – word of mouth

Need to keep the community interesting – events, dialogue, ideas, activities ... need long term activities as well as those activities that will attract members and enable people to connect with common interests

To be effective, the community manager needs to establish a balance of communication and activity to stimulate and engage members, avoiding the danger of overload.

6.5 Challenges for communities of practice

Along with those factors that interviewees had determined as contributing to the success of a CoP, the interviewees were also asked about the significant challenges they felt they had faced to date. Some of the challenges that they identified were related to the critical success factors, such as the role of the facilitator and membership engagement. The discussion focused on the following three central issues:

• using the technology
• facilitator workload
• community engagement.

The interviewees were keen to discuss their own experience of these challenges.

6.5.1 Using the technology

The development of online and internet-mediated CoPs has provided a flexible platform to support community members and their activities, particularly in the area of ePortfolio practice. Nevertheless, navigating these technologies has proved problematic for some of the members. Facilitators have discovered the need to consider the type of software they might use within the technical architecture of the community:

... need to make the community feel that they are not alienated from the technology.

... still a lot of people new to the technology – have to be very mindful of the technology you utilise

... trying to factor in the technological issues – try to use simple tools – website, blog and a easy to use tool for web conferences.
For those interviewees working within a higher education institution or a specific organisation, there were often additional concerns about some of the Web 2.0 platforms that might be blocked by the institution. While it was necessary to offer the community a public face, it was also crucial for members to feel there was safety and inclusivity in terms of their ability to share information and resources. Wikis were often the preferred software tool, accommodating privacy through password access.

Although it was reported that most members were comfortable in the evolving online environment, some facilitators noted the need to keep their members within the confines of familiar channels of communication:

… have some technical challenges – some people prefer email as a form of communication rather than use a networking site – we’ve started out with what is good enough to work – not entirely convinced that using other technology will work – why change if it works?

It was important, therefore, to achieve a balance between innovative and more traditional technologies.

### 6.5.2 Facilitator workload

In the discussions about critical success factors, interviewees emphasised the important role of the facilitator. Inevitably, however, they also highlighted the associated challenges of the role, particularly in terms of the workload and commitment required by the individuals who held the position. Some of those interviewed stressed the enormity of their role and the impact of the workload:

… trying to keep all the projects spinning – a lot going on.

Trying to cover all the bases - also marketing and member services, communication methods, arranging conferences and the like.

As discussed previously, the interviewees recognised that their role as a facilitator should ultimately be a temporary one, within the lifecycle of the CoP. In the long term, they optimistically anticipated complete community ownership rather than a fully facilitated practice:

… but would rather not be doing this ongoing because other people don’t have ownership, if you like, and they don’t have involvement and it is not a sustainable model.

Nevertheless, the goal of sustainability meant that there was a degree of reticence about moving away from the facilitated model in the short term.

### 6.5.3 Community engagement

In the discussions on critical success factors reference was also made to member engagement and the general reliance on the community structure to attain and maintain their commitment. For some interviewees, engagement was found to be the essential key to sustainability:

Keeping engagement has been the largest challenge – feedback at events is generally positive but how do you measure the level of activity once members go back to their institution?

Maintaining engagement is tricky … not easy when you only have a small amount of money involved.

Again, the topic led to discussion about the role of the ‘lurker’. There was evidence that not all members wish to actively participate in the community:

Listeners are browsers – they just read but may not contribute

Keeping or encouraging engagement in the community was therefore considered an additional challenge for those facilitating the CoP:

(lurkers) just don’t want to miss anything … they just sit and watch – come and go, they can be from related communities … may come to life at certain points
One CoP had designed the structure of the community to reflect the different levels of activity. Lurkers were encouraged to use the first tier: a wiki page of research project information and resources. Other tiers were directed to those members, often early adopters, who were running pilot studies and could act as potential mentors for new members. It was also noted that a critical mass of members frequently meant that the lurking or listening factor was not really a concern:

>You have ‘listeners’ and ‘contributors’ … need a good blend of this and this comes from a large group … pulls in enough active people so it can include those who just want to ‘listen’ or read what’s on the Wiki.

It was acknowledged that a community would — and indeed should — be comprised of members who represented differing levels of understanding and progress with ePortfolio practice, to ensure that there was an effective transfer of ideas and experience within the community, and potentially also between communities.

### 6.6 The sustainability of the communities of practice

Stages One and Two of the Australian ePortfolio Project have demonstrated that interest in ePortfolio use to support learning continues to grow both nationally and internationally. The series of interviews with ePortfolio CoP facilitators revealed that their communities were continuing to develop, either in response to an evolving understanding of the potential value of ePortfolios in education overall, as part of a business process in the context of further education and the recognition of prior learning, or as a complement to professional education activities in a career development environment. Ultimately, it was found that there was no single factor that ensured the sustainability of a CoP. The interviewees agreed that there were a number of interrelated activities and actions that, in combination, would continue to drive the effectiveness of an ePortfolio CoP. It was noted that these factors could have both internal and external implications for the community.

#### 6.6.1 Internal drivers for sustainability

Continued momentum and engagement are viewed as essential elements of community sustainability. Cambridge et al. (2005) remind those planning to instigate a CoP that it would ultimately be the members themselves who would sustain the practice over time. This view is supported by Kranendonk and Kersten (2007) who surmised that their ‘members keep on re-evaluating the meaning, practice, community and identity of the CoP’ (p. 956). Interviewees echoed this in their discussions about community membership:

>Need new people to come onboard all the time to compensate for those who may leave the group – helps deal with change and keeps the momentum going … also need to target new people – ‘fresh blood’ - and identify those who may want to be involved

Within the online environment, the literature has identified the fact that sustainability can be directly linked to levels of dissemination, for example, the sharing of resources and publications (Stuckey & Smith, 2004). All interviewees stressed the importance of keeping the community engaged, stimulated and ‘fresh’:

>Regular forums and symposiums to sustain and continue momentum … keeping the site up-to-date – keep it fresh and if there is something happening – events, discussion – this keeps the momentum. It’s possible to sustain these types of online CoPs indefinitely if the interest is there

The notion of inclusivity was regarded as an essential factor for effective engagement, to ensure that members maintained a sense of belonging and place in the community:

>ensuring people feel valued, welcome and engaged in the network – that encourages other people to take responsibility - becomes shared ownership – other people do the facilitation, prompting, engaging – people feel the network does a good job for them … it’s about hearts and minds, people feel connected, valued, appreciated and endorsed – not just about the present but what’s happening in the future
One interviewee gave the example of members having a ‘heads up’ in regards to different events, activities or being up to date on current information. Within an institution individual members could feel that, through the CoP, they were ‘ahead of the game’:

… very instrumental but important because in their institution it signals that they are connected

As noted earlier, 11 of the 14 CoPs reviewed for this project accommodated a funded facilitator, either as part of the institutional business process or through sponsorship from a national organisation. Kranendonk and Kersten (2007, p. 955) concluded from their studies that a successful CoP required not only a proactive facilitator, but also what they termed as a ‘master’ or core group of members that was able to provide distributed leadership and direction. The key person (or persons) may have some degree of status or influence:

Need an aggregator and an agitator … probe and feel what the groups needs are

Need ‘thought leaders’ who put themselves out there and where people can be honest about their experiences – good and bad – need a provoker – someone who will shake things up

Interviewees also discussed the importance of attaining financial support in terms of ensuring ongoing sustainability:

Funded activities and administrators make a huge difference to sustaining a CoP.

Would require someone funded and motivated in equal amounts – be good to find someone within the group to maintain the emphasis …

While it was accepted that, as a starting point for an ePortfolio CoP, a funded position might be a crucial factor for success, it was felt that — ultimately — there should be some sense of communal responsibility for the future of a CoP, especially to ensure a sense of ‘reputation and prestige’.

One community manager reported that she had recently lost funding for the (part time) position she had held for several years to manage the community. However, a new team was committed to continuing her work, with the former manager remaining the ‘face’ of the community. It was noted that, because of the national and international reputation of the CoP, the institution where she was employed had agreed to continue to support her surrogate role within the infrastructure for the community and was committed to hosting various ePortfolio events and forums in the future. This outcome reflected the significant value and prestige of the community, together with recognition of contributions made to funded projects in previous years.

### 6.6.2 External drivers for sustainability

The impact of external drivers on the ongoing sustainability of a community is highlighted in the various models of ePortfolio CoPs profiled as case studies in this report. The literature on CoPs reviews some of the communities in the business or corporate sector introduced in response to a specific problem or issue within the organisation. Probst and Borzillo (2008) noted that the viability of CoPs would depend on members believing that their community involvement would benefit or be advantageous to their professional needs. As ePortfolios become more common in the education sector, particularly in Australian higher education, the immediate context of CoPs has the potential to be influenced by government policy around education and employment.

Interviewees stressed that those external drivers were a prominent feature in their understanding of sustainability of the community:

Perhaps we need to put more effort into getting employers interested in ePortfolios. This will help as an external driver

A managed external approach will assist in keeping the ePortfolio environment active.

Although not specifically addressed in the interviews, external drivers were broadly included in discussions about the current ePortfolio environment. One interviewee considered the policy issues of ePortfolio practice and suggested that some form of national award or recognition could serve as a positive motivator within the ePortfolio community as a whole.
External factors such as professional accreditation and the recognition of prior learning where evidence of learning and development was captured in an ePortfolio was also viewed as providing impetus and momentum within particular CoPs. The CoPs that accommodated members from a variety of sectors were also seen to have a significant effect on practice perspectives:

... affiliations with other organisations ... can be useful to offer other resources – that will ultimately increase the level of engagement.

If there are separate communities it is important to have bridges between them.

There were strong views about the value of building connections and linkages with other communities, especially in terms of integrating and leveraging ePortfolio practice with the opportunities offered by the adoption of emergent technologies and online learning and teaching strategies. For example, the role to be played by ePortfolios in the context of eLearning was seen to be an important driver for interaction with other communities.

6.6.3 Future directions for communities of practice

The sustainability of a community will inevitably be determined by the members’ goals for a group’s ongoing development and growth. The model adapted by Cambridge et al. (2005) presents the final phase of the CoP as Sustain:

**Sustain:** Cultivate and assess the knowledge and ‘products’ created by the community to inform new strategies, goals, activities, roles, technologies, and business models for the future.

(McDermott, 2002, as cited in Cambridge et al., 2005, p. 2)

The future directions in ePortfolio practice are intrinsically linked to emerging educational technologies, as well as to policies on skills development and lifelong learning. Some facilitators indicated that they saw their communities playing a significant role in the area of ePortfolio development:

... don’t have formal clout but are recognised as a group with expertise (a large mass) we are invited to different things but we can maintain our independent and a professional orientation

Need to influence the market and champion for different types of ePortfolios

The need to think about future directions links back to the community’s original planning activities and their documented aims and purposes; interviewees believed that the process of providing members with the information, resources and support that they might need would empower and ultimately sustain the community:

... it’s about doing the best you can for the people in the present but it is also about helping people connect to the future

There was strong agreement amongst the CoP facilitators that it was essential to build and extend national and international partnerships, especially given the globalisation of higher education.

6.7 Summary

By conducting a series of semi-structured interviews with the facilitators of 14 different ePortfolio communities based within Australia, New Zealand, the UK, the Netherlands and the USA, the research team was able to gather an extensive collection of experiential data about the diverse communities. While there were some distinctive aspects of these communities — presented in detail in the individual case studies — it was found that there was considerable commonality of views and experiences. The balance of virtual and face-to-face communication varied across the CoPs, there was a shared understanding about the critical success factors, with a clear need for the commitment of a funded facilitator in the early days of the community in order to stimulate member engagement and organise regular activities to help build the networks and relationships.
There was also agreement about the challenges faced by CoPs: technological issues, difficulties in maintaining member engagement and the workload of the facilitator were all cited as barriers to community development. Nevertheless, all facilitators expressed a clear desire to ensure that their CoP not only had a strong and vibrant future, but also that the different communities should work together to strengthen the role of ePortfolios as a tool for learning and teaching and for career development.
Case study 7

PDP and ePortfolios UK

Website:  http://pdpandeportfoliouk.wetpaint.com (private wiki — password access only)
Contact:  Tracey Madden, University of Hull, Higher Education Academy Physical Sciences Centre, t.madden@hull.ac.uk

Context
The PDP and ePortfolios group started in early 2009 as a small email list of practitioners with a key interest in personal development planning (PDP) and ePortfolio use in the higher education sector in the UK. The community utilises Wetpaint (http://www.wetpaint.com/), a wiki hosting service, to support the increasing number of ‘question and answer’ emails distributed within the group. The information generated is then archived in the wiki as a type of repository for resources.

Facilitation for the CoP is not funded and group members consist mainly of university practitioners working in learning support or as lecturers. They often meet each other at events and activities dedicated to ePortfolio practice.

Aims and outcomes
So far the focus in this community has been quite general, providing a forum for different experiences, opinions and foci around PDP and ePortfolios. Membership is promoted through various JISC email lists, and the wiki has provided a more comprehensive overview of members (for example, members can post photos and additional information about themselves and interests rather than just an email address). The networking consequences of this activity have ultimately assisted in the communication and engagement aspect of the community.

Critical success factors
The impetus for the development of PDP and ePortfolios UK has been from the members themselves rather than someone bringing them together. Self-motivation rather than external motivation has been the key success factor in the evolution of the community. There is the notion that people can achieve more collectively rather than in isolation. Members are able to pass on information from their particular experiences both in the face-to-face meetings and then additionally in the wiki environment.

Challenges
As a young community there is a degree of consciousness around the need to balance the ‘technological native’ with those individuals new to wikis. A simplistic wiki model is used here to accommodate all skill levels and the email list is the principal communication method.

Sustainability
The effects of a critical mass of members will become an essential feature of the CoP as it evolves and grows. Promotion and awareness around the CoP will be reliant on all members identifying other practitioners and ‘pockets of activity’ where individuals may be interested in PDP and ePortfolios. The community is aware that there is a need to accommodate those members who move out of the community and to replace them with regards to their particular contributions, if the momentum and activity created in the community is to be continued.
SURF NL Portfolio

Website: http://www.surfspace.nl/enK/themas/Portfolio/start/pages/overzicht.aspx
Contact: Marij Veugelers, community manager SURF NL Portfolio, Veugelers@uva.nl

Context

Established in 2004, SURF NL Portfolio is a community funded by SURFfoundation, a collaborative organisation for higher education institutions in the Netherlands that undertakes significant research around ICT and has a specific interest in eLearning activities (http://www.surffoundation.nl/en/Pages/default.aspx).

The CoP exists as a special interest group within SURF and the composition of the group is practitioners within higher education, as well as representatives from professional bodies and tool developers. The geographical profile of the Netherlands allows for regular meetings between the various community workgroups as well as collaboration with international organisations, inclusive of AeP. The community manager coordinates research projects across the sector and knowledge is shared via a monthly newsletter, web space, seminars and publications.

Aims and outcomes

The principle aim of the NL Portfolio community is to work together to build and share new knowledge around ePortfolios. Specific aims have been outlined on the ePortfolio website and the community has a current focus around (inter)national relationships and the concept of lifelong learning, in cooperation with current partners in education, employment and the government.

In the Netherlands there is an active network of contact persons from institutes who are working with ePortfolio. There is also an active scaling-up workgroup. NL Portfolio has successfully organised funding for six research projects that are facilitated by a project manager, produced several publications, participated in international ePortfolio symposiums and has enabled the development of international alliances.

Critical success factors

Community manager Marij Veugelers is nationally known as ‘Mama Portfolio’, a title bestowed on her due to the Netherlands’ long-standing commitment and profile in the ePortfolio community. The role of the community manager to coordinate and facilitate activities is crucial.

Challenges

From mid-2009 the community manager role will no longer be funded by SURFfoundation. However, the organisation will continue to provide logistical support and endorsement for the community. A team of six community members (including the community manager) will continue the ongoing progress of the community.

Sustainability

Despite the current funding issues for the community, the work achieved to date has sustained and will continue to effectively sustain the momentum of the group. The scope now for the community is to align with lifelong learning initiatives, thus taking the ePortfolio beyond the education sector. Regular face-to-face meetings have also assisted in enabling networking opportunities to expand into the international ePortfolio community.
Case study 9

University of Canterbury ePortfolio

Website: Membership access only, University of Canterbury, http://www.canterbury.ac.nz
Contact: Alan Hoskin, community manager, alan.hoskin@canterbury.ac.nz

Context

In 2009 University of Canterbury's (UC) Centre of Teaching and Learning provided funding for a pilot project to survey the use of ePortfolios within the institution and examine the future needs of students and staff. Emerging interest in ePortfolios has come about as a result of the increase in national and international research around ePortfolios in recent years.

The project has initiated a community of practice that aligns with the current pilot and is accommodated in a Moodle environment. Two specific groups make up the community of around 30 active members: (1) a working party in which members represent different departments examining the ePortfolio project at UC, and (2) a wider group of individuals who have joined out of interest around the project, inclusive of students and teaching staff. The ePortfolio CoP also has links to an institutional eLearning community.

Aims and outcomes

This pilot project aims to collect data around the use of ePortfolios in the university and provide a set of guidelines for those wanting to use ePortfolios in their courses or departments. The CoP enables this research and also assists in investigating the range of ePortfolio tools available that might be considered for use campus wide.

The working group meets regularly and the project has been able to bring out ePortfolio practitioners both nationally and internationally to participate in workshops and to enable ‘conversations’ around ePortfolios — ultimately acting as a catalyst to increase the scope of interest within the institution.

Critical success factors

As an institutionally funded project the community has a sense of significance and influence as to the future direction of teaching and learning at UC. Members of the core working group not only represent the various departments, but are inclusive of individuals with specific interests in ePortfolios: current and prospective ePortfolio users, those involved with tool development and those involved with academic development and the pedagogical aspect of ePortfolio use.

Challenges

Increasing membership can be a challenging activity in an academic environment where teaching staff are coping with demanding workloads and are often time poor. As well, encouraging discussion and the posting of information on the community site has required a proactive approach from the facilitator in regards to summarising events and activities. The development of participation strategies in this young CoP will further the involvement of the existing members and encourage ‘lurkers’ to contribute.

Sustainability

Directives around the currency of ePortfolios in the education sector — at either an institutional or national level — will help sustain the interest and activity around ePortfolio use. The role of a funded CoP facilitator and the strengthening of links to national and international initiatives (inclusive of other CoPs) will sustain the community once the pilot project is completed.
AAEEBL: Association for Authentic, Experiential and Evidence-Based Learning

Website:  http://www.aaeebl.org
Contact:  Trent Batson, AAEEBL Director, trentbatson@mac.com

Context

Although still an emerging professional body, the Association for Authentic, Experiential and Evidence-Based Learning (AAEEBL) represents a significant ePortfolio community that has formalised a tacit group of individuals who had previously worked collaboratively. Launched in early 2009, the core members of AAEEBL stem from the Electronic Portfolio Action Committee (EPAC) and bring together ePortfolio practitioners in both the education and professional sectors. AAEEBL has also identified a gap in annual ePortfolio conferences in the United States and views this as a crucial means of engaging a widespread group of practitioners. The technical architecture of the association is supported by an online website that accommodates affiliate, administrative and membership details as well as providing links to resources and discussion forums.

Aims and outcomes

The launch of AAEEBL was noted as being in response to three key issues:

• … to nurture the growth and improvement of portfolio practices and the portfolio technologies to support those practices
• … to help guide and inform academic transformation around portfolio practices
• ePortfolios are widely implemented but have not assumed the role that they will in the transformation of education. So that the current state of ePortfolio implementation is not mistaken for what should be, AAEEBL was formed.

(Membership is categorised into two arenas: AAEEBL committees (representing technical, standards, corporate relations, conferences, K–12, research and governance) and AAEEBL Regional Chapters. These chapters are formed at either a local or regional level and will support regular communication, meetings, shared initiatives and grant projects. They will also be involved in a national AAEEBL meeting each year and represent a more theoretical CoP exemplar.

Critical success factors

Over half of all American colleges and universities are using ePortfolios of some description and yet, to date, no specific government policy exists about implementation in education and there is only dialogue around educational accountability. AAEEBL not only operates around advocacy but also seeks to set national benchmarks that will provide more scope and context around ePortfolio practice.

Challenges

A myriad of issues were associated with the formation of the organisation (marketing, communication, organising events, attracting membership, etc.). Dedication to organisation of the profession is considered to be a full-time obligation, sanctioned by the professional status of the community through sponsorship and membership fees.

Sustainability

The Regional Chapters will operate to sustain the community continuum of AAEEBL and will reach out beyond the national scope of the association. While the national agenda will continue to come from the AAEEBL executive, these chapters will assist to guide and inform current knowledge around process and change in the ePortfolio community.
Case study 11

Midlands Eportfolio Group, West Midlands, UK

Website:  http://groups.google.com/group/rscmeg?hl=en
Contact:  Kevin Brace, Coordinator West Midlands Regional Support Centre, Community Manager, k.brace@wlv.ac.uk

Context
The West Midlands Regional Support Centre (RSC) is funded by the Joint Information Systems Committee (JISC), and along with the East Midlands Group is involved in the Midlands Eportfolio Group. RSC supports the development of educational e-learning in the further education, adult and community education and higher education sectors.

The Midlands ePortfolio community came together in late 2008 in response to the growing interest in ePortfolios in education. Its purpose has been summarised as offering ‘support for people working in education in the Midlands region who are either using e-portfolios or thinking of using e-portfolios as part of their practice’ (http://groups.google.com/group/rscmeg?hl=en).

The Midlands Eportfolio Group currently has around 60 members and uses Google Groups (with a subscription feature) as a means of interaction for their public face.

Aims and outcomes
The young community aims to not only share effective practice in an efficient manner, but also to build networks amongst practitioners using, piloting or considering the use of ePortfolios.

The wiki offers access to relevant resources about ePortfolio practice, with both a national and international focus, and supports the first tier of members — those interested in viewing and learning rather than actively participating. A second level of members is already engaged in using ePortfolios or is developing pilot projects and these members are supported by Google Groups. The top tier of members is represented by the perceived ‘experts’ and early adopters who have been able to provide valuable assistance through mentoring and coaching.

Critical success factors
Planning has been a key factor in the early success of the community. Nurturing and facilitating the community to engage the ‘early adopters’ and to ensure that they continue their involvement in the future have been vital strategies to encourage members to ultimately manage their own community.

Challenges
The community has been essentially virtual, although some face-to-face events are planned. Face-to-face events will endeavour to further the community’s life and assist in cementing the relationships established in the virtual space. Identifying the appropriate technological platform to ensure member engagement has been a key element to consider. There has been a strong need to address the ICT and useability issues to ensure community engagement and participation. In July 2009 the community had its inaugural forum, an online webinar (using Instant Presenter) that covered the topic of ePortfolio pilots. Feedback from members regarding the event and its alignment with the wiki and Google Groups has been positive.

Sustainability
It is believed that the ability to maintain the current levels of impetus will depend on scaffolding and facilitation from the outset to offer support and feedback to members and to directly promote the community itself. The planning and effort already invested in the development and management of the virtual space has catered for the three different tiers of members with the ultimate aim of the group to become self-sustaining and driven by the members themselves.
EPAC: Electronic Portfolio Action and Communication

Website: http://epac.pbworks.com
Blog: http://epaccop.blogspot.com
Contact: Helen Chen, Community Manager, Stanford University, hlchen@stanford.edu

Context
Initially, Electronic Portfolio Action and Communication (EPAC) drew together practitioners within the higher education sector who had an interest in the technical perspectives of ePortfolio tools and development. Meetings were either face-to-face events in a conference setting, via email or through video conferencing technologies. EPAC was at first supported through an EDUCASE pilot initiative known as EDUCASE Virtual Community of Practice (VCOP), which included facilitator training and offered an interactive multimedia platform (Chen & Ittelson, 2009).

Since 2005 the community has been supported by various collaboratives and continues to prosper through its partnerships with other bodies such as the Inter/National Coalition for Electronic Portfolio Research (http://ncepr.org/index.html) and MERLOT (http://www.merlot.org/merlot/index.htm). EPAC has also evolved from a technological perspective into a more specific focus around the use of ePortfolios in teaching, learning and assessment involving various sectors of education and lifelong learning initiatives.

Aims and outcomes
The ultimate aim of the community is to share and discuss ePortfolios and to support the following activities:

- Virtual interactions through online chats and discussions, audio and video conferences discussing ePortfolio-related issues, case studies, pedagogical approaches, assessment techniques and best practices
- Networking and face-to-face opportunities with EPAC members at conferences and meetings
- Exchange of resources via the EPAC email listserv and wiki
- Tracking of international and national conferences, requests for proposals and funding opportunities
- Active exploration and evaluation of tools and practices to support ePortfolio-related activities, reflective thinking, and community-building.


Membership, therefore, constitutes both individuals from the education sector as well as professional bodies and tool developers.

Critical success factors
Significantly, EPAC has drawn upon the guiding questions developed by Cambridge et al. (2005) to determine the effectiveness of the Community of Practice. Chen (2009) cites the examples of cross-institution partnerships for various conference presentations, participation in the online chats and webcasts and participation in review activities around ePortfolio tools. Regular events, whether virtual or face-to-face, have become a key factor in building the community and maintaining the interest around the group.

Challenges
In the virtual environment much consideration has been given to how the information on ePortfolios should be easily accessible and searchable. Web access is essentially by use of a wiki platform and the blog allows an additional opportunity to view resources and current news. The needs of the community have been thoughtfully considered so that news and resources are current but specific to the members.

Sustainability
Chen summarises how the community has been maintained by highlighting three main components: (1) organising and hosting online events; (2) facilitating face-to-face meetings; (3) keeping the web space current (2009, p. 112). It is hoped that the emerging interests of members may bring about the development of special interest groups — supported by EPAC — to maintain the impetus around ePortfolios.

EPAC Community of Practice
Case study 13

Scottish Higher Education PDP Forum, UK

Website: http://www.heacademy.ac.uk/aboutus/scotland/institutions/pdpforum
Contact: Dr Alastair Robertson, Senior Adviser, Higher Education Academy Scotland, community facilitator, alastair.robertson@heacademy.ac.uk

Context
In recent years there has been extensive activity around personal development planning (PDP) and ePortfolios in the United Kingdom (UK). The sharing of general practice, along with collaboration in workshops and consultative activities over a period of time, highlighted the need for a more coordinated approach to the implementation of PDP and ePortfolios in the Scottish higher education sector. The CoP (Community of Practice) is fundamentally practitioner-led and is co-facilitated by the Centre for Recording Achievement (CRA), the Quality Assurance Agency (QAA) and the Higher Education Academy (HEA). The agencies also provide modest funding to cover meeting costs, events, etc.

To date, the majority of activities and programs of support have been offered in a face-to-face environment to take advantage of the geographic location of the participants. An email list and web space provide the technical architecture for the community.

The community has been active for about two years and has an email list with around 100 people actively engaged. Workshops and meetings usually accommodate 40–50 members.

Aims and outcomes
Seven embryonic interest groups around research and evaluation of PDP and ePortfolio have developed so far (similar to the National Action Research Network — NARN — in England), which will ultimately lead to the Scottish network linking into activities and interest groups nationally.

The forum has also been involved in the production of a PDP Toolkit that is designed to help staff at all levels within institutions to consider, reflect upon and develop their strategies and policies for the implementation and enhancement of PDP. This is about to be published and a draft is available here: http://www.enhancementthemes.ac.uk/ELF/default.asp.

The HEA recently launched EvidenceNet (http://www.heacademy.ac.uk/ourwork/research/evidencenet), a new web portal that will ultimately support the various CoPs; this will allow for closer networking as well as strengthen the online nature of the community.

Critical success factors
Buy-in has been a decisive element of the engagement with the CoP. The practitioners themselves have identified the priorities in their institutions and determined the themes and content within the community. Facilitation and financial support from the HEA, QAA and CRA have ensured the strengthening and development of the CoP.

Challenges
While ensuring the momentum of the CoP is important, effective engagement is considered a significant challenge in a CoP, whether virtual or face to face. Feedback provides a valuable reference point for the CoP as a means of determining the impact of CoP events and workshops. To date, the CoP has primarily sought feedback from members in post-workshop communication.

Sustainability
Despite the fact that the CoP is facilitated externally (that is, through the HEA, CRA and QAA), sustainability will ultimately depend on the members themselves leading discussions and activities. Providing members with the opportunity to discuss and investigate relevant issues will allow for the continued buy-in required amongst the 20 higher education institutions in Scotland.
Case study 14

Centre for Recording Achievement (CRA), UK

Website:  http://www.recordingachievement.org/eportfolios/default.asp
Contact:  Rob Ward, Director, rob@recordingachievement.org

Context
The Centre for Recording Achievement (CRA) is a national organisation that operates as an Associate Partner of the Higher Education Academy (HEA). The central focus of the CRA is to support higher education with the implementation of personal development planning (PDP) and ePortfolios.

CRA’s Community of Practice (CoP) offers two levels: the first is an overall group of around 850 individuals in the UK and internationally, and the second is a CRA member community comprised of the higher education, school and college sector and professional bodies with links to the Joint Information Systems Committee (JISC) and the Quality Assurance Agency (QAA). In addition, this second community also emphasises links across the sectors as well as connections to employers.

Aims and outcomes
CRA’s CoP model is particularly about communication, enabling effective communication, and networking between the various stakeholders. In terms of the wider community, individuals subscribe to an email list with the main traffic focusing on specific questions associated with ePortfolios and PDP. This email list is also a means of promoting various events and activities that may be virtual or face to face.

This community also produces an electronic newsletter twice a year where members contribute short articles and advertise events. This is a group-driven newsletter and it can then be circulated within an institution.

As well as the communication and networking opportunities, direct CRA membership includes consultancy and training support, free or reduced rate access to seminars and conferences, and access to various publications. Most members in this group represent universities or other organisations.

Critical success factors
CRA is actively involved in the development of higher education sector policy in particular, and provides a context for policy implementation (for example, in areas of workforce development and the Higher Education Achievement Report). The critical mass of the community has allowed for informal participation in policy discussions without losing the independence or professional orientation of the community. Community members feel they have a voice in the future direction of PDP and ePortfolios.

Challenges
Email is the preferred method of communication amongst members. While many prefer the simplicity and directness of this it does raise issues of participation through newer tools, including those built to facilitate social/professional networking.

Key challenges for the CRA include the need to maintain a focus on outcomes, including the development of an evidence base to demonstrate the efficacy of the processes the Centre advocates, and to monitor and maximise the available finance to support the community, given the multiple project opportunities and the need to ensure that the different projects are conducted effectively.

Sustainability
Sustainability relates to ensuring members feel valued, welcomed and engaged in the network, but also ensuring that the members themselves take responsibility for engaging with others and participating in community activities. In addition, it is important for the community to retain a specific focus to remain relevant, but it also needs to pay attention to emerging policy drivers and contexts within the UK. Additionally, the CRA maintains a keen interest in extending partnerships internationally, reflecting the way in which the higher education sector as a whole now operates in a global environment.
This report has presented a rich picture of national and international ePortfolio communities of practice, with an examination of the factors that have contributed to their success and sustainability. The notion of the community lifecycle is central to the discussion. The research activities encompassed a survey, a program of semi-structured interviews with community managers, and a series of case studies depicting successful ePortfolio communities. The survey of ePortfolio practitioners sought to determine the potential value of an ePortfolio CoP, the preferred focus for and the desired features of such a community, as well as the options for the technical and social architecture of an online forum. Through the semi-structured interviews it was possible to examine current examples of CoP activity to identify the critical success factors and the challenges faced by individual ePortfolio CoPs. Thus, the attributes of good practice could be presented. The data collected in the interviews contributed to the development of the 14 case studies, which have been beneficial in illustrating the diverse nature of CoPs in Australia and overseas.

The AeP2 team successfully achieved the desired outcomes for the project, as presented in Chapter 3 of the report:

- A forum was developed with the ALTC Exchange to support an ePortfolio community of practice.
- A range of strategies were developed and implemented to encourage interest in and engagement with community of practice activities.
- Resources were developed and promoted to support the diverse stakeholders in ePortfolio practice.
- There was effective collaboration with colleagues in the vocational education and training sectors to contribute to a cross-sector ePortfolio community of practice.
- A second Australian ePortfolio Symposium (AeP2) was hosted to disseminate the findings from Stage One of the Australian ePortfolio Project, exploring innovative practice in ePortfolio use in higher education, articulating policy developments and stimulating discussion on international ePortfolio issues.
- An associated trade display was held as a forum for strengthening the higher education sector’s understanding of the features and functionality of ePortfolio platforms.
- Initial plans are in place to hold an ePortfolio symposium event in 2010 in collaboration with other ALTC projects and the e-Portfolios — Managing Learner Information business activity team with the Australian Flexible Learning Framework.

To further develop the sense of community engendered through Stage One, the AeP2 project team has effectively continued the dialogue about ePortfolios with a wide range of stakeholders in diverse educational contexts. This has specifically been achieved through the development and distribution of the series of six Australian ePortfolio concept guides; through the hosting in February 2009 of the second Australian ePortfolio Symposium, the AeP2 Showcase and the Technical Issues and Opportunities in ePortfolio Practice meeting; and through the online ePortfolio Practice Group set up within the ALTC Exchange. In addition, the ALIA/AeP2 LIS ePortfolio Pilot Project has successfully brought together an active community of library and information professionals interested in using ePortfolios to support their career development.

The research findings presented support the theoretical perspectives identified and discussed in the literature review, to indicate that the success and sustainability of CoPs were directly linked to the passion, dedication and commitment of a funded facilitator in the early days of the community, who was able to stimulate member engagement and to organise regular face-to-face and virtual activities to build the networks and relationships.

There was also agreement about the challenges faced by CoPs, with technological issues, difficulties in maintaining member engagement and the workload of the facilitator all cited as barriers to community development.
While the ePortfolio Practice Group was set up as a pilot collaborative space in the ALTC Exchange, the project team found itself challenged by a number of technical issues associated with the migration of the system to a new platform in mid 2009, which impacted on the coherence, reliability and accessibility of information posted to the forum. There were clear expressions of concern from members of the community about the features and functionality of the ALTC Exchange, particularly in terms of support for collaborative and networking activities, which inevitably had ramifications for the level of confidence members placed in the community site.

The AeP project, as a commissioned study of the ALTC, has served as a natural focal point for ePortfolio practice in higher education from late 2007 to the current time, with members of the project team acting as recognised points of contact and avenues for the dissemination of information about ePortfolios within Australia and internationally. This opportunity for leadership has been valuable in terms of making linkages across the various education sectors, particularly between the higher education and the VET sectors through the alignment with standards and policy development with colleagues representing the Australian Flexible Learning Framework. Initiatives where knowledge and expertise has been shared include the open exchange of information about ePortfolio policy and practice, input into research and consultative processes, reciprocal support for and representation at ePortfolio seminars and workshops, and the contextualisation of AeP resources for audiences in the VET sector. Collaboration in this arena is timely, as new requirements emerge in the context of learner mobility within and between education, training and employment.

The AeP project has also been a lens for international activities, with natural synergies evident in the relationships established with agencies such as the Centre for Recording Achievement (CRA), the International Centre for ePortfolio Research (hosted by the University of Nottingham) and the Joint Information Systems Committee (JISC) in the UK, NL ePortfolio SIG in the Netherlands, and emerging professional bodies such as the Association for Authentic, Experiential and Evidence Based Learning (AAEEBL) in the USA.

The ability for this leadership role to be maintained, however, is limited due to the finite life of the project itself. It was noted in the discussion about the CoP lifecycle that ‘communities’ typically follow a path of continual evolution, while a ‘project’ is ostensibly defined by specific start and end dates. The current funding model for the AeP project does not provide any opportunity for support for an ongoing role of community facilitator, which has been recognised as one of the most significant critical success factors for embryonic communities. This situation has a direct impact on the ability to sustain the momentum of the ePortfolio Practice Group within the ALTC Exchange: the group was initiated by the project team as part of the AeP2 project and, while the group has attracted around 50 members, the ‘active’ members who have added resources and promoted events have been those on the project team, rather than the membership at large. The members of this group are largely unknown to each other; it has been difficult to generate a feeling of collegiality in such a diverse, dispersed group even though the numbers are relatively small. Having experimented with this organic model of the pilot ePortfolio Practice Group, the project team believes that the long-term viability of such a group will rely on regular monitoring and support with a person (or people) dedicated to sourcing and providing new and fresh information. It is proposed that Queensland University of Technology takes responsibility for the active management and/or facilitation of the ePortfolio Practice Group within the ALTC Exchange so that the community of practice can successfully progress to the Grow–Sustain phases of the CoP lifecycle (see Figure 6.2).

It should be noted, however, that the diverse nature of the ePortfolio CoPs identified through the AeP2 research activities underscores the argument that a one-size-fits-all model might not be the most appropriate community of practice. In the literature review it was revealed that it was natural for CoPs to have a variety of geneses, based either on local or regional geography, on specific issues such as ePortfolio standards or pedagogy, on particular discipline interests, or on institutional factors. The key dynamic is therefore the interest in ‘common practice’, so that specific needs — such as the articulation of professional standards and competencies or the sharing of experience and expertise in using a particular software platform — may be the catalyst that draws people together. It is argued that there is room for all of these communities. One of the key outcomes from the AeP2 project could be the finding that ePortfolio researchers and practitioners are interested in a number of communities that support discrete aspects of ePortfolios, rather than a single national CoP through the ePortfolio Practice Group on the ALTC Exchange.
The AeP2 project has, in fact, successfully helped people come together to share their ideas and experiences in different areas, for example, through:

- PebblePad User Group (focusing on a particular ePortfolio platform)
- ALIA/AeP2 LIS ePortfolio Pilot Study (focusing on professional requirements)
- interaction through the Managing Learner Information Reference Group that supports the ePortfolio business activity within the VET sector (focusing on cross-sector technical issues and opportunities).

These different CoPs therefore represent a distributed model, rather than a centralised one. Nevertheless, it is acknowledged that the distributed profile of the sector itself represents one of the major hurdles for Australian higher education. While some sense of coordination across technology in education is provided by agencies such as JISC in the UK and SURF NL in the Netherlands, there is no comparative organisation in Australia. Some sense of cohesion can be found in the funding allocated to the Australian Flexible Learning Framework to provide the vocational education and training sector with an eLearning infrastructure. This arguably provides an opportunity for the strategic implementation of eLearning initiatives such as ePortfolios.

A number of organisations in the higher education sector are in the position to provide leadership and support for sustainable communities of practice in the area of ePortfolios in learning. The university Directors of Information Technology collaborate through the group CAUDIT, although their focus is primarily on strategic partnerships and relationships rather than on specific, funded initiatives. The Australasian Council on Open, Distance and E-Learning (ACODE) is regarded as a key Australasian organisation for universities engaged or interested in open, distance, flexible and eLearning, with a strong interest in enhancing policy an practice in eLearning. The Australasian Society for Computers in Learning in Tertiary Education (ascilite) represents a professional community that encourages and supports quality research into, and exemplary use of, technologies for teaching and learning in tertiary education throughout Australasia. Interest in ePortfolio practice has been encouraged through focused forums at the annual ascilite conference. In recent years, ascilite has established strategic relationships with related organisations such as the Association for Learning Technology (ALT) in the UK and SURF in the Netherlands.

At the same time there has been a groundswell of interest in ePortfolios in individual universities across the higher education sector, with linkages to a number of other ALTC projects such as the National Graduate Attributes Project led by the University of Sydney and the University of Queensland, and a range of initiatives introduced at various institutions, including the University of New South Wales, Monash University, Flinders University, Edith Cowan University, Charles Sturt University, Murdoch University and Bond University. Building on relationships within the Australian Technology Network (ATN), ePortfolio activities are being extended at Queensland University of Technology, Curtin University of Technology, RMIT University and the University of South Australia. The dual sector institutions, which combine higher education and vocational education and training — such as RMIT University, Swinburne University, Victoria University and Charles Darwin University — have also demonstrated interest in ePortfolios to support more informal learning and recognition of prior learning (RPL) activities, especially for non-traditional learners. There are, therefore, already a number of collaborative bodies whose representatives may see value in driving further ePortfolio initiatives within the higher education sector and cooperating with other education and employment sectors.

While valuable work is evident in the cross-sector and cross-institutional collaborations, significant challenges remain. Further work needs to be done to develop strategies to progress ePortfolio practice in higher education. Effective strategies depend on interaction between the four contexts of government policy, technical standards, academic policy, and learning and teaching. The recommendations made in the final report of the first stage of the AeP project (Hallam et al., 2008) remain relevant. Government departments with responsibilities for education are encouraged to engage with peak industry, professional and employer bodies to develop a shared understanding of the potential of ePortfolio practice to articulate employability skills. This may foster an understanding that ePortfolio practice could be developed as a strategy to build an integrated relationship between the higher education, VET and schools sectors in order to support an individual’s lifelong learning needs and to increase the potential for career progression.
Within universities there is a continued need for those engaged in the institution’s learning and teaching policy environment to be conscious of the potential of ePortfolios to be integrated into current and future eLearning strategies in order to contribute to student-centred learning outcomes that reflect not only high level academic standards, but also the relevant professional standards and graduate employability skills. It is argued that the successful adoption and effective implementation of ePortfolios require strong alignment between the strategic, tactical and operational areas of academic management.

Despite the continued energy and enthusiasm generated by the AeP2 project, concerns remain about the ‘unfulfilled potential’ of ePortfolios in education. Delegates attending the AeP2 Symposium noted that there was still a lack of meaningful research into practice, with many academics seeking answers where little research has actually been conducted to date, particularly in Australia. It is believed that there is still room to undertake investigations into the real impact of ePortfolios on key learning outcomes within and beyond university.

In the context of higher education, there is scope to conduct further research into areas of learning and teaching practice that are aligned with ePortfolio learning in order to develop deeper understandings of issues such as the first year experience, curriculum mapping, student assessment, work integrated learning (WIL), cooperative education, graduate employability, learner mobility, graduate attributes, critical reflective practice and so on. While funding from the ALTC has directly supported the first two Australian ePortfolio symposia in 2008 and 2009, to achieve community engagement through the Inquire, Design, Prototype and Launch phases of the CoP lifecycle (see Figure 6.2) further financial support from the ALTC through the funding of ancillary ALTC projects and ALTC Fellowships would represent a valuable strategy to ensure that the ePortfolio community continues to move into the mature phases of Growth and Sustainability. One possible strategy could include partnership and/or sponsorship arrangements with the ALTC at learning and teaching forums and conferences — with permission to use the ALTC branding — to ensure that ePortfolio learning remains on the education agenda. This would also enable events to be hosted in different areas of Australia to reach a wider community of ePortfolio practitioners and researchers.

The relationship between critical reflective practice and ePortfolios offers further potential for progressing CoP activities, with ALTC funding granted to Dr Mary Ryan from Queensland University of Technology to develop staff and student capacities for teaching and learning reflective writing in higher education. Dr Ryan’s project builds on some of the outcomes of the Australian ePortfolio Project; the project reference group includes established practitioners in the ePortfolio community, with representation by members of the AeP team from QUT and by members of the AeP2 steering committee. Beyond this, recent discussions within the AeP community have led to plans for an ePortfolio symposium to be held in 2010 in conjunction with the national forum proposed as part of Professor Beverley Oliver’s ALTC Teaching Fellowship. Professor Oliver, from Curtin University, will be focusing on facilitating national benchmarking of the achievement of graduate attributes and employability skills at course level. Cross-sector collaboration is proposed, as the interest in employability skills is shared by those involved in the e-Portfolios — Managing Learner Information business activity, which is currently developing a national standards-based approach to the use of ePortfolio technologies for managing learner information (for example, through learner records, between VET, other educational sectors and employment).

Stage Two of the Australian ePortfolio Project was particularly targeted: to establish, facilitate and encourage an Australian community of practice (CoP) for ePortfolio researchers and practitioners, and to introduce a regular Australasian conference to provide a forum in which to explore and discuss ePortfolio research and practice. As an applied research project with tight timelines, the AeP2 project team achieved its principal objectives. The recommendations from the study are equally targeted: to promote the sustainability of ePortfolio CoPs and to encourage further stakeholder commitment to a regular face-to-face forum or conference.
Recommendation 1
It is recommended that the various stakeholders in higher education who are interested in ePortfolios utilise the Australian ePortfolio Toolkit to guide and inform their practice.

Recommendation 2
It is recommended that Queensland University of Technology takes responsibility for the management and/or facilitation of the ePortfolio Practice Group within the ALTC Exchange.

Recommendation 3
It is recommended that the current distributed model of ePortfolio communities of practice be continued, with member needs tailored to meet geographic, software platform, or discipline/profession/industry requirements.

Recommendation 4
It is recommended that, within individual academic institutions, ePortfolio communities of practice are encouraged and supported in order to develop common goals and shared understandings between the different ePortfolio stakeholders.

Recommendation 5
It is recommended that individual academic institutions, through their teaching and learning research funds, foster and support further research into the educational benefits of ePortfolio practice.

Recommendation 6
It is recommended that academic consortia such as the Australian Technology Network (ATN) sponsor cross-institutional research initiatives that will contribute to the development of a sound evidence base to support effective ePortfolio practice.

Recommendation 7
It is recommended that cross-sector collaboration continues through the e-Portfolios — Managing Learner Information business activity coordinated by the Australian Flexible Learning Framework, to ensure that international information standards for ePortfolio practice are adopted as an Australian technical framework, in order to facilitate the exchange of information and data across institutional, sectoral and jurisdictional boundaries.

Recommendation 8
It is recommended that the ALTC establish partnership and/or sponsorship arrangements that continue the branding of future ePortfolio forums as ALTC events held in association with other ALTC project or fellowship activities.

Recommendation 9
It is recommended that the 2010 Australian ePortfolio Symposium (AeP3) is planned to facilitate cross-sector collaboration between the higher education and vocational education and training sectors, in conjunction with ALTC-funded projects and fellowships and the Australian Flexible Learning Framework, in order to develop the interests in all stakeholders interested in the use of ePortfolios to support graduate employability, employability skills and learner mobility.
References


Dissemination and communication of project activities

Project documents
Australian ePortfolio Project (AeP) website: http://www.eportfoliopractice.qut.edu.au/

Australian ePortfolio Toolkit
- ePortfolio concepts for learners
- ePortfolio concepts for academic staff
- ePortfolio concepts for information technology & teaching and learning support staff
- ePortfolio concepts for institutional managers
- ePortfolio concepts for employers, professional bodies and careers services
- ePortfolio concepts for staff/employees

Australian Flexible Learning Network: e-portfolio brochures
- e-portfolios for learners
- e-portfolios for teachers and trainers
- e-portfolios for IT and teaching and learning support staff
- e-portfolios for CEOs and managers
- e-portfolios for employers, professional bodies and careers services
- e-portfolios for employees

Book chapters

Journal articles

Selected AeP2 symposium papers are to be published in a forthcoming special issue of the peer reviewed online journal Learning Communities: International Journal of Learning in Social Contexts.

Professional and academic newsletters


Conference presentations


Symposia and invited speaker sessions

- Murdoch University, Perth, 29 April 2009
- ePortfolios for RPL Roundtable, RMIT, Melbourne, 21 May 2009
- Central Queensland Institute of TAFE, Mackay, 22 May 2009
- University of Ballarat, 4 June 2009
- University of Canterbury, Christchurch, NZ, 20–23 July 2009
- VET ePortfolio Showcase, Melbourne, 16 October 2009
- RMIT ePortfolio Forum, Melbourne, 4 December 2009
Appendix 1: AeP2 Toolkit — a series of six concept guides

The following resources were developed during the life of this project:

- ePortfolio concepts for learners
- ePortfolio concepts for academic staff
- ePortfolio concepts for information technology & teaching and learning support staff
- ePortfolio concepts for institutional managers
- ePortfolio concepts for employers, professional bodies and careers services
- ePortfolio concepts for staff/employees
ePortfolio concepts for learners

‘After writing just one experience according to the ‘formula’ suggested by the ePortfolio team, I could notice a change in my thinking. I was learning to consider my experiences from an employer’s perspective and to identify — in all facets of my life — examples of skills that employers would value.’

— Postgraduate student, QUT
ePortfolios are becoming popular with students around the world as a tool to enhance learning and assist with personal career development. As a learner, you might be wondering how you can use an ePortfolio to support your learning. This guide will introduce you to ePortfolios, their benefits, and issues you need to consider when developing your own ePortfolio.

What is an ePortfolio?
This guide uses the term ‘ePortfolio’ to refer to an electronically stored collection (or archive) of a student’s experiences, achievements and artefacts, together with their reflections on learning.

Why use an ePortfolio?
ePortfolios can be customised and personalised into a one-stop-shop to demonstrate your skills and experiences to teachers, peers and employers. Many students find their ePortfolio to be a valuable resource when it comes to writing job applications and preparing for interviews. Students who have used ePortfolios report having a greater awareness of their skills, greater confidence in their abilities, and feeling more independent as a learner.

In the academic context, an ePortfolio can assist you with your personal development by providing a single, organised repository from which you may:

- Develop an holistic overview of your learning/experiences/development beyond individual subjects/classes.
- Understand your learning and experience in terms of graduate attributes and employability skills.
- Extract evidence to represent your learning and achievements, for example to develop selection criteria responses.
- Identify skills gaps through review of and reflection on your ePortfolio content.
- Plan, set and review personal development targets.

An ePortfolio is not only a product, but more importantly a process, which can help you to better understand not just what you have learned, but how you have learned. As you reflect on your learning to create your ePortfolio, you will also develop important lifelong learning abilities that complement your technical knowledge and skills.

‘It was only when I came to write about my experiences that the really great value of the ePortfolio became apparent. My confidence in myself as a valuable future employee increased dramatically!... And when it came to applying for jobs, I could readily draw together evidence from a wide variety of areas to demonstrate my competence... I believe that this confidence and maturity was evident in both my written applications and interviews, and helped me to secure a professional job prior to graduation.’

– Postgraduate student, QUT
What do I need to think about with regards to creating and maintaining an ePortfolio?

What is my main reason for creating an ePortfolio?
Your reason(s) for creating the ePortfolio will guide you as to what evidence to include:
- To help me address job applications
- To showcase my skills and experiences to potential employers or professional organisations
- To demonstrate the attainment of professional standards
  - Refer to the employability skills required by your industry (available from job advertisements, industry associations or career advisory services), and think about which of your experiences and achievements align with them.
- To help me plan my personal development and develop life-long learning skills
  - Refer to the graduate attributes identified as important by your institution, and think about which of your experiences and achievements align with them. Identify which of the graduate attributes you don't have much evidence for. Consider what training or experiences you require to be able to develop those skills.
- Use your ePortfolio to look for patterns in your learning. Are there certain types of experiences or assessment items from which you seem to learn more from? Aim to structure future learning opportunities around those type of experiences.
- To help me transition from university to work, or between learning institutions
- To support my application for the recognition of prior learning (RPL)
  - After you have entered a range of experiences, sit back and reflect on which graduate attribute or employability skill each entry represents. You will probably find that each entry can be used to demonstrate more than one skill or attribute.

Who will have access to my ePortfolio?
It is important whenever you add information to the World at Web to remember that it is a public space. While all ePortfolio systems provide privacy controls, it is essential that you understand exactly who can access your ePortfolio.
You will probably be able to customise your ePortfolio for different audiences, for example by selecting some experiences or artefacts for your teacher to be able to see, whilst keeping other experiences for your eyes only. Check your institution's ePortfolio guides to make sure you understand how this works.

What sort of experiences and artefacts should I include in my ePortfolio?
Think broadly when selecting experiences to include in your ePortfolio. You can include evidence of skills you've gained at university, at work, in volunteer roles or in your personal life. Some examples might include:
- Assessment pieces you performed well in during your university degree
- Roles or achievements in part-time jobs or voluntary work
- Awards you've won at university, work, or in your personal life
Whatever you include should provide clear evidence of a particular skill or attribute that you possess.

What will happen to my ePortfolio in the long term?
In many cases, institutions will continue to provide former students with access to their ePortfolios after graduation. Check your institution's ePortfolio policy to find out whether this is possible.
Alternatively, you may be able to transfer your material between different ePortfolio systems, such as that of your employer, a different educational institution, or professional association.
Finally, it is important to know whether there is a point at which your ePortfolio will be deleted by the institution storing it, for example, if it is inactive for a certain period of time.

How do I go about creating an entry in my ePortfolio?
To get the most out of your ePortfolio, you need to do more than simply add examples of your work. Each time you add a piece of evidence, you need to provide a brief context for the piece – why are you adding it? What does it display? What do you want your audience to know about that piece of work?
One useful method to help you provide a succinct context is called the STAR-L framework. Stands for Situation, Task, Action, Result and lessons Learned, can help you to structure your reflections about an experience in such a way that the meaning and outcome of the experience can be clearly identified and communicated to others.
- Situation – the context in which the experience occurred.
- Task – what was actually required of you in the situation.
- Action – the steps that you personally took in response to the task. When reflecting on your actions, ask yourself why you chose to respond in that particular way.
- Result – the outcome of your actions. How did your actions contribute to the completion of the task? How did your actions affect the final outcome of the situation?
- Learned – the things you have learned from the experience. Highlight any skills or abilities that you have developed or improved as a result of the experience. Think about how you might apply what you’ve learned to other situations.

How will I ensure my ePortfolio is kept up to date?
To ensure your ePortfolio gives you the greatest benefit, keep your information up-to-date. Think about how you are going to achieve this:
- Set aside half an hour every Friday to add that week's achievements to your ePortfolio.
- After a major event (e.g. seminar, lecture, assignment, performance), take time to reflect on your experiences and add an entry about it to your ePortfolio.
- At the end of each month, spend an hour browsing through your ePortfolio. Consider whether there are any new experiences or artefacts you could add to it as evidence of your learning or skills.
Remember
you are not alone! Other stakeholders are part of the ePortfolio process, so consider the issues that are relevant to your own perspective and context!

Need more information?
Visit www.eportfoliopractice.qut.edu.au
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Further reading

Acknowledgment
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Australian ePortfolio Project
www.eportfoliopractice.qut.edu.au
February 2009
ePortfolio concepts
for academic staff

‘I’m really excited by the notion of ePortfolios. I really like the idea of making it available to students and staff, whether for the recognition of prior learning process or for the purpose of linking it to their employability skills.’

— AeP focus group participant (2007)
The use of ePortfolios in education can involve a range of stakeholders: beyond the students themselves and the teaching staff, there may be learning designers, academic developers, ICT managers and policy makers. The audience for an ePortfolio might also include employers and members of professional bodies. This is one of a series of concept guides aimed at these diverse stakeholder groups.

With the growing use of eLearning in universities and colleges, many teachers want to increase their understanding of ePortfolio-based learning. Have you considered how you can develop student-centred learning activities to enhance the quality and sustainability of learning outcomes?

What is an ‘ePortfolio’?
This guide uses the term ‘ePortfolio’ to refer to an electronically stored collection (or archive) of a student’s experiences, achievements and artefacts, together with their reflections on learning.

Why use an ePortfolio?
There are many different potential purposes for ePortfolios, so you need to be clear about the reasons why you want to introduce ePortfolio-based learning activities into the curriculum.

in the academic context, an ePortfolio may assist learners with their personal development by providing a single, organised repository from which they may:

- Develop an holistic overview of their learning/experiences/development beyond individual subjects/classes.
- Understand their learning and experience in terms of graduate attributes and employability skills.
- Extract evidence to represent their learning and achievements, for example to develop selection criteria responses.

- Identify skills gaps through review of and reflection on their ePortfolio content.
- Plan and set personal development targets.

ePortfolios can assist you, as a teacher, to gain deeper, more rounded insights into your students, enabling the provision of rich individualised academic advice.

What teaching approaches are ePortfolios best suited to?
An ePortfolio is not only a product, but more importantly is also a process, allowing students to move beyond what they have learned to consider how they have learned, and to understand the conceptual connections inherent in the creative process of learning. When they develop their ePortfolio, students may build their understanding of the linkages between assessment and learning, with the focus changing from assessment of learning to assessment for learning.

Constructivist practices such as self-reflection underpin ePortfolio practice, which can help increase student engagement with the learning process itself and, in turn, develop lifelong learning abilities that augment the acquisition of specific disciplinary knowledge and skills.
What do you need to think about when introducing ePortfolio-based learning into your teaching?

The following questions have been compiled to help you to clarify your specific needs with regard to using ePortfolios.

**Teaching philosophy**
- Do I believe in student-centred learning?
- Am I concerned about quality learning outcomes that focus on the development of the student as a whole person?
- Do I think about the contribution I am making to students building the skills they need to gain employment in a dynamic, changing world?

**Pedagogies**
- Does ePortfolio use, with its emphasis on reflective practice and constructivist learning, suit my usual teaching approaches?
- Would professional development in alternative pedagogical approaches help me to implement ePortfolio in my teaching?
- Will the introduction of ePortfolio learning require program redesign?

**Tools for learning**
- How can ePortfolios be incorporated as a useful learning activity in my subject?
- How can ePortfolios assist with assessment in my subject?
- How can I motivate my students to fully engage with the ePortfolio process?
  - External motivation, e.g. the ePortfolio is a mandatory part of assessment?
  - Internal motivation, e.g. students see the relevance of the ePortfolio to their personal development.
  - Modelling, e.g. students see that I also have my own ePortfolio.
- What additional training or resources will my students require to successfully engage with the ePortfolio?
  - Reflective practice training?
  - Technical (ICT) training?
  - In-class access to computers?
  - Increased student Internet access limits?

**Curriculum**
- What learning outcomes do I wish my students to have?
- What are the learning goals for my subject?
- Can ePortfolios really assist in the achievement of these learning goals (ePortfolios may not necessarily be appropriate in every academic context?)
- How are ePortfolios currently being used in my faculty/school/academic program?
- Will my application of ePortfolios complement approaches in other parts of the faculty/school/academic program?
- When is the best time to introduce ePortfolios?
  - Integrated?
  - Optional?
  - Embedded?
- Should ePortfolio use be assessed?
  - If so, should the assessment be formative or summative, or both?
- Do ePortfolios fit in with our existing assessment approaches?
- What will I assess—the product or the process?
- Should I allocate grades, pass/fail, or use another approach?
- What weighting should it have in terms of the overall assessment?

**Resourcing and support**
- Do I have the time and energy required to adequately support ePortfolio implementation in my subject?
- What support is available to help me implement ePortfolios in my teaching?
  - Learning design assistance from teaching and learning support services?
  - Technical (ICT) support?
  - Management and administrative support?
  - Pedagogical support, e.g. academic peers, Teaching and Learning support services, a community of practice?
  - Can my Careers and Employment office assist with marketing the potential of ePortfolios to students?
- What professional groups/networks/collaborations are available to support my use of ePortfolios, e.g. drawing on institutional, national or international relationships?
- Do I think I would benefit from professional development/training to enable me to effectively implement ePortfolios in my teaching?

**Commitment**
- How might my research and/or practice in ePortfolio use contribute to my own professional development?
- Can I identify an “ePortfolio champion” who will support innovative practice?
Remember
you are not alone! Other stakeholders are part of the ePortfolio process, so consider the issues that are relevant to your own perspective and context!

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Australian ePortfolio Project
www.eportfoliopractice.qut.edu.au
February 2009
ePortfolio concepts
for information technology and teaching and learning support staff

‘ePortfolio provides a dynamic learning environment for students to document and reflect on relational outcomes of their learning. Often assessment tasks and their criteria focus on the...products of their learning [and] fail to capture and emphasise the learning that occurs through...engaging in authentic tasks.’

— Jude Smith, Learning and Teaching Consultant, Creative Industries Faculty, QUT
The use of ePortfolios in education can involve a range of stakeholders: beyond the students themselves and the teaching staff, there may be learning designers, academic developers, ICT managers and policy makers. The audience for an ePortfolio might also include employers and members of professional bodies. This is one of a series of guides aimed at these diverse stakeholder groups.

As a member of the information technology or teaching and learning support staff, you might be considering how you can assist teachers to develop student-centred learning activities to enhance the quality and sustainability of learning outcomes. With the growing use of eLearning in universities and colleges, many teachers want to increase their understanding of ePortfolio-based learning.

What is an ePortfolio?
This guide uses the term ‘ePortfolio’ to refer to an electronically stored collection (or archive) of a student’s experiences, achievements and artefacts, together with their reflections on learning.

Why develop an ePortfolio system?
There are many different potential purposes for ePortfolios, so you need to be clear about the reasons that your institution, or perhaps a specific teacher, wants to introduce ePortfolio based learning activities into the curriculum. ePortfolios can support a range of activities, including study or employment applications, transition between different life stages, assessment of professional standards or providing evidence of continuing professional development.

In the academic context, an ePortfolio may assist learners with their personal development by providing a single, organised repository from which they may:
- Develop a holistic overview of their learning/experiences/development beyond individual subjects/classes.
- Understand their learning and experience in terms of graduate attributes and employability skills.
- Extract evidence to represent their learning and achievements, for example to develop selection criteria responses.
- Identify skills gaps through review of and reflection on their ePortfolio content.
- Plan and set their own personal development targets.

ePortfolios can also assist teachers to gain deeper, more rounded insights into their students, enabling the provision of rich individualised academic advice.

What teaching approaches are ePortfolios best suited to?
An ePortfolio is not only a product, but more importantly also a process, allowing students to move beyond what they have learned to consider how they have learned, and to understand the conceptual connections inherent in the creative process of learning. When they develop their ePortfolio, students may build their understanding of the linkages between assessment and learning, with the focus changing from assessment of learning to assessment for learning. Constructivist practices such as self-reflection underpin ePortfolio practice, which can help increase student engagement with the learning process itself, and in turn develop lifelong learning abilities that augment the acquisition of specific disciplinary knowledge and skills.
What do you need to think about when supporting teachers or institutional managers to introduce ePortfolio-based learning?

The following questions have been compiled to help you to clarify the specific needs of the teaching staff or institutional managers with regard to utilising ePortfolios.

Scoping and purpose
- Who do we envision will use ePortfolios (undergraduates, postgraduates, alumni, staff)?
- What stage are they at in their education or employment?
- How might ePortfolios prepare them for their next stages of learning?
- What do we see as the main purposes of ePortfolios for our learners?
  - to support formal academic learning
  - to support overall development (including personal and career areas, and experiences/learning from non-academic contexts)
  - to develop the capacity for lifelong learning
  - to support formative assessment
  - to provide an assessment management tool, for formal summative assessment
  - to create a presentation portfolio to showcase achievements
  - to support transition between different learning environments.

Teaching and Learning quality and outcomes
- What is the level of interest and engagement in ePortfolio learning in the institution's faculties/schools and amongst individual academic staff?
- What learning and teaching outcomes do we aim to achieve through the use of ePortfolios?
- How will ePortfolio activities be evaluated to ensure identified learning outcomes are being achieved?
- What pedagogical/andragogical approaches are appropriate to be incorporated into both the ePortfolio systems and associated training activities?
- What ongoing professional development will academic and support staff require?

Learner help and support
- What guidance to support learners is important in our context to include online or alongside the ePortfolio system?
  - Guidance to learners on the purpose(s) of the system?
  - Guidance to learners on how to use the system?
  - A tutorial programme to support the ePortfolio process?
  - Online tutor or mentor support for feedback to learners?
  - Diagnostic tools to assist with self-assessment, or educational or career planning?
  - Guidance and warnings about the risks associated with sharing personal information via the Web?
  - ICT support for learners?

Teacher help and support
- Are we likely to encounter resistance to change among academics who wish to focus primarily on their teaching and research in a particular discipline?
- What professional development activities need to be developed for teachers to enable them to use the ePortfolio system?
- What form should ongoing technical support take?

Information management
- Will learners need to:
  - enter, edit and save text?
  - include a range of materials (eg CV, reflections, skills, achievements, goals and plans)?
  - upload files as evidence of learning and/or competency (qualifications, certificates, other digital files such as images, audio, video)?
  - hyperlink to files as evidence?
  - export files?
  - create their own web page templates?
  - see all their data, with a list of uploaded and linked files?
  - view or link to their academic transcript or official records?
- What types of information will be managed by a learner, and will not be processed for the purposes of the institution?
- Are there privacy implications associated with this?
- What information is owned and managed by the institution?
  - Academic transcript – will a learner be able to view and link to transcript as authenticated evidence of achievement both during and after their period of study?
  - How will security and authentication of transcript information be assured and maintained?
  - How will the ePortfolio integrate with our existing learning management and student management systems?
Information management cont.

- What information might be managed or processed collaboratively e.g. by more than one learner, or by more than one organisation?
  - Collaborative work involving other people’s personal data
  - Work undertaken with another organisation, e.g. work experience placement
- What are the implications of shared information?
  - Does the ePortfolio system have suitable prompts about the use of other people’s data, or other people’s copyrighted material, at the point of incorporation?
  - Who has an interest, an obligation, a right with respect to this data? What is the interest, obligation, right?

Legal considerations and privacy issues

- Who owns the ePortfolio?
- How do we accommodate our privacy and intellectual property (IP) obligations under the relevant legislation, and under our institutional policies?
- Will a learner be able to view relevant institutional privacy and IP policies from within the ePortfolio system?
- Who will have permission to view all or part of a learner’s ePortfolio?
- Who will set permissions for sharing learner information (learner/school/faculty/institution)?
- How long may/must data be stored after learner leaves the institution? What are the institutional obligations of stewardship?

Storage capacity and storage duration

- How much space will be allocated to each learner’s records and digital files?
- How long will a learner’s records be retained, so they may reflect back on progress between ‘then’ and ‘now’?
- What process will accompany deletion of ePortfolios, e.g. learner initiated deletion or system initiated deletion of inactive ePortfolios?

Evaluation

- How might we evaluate our ePortfolio practice?
  - Level of use by learners?
  - Uptake across the institution?
  - Impact on learners?
  - Impact on staff?
  - Acceptance/uptake by employer/professional bodies?

Accessibility/usability

- Does the system enable use by people with disabilities?
- Does the ePortfolio system comply with our obligations under the Disability Discrimination Act 1992 and associated Disability Standards for Education 2005?
- Is accessibility via a keyboard (instead of a pointing device) available to a learner?
- Can each learner select preference settings for screen display – font style, size, colours of font and background, which are stored and automatically applied at log-in?

Technical standards and interoperability

- To what extent do we want our ePortfolio system to be compatible with those offered by associated sectors (other institutions, VET, schools)?
- What do we need to consider with regard to interoperability between systems?
Remember
You are not alone! Other stakeholders are part of the ePortfolio process, so consider the issues that are relevant to their own perspective and context.

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February 2009
'The need for an integrated student experience has been recognised for some time, along with the need to address the concerns of employers and professional associations regarding the adequate preparation of graduates for the workplace. ePortfolio provides a tool which supports the integration of the student experience across courses of study and the transition to employment.'

— Professor Tom Cochrane, Deputy Vice Chancellor, Technology, Information and Learning Support, QUT
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As an institutional manager, you might be considering how you can utilise ePortfolio systems and processes to enhance the quality and sustainability of learning outcomes for learners and/or teachers in your institution.

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- Understand their learning and experience in terms of graduate attributes and employability skills
- Extract evidence to represent their learning and achievements, for example to develop selection criteria responses
- Identify skills gaps through review of and reflection on their ePortfolio content
- Plan and set their own personal development targets.

ePortfolios can also assist teachers to gain deeper, more rounded insights into their students, enabling the provision of rich individualised academic advice.

What do we need to think about when introducing an ePortfolio system at our institution?

The following questions have been compiled to help you to clarify your institution’s specific needs with regard to implementing an ePortfolio system.

**Scoping and purpose**
- Who do we envision will use ePortfolios (undergraduates, postgraduates, alumni, staff)?
- What stage are they at in their education or employment?
- How might ePortfolios prepare them for their next stages of learning?
- What do we see as the main purposes of ePortfolios for our learners?
  - to support formal academic learning
  - to support overall development (including personal and career areas, and experiences/learning from non-academic contexts)
  - to develop the capacity for lifelong learning
  - to support formative assessment
  - to provide an assessment management tool, for formal summative assessment
  - to create a presentation portfolio to showcase achievements
  - to support transition between different learning environments

**Institutional culture**
- Do the mission and values of our institution encourage innovation?
- Do the mission and values foster a culture of student-centred learning?

**Institutional policy**
- Does ownership of the ePortfolio lie with the learner or the institution? How can we reflect this in our institutional policies and culture?
- Will ePortfolios be portable, enabling learners to take their ePortfolio with them when they move between institutions?
- What national or international standards should we adopt to enable long term portability and interoperability of ePortfolios?
- How will we ensure individual ePortfolios can be maintained in the long term, eg. throughout multiple software and storage upgrades?
- What are the implications of ePortfolio for our existing institutional privacy policy?
- What are the implications of ePortfolio for our existing institutional data security policy?
- How will different security and access permissions be accommodated at a policy level? eg. learner access, employer access, past student access.
- What is the institution's legal liability with regards to materials stored within the learners’ ePortfolio?
- How can our policies allow maximum flexibility for the learner, while accommodating privacy, confidentiality and intellectual property concerns?
- Will inactive ePortfolios eventually be disposed of? At what point will this occur?

**Teaching and Learning quality and outcomes**
- What role can the Teaching and Learning Committee play to foster and encourage ePortfolio practice within the institution and in individual faculties?
- Can we identify and support champions in each faculty/school, to nurture and disseminate ePortfolio innovation and practice?
- How can we overcome resistance to change among academics who wish to focus primarily on their teaching and research in a particular discipline?
- What learning and teaching outcomes do we aim to achieve through the use of ePortfolios?
- How will ePortfolio activities be evaluated to ensure identified learning outcomes are being achieved?

**Resource allocation and management**
- What technical (ICT) resources are required for the development, management, promotion and evaluation of an ePortfolio system?
- What human resources are required for the development, management, promotion and evaluation of an ePortfolio system?
- Does existing student internet access quota need to be modified to enable equitable access to ePortfolio?
- How much digital storage will we provide for each student?
- How long will we provide this digital storage for?
- How will these resources be funded?
Remember

Other stakeholders are part of the ePortfolio process, so consider the issues that are relevant to your own perspective and context.

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February 2009
ePortfolio concepts
for employers, professional bodies
and careers services

‘Building and maintaining an ePortfolio will help students to be better prepared for the recruitment process, meaning that the quality of employment applications will improve. Students will be able to answer interview questions and selection criteria more effectively by drawing on a wide variety of real life examples. This will make it easier for employers to accurately assess the qualities and suitability of each applicant.’

— Employer, Brisbane
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As an employer, a careers service staff member or a professional association officer, you might be considering how you can utilise ePortfolio systems and processes to enhance your employment processes or the employability and career planning of learners at your institution, or support professional accreditation activities.

What is an ePortfolio?
This guide uses the term 'ePortfolio' to refer to an electronically stored collection (or archive) of a student's or graduate's experiences, achievements and artefacts, together with their reflections on learning. The process of creating an ePortfolio can assist learners, graduates and employees to:

- Develop an holistic overview of their learning/experiences/development beyond individual subjects/classes
- Understand their learning and experience in terms of graduate attributes and employability skills
- Extract evidence to represent their learning and achievements, for example to develop selection criterion responses
- Identify skills gaps through review of and reflection on their ePortfolio content
- Plan and set their own personal development targets

Employability skills and ePortfolios
Our ability to build a competitive Australian workforce depends on our workers being able to apply a range of employability skills learned in many contexts and through a range of experiences' (Precision Consultancy, 2007, p.1). The focus on graduate attributes and employability skills is central to the development of ePortfolios: the creation of an ePortfolio encourages graduates and employees to consider their studies and experiences in a broad career development context. A clear understanding of transferrable competencies, such as communication, problem solving, initiative and enterprise, planning and organising, self-management, and teamwork, will assist workers not only in their transition from higher education to the workplace, but also with their ongoing professional development and lifelong learning. Employability skills are progressively developed both vertically and horizontally, in all formal and informal learning contexts, including paid employment, self-employment, formal education and volunteering in the community.

Beyond our own shores, government policies focused on lifelong learning and employability are driving ePortfolio development in regions such as Europe (particularly the United Kingdom, the Netherlands and Scandinavia), Canada and New Zealand. To make the most of these developments, employers, careers services and professional associations need to understand the value of employability skills as the lens through which employees are increasingly viewing their own development and career paths. Incorporating ePortfolios into your business and recruitment practices can provide a common language to communicate with both new graduates and established workers.

How might ePortfolios assist your business processes?
ePortfolios can assist with a range of activities, including:

- Recruitment and appraisal processes
  By assisting job applicants to contextualise and understand their development in terms of employability skills and graduate attributes, ePortfolio use can enhance the quality of job and promotion applications, streamlining recruitment and candidate appraisal processes.

- Training Needs and Career Planning
  An ePortfolio can assist in the identification of skills gaps and training needs, enabling the provision of targeted employee development plans and thus a more efficient use of training budgets. They may also enable employees to reflect on themselves and encourage longer term career plans to be implemented. ePortfolios can therefore serve as a tool to support staff performance and workforce planning in your organisation.

- Continuing Professional Development (CPD)
ePortfolios can be used to showcase evidence of CPD activities for professional accreditation purposes, as well as to identify both short and long-term career development needs.

www.jscc.ac.uk/media/documents/publications/effectivepracticeeportfolios.pdf
- Recognition of prior learning (RPL)
  The process of collecting evidence of employee achievements for formal RPL documentation can be streamlined through the use of ePortfolios. Skills, abilities, and achievements for a particular employee can be compiled in a central repository, aligned with the specific skill sets recognized by higher and vocational education institutions, making the RPL process simpler and more efficient.

- Internationalisation of the workforce
  With the increasing internationalisation of the workforce, cross-candidate comparisons can be complex, due to differing qualifications and professional requirements across countries. ePortfolios provide a richer view of a candidate's abilities, fleshing out the academic qualifications to reveal more clearly the range of specific experiences and skills an individual has attained, thereby providing useful additional evidence on which to base recruitment decisions.

What would be involved in incorporating ePortfolios into my business?

Higher and vocational education institutions around the world are introducing ePortfolio systems and encouraging their students to develop ePortfolios. Student ePortfolios can be made available to organisations during graduate recruitment activities, providing a tailored view of candidate skills and experiences, aligned with the selection criteria for the position. An in-house ePortfolio system can be established to support the staff performance review and career development processes, or there may be opportunities to work with professional associations to develop a targeted CPD program.

Career services

Career services in many Australian education institutions offer a wide range of information and resources to support students and new graduates to gain employment, and develop their career management skills. ePortfolios provide a vital tool for working with academic staff to prepare students for full-time or part-time work, to integrate learning activities, or employment in their chosen career. The mission and role of most career services are in principle aligned with the goals of ePortfolio practice, which 'offers students a tool they can use to gather evidence of their skills, reflect on their experiences, and recognize their improvement and development over time'.

Professional associations

A growing number of professional associations are utilizing the ePortfolio process to provide evidence of the attainment of professional standards, as in the medical sciences, nursing and teaching. An ePortfolio allows a candidate to collate and reflect on their learning activities and work experience to substantiate their application for professional accreditation, or for current members to demonstrate active and ongoing professional development to facilitate their reaccreditation as a professional. Teaching registration processes, for example, encompass the requirement to present evidence of continuing professional development as a critical element of the renewal of registration, with a number of State departments of education mandating an ePortfolio as a format to substantiate the development of critical reflective practice on professional issues.

Case study: ePortfolios for career services

The Careers and Employment Service at QUT has been instrumental in working with the Division of Technology, Information and Learning Support to develop an institution-wide student ePortfolio platform. The relevance of the ePortfolio has recently been enhanced through a Career Development Program designed to help students focus on different aspects of career development during their studies at university. The program includes a series of modules such as Workplace Placement Preparation, Career Preparation, Career Management and Workplace Resilience. In each module, students are encouraged to engage with the Student ePortfolio, with their activities being scaffolded from an introduction to the ePortfolio early on, through to maximizing its use in the later stages of the program. Within the learning management system, the program provides seamless access for academics wishing to embed the modules into the curriculum in order to increase familiarity with realistic career destinations, to improve student certainty about their course choice, and to demonstrate how the curriculum develops capabilities and skills that will enhance employability.

Students are encouraged to utilise the ePortfolio to assist in the development and recording of graduate capabilities and employability skill acquisition, and to make the curriculum itself more meaningful through its clear career relevance.

Case study: ePortfolios for professional associations

In line with the continuing complexity of the role of health professionals, there is an evolving interest in the potential of ePortfolios to facilitate professional reflections and to document professional development. Many highly experienced nursing personnel are choosing to undertake additional postgraduate studies to become nurse practitioners. An extensive set of formal curriculum competencies needs to be mastered by students in order to achieve professional accreditation. In Queensland, the registration of nurse practitioners is managed by the Queensland Nursing Council (QNC). The QNC has adopted a portfolio approach to registration, with candidates asked to provide evidence of their clinical leadership and their reflective self-assessment of the attainment of the nurse practitioner competency standards.

Case study: ePortfolios for employers

In 2007 Queensland University of Technology (QUT) introduced a Professional Staff ePortfolio, which was collaboratively developed by Human Resources, Careers and Employment and the Division of Technology, Information and Learning Support (TILS). Pilot groups were established in both the Division of TILS and the Division of Administrative Services. The ePortfolio concept features a set of skills areas relevant to professional staff in an academic institution and specifically supports the People Capability Framework which seeks to improve the retention of staff by clearly articulating career pathways and facilitating staff progression and promotion. The Professional Staff ePortfolio has been acknowledged to be a key tool for staff to record evidence on personal and professional development and to share this with their supervisor as part of the performance planning and review process. In 2009, the focus will move to an Academic ePortfolio, which will be developed to ensure alignment with the promotion process and with current initiatives within the university to promote teaching quality and excellence.
Remember

you are not alone! Other stakeholders are part of the ePortfolio process, so consider the issues that are relevant to your own perspective and context!

Need more information?
Visit www.eportfoliopractice.qut.edu.au
- ePortfolio concepts for learners
- ePortfolio concepts for academic staff
- ePortfolio concepts for institutional managers
- ePortfolio concepts for information technology and teaching and learning support services

Further reading

References

Acknowledgment
Thanks are extended to the Centre for Recording Achievement (CRA) in the United Kingdom for their guidance in the development of this resource.

Australian ePortfolio Project
www.eportfoliopractice.qut.edu.au
February 2009
ePortfolio concepts
for staff/employees

‘After writing just one experience according to the ‘formula’ suggested by the ePortfolio team, I could notice a change in my thinking. I was learning to consider my experiences from an employer’s perspective and to identify – in all facets of my life – examples of skills that employers would value.’

– ePortfolio user, QUT
ePortfolios are becoming popular with employees around the world as a tool to enhance learning and assist with personal career development. As a staff member, you might be wondering how you can use an ePortfolio to support your learning and development. This guide will introduce you to ePortfolios, their benefits, and issues you need to consider when developing your own ePortfolio.

What is an ePortfolio?
This guide uses the term ‘ePortfolio’ to refer to an electronically stored collection (or archive) of an individual’s experiences, achievements and artefacts, together with their reflections on learning and professional development.

Why use an ePortfolio?
ePortfolios can be customised and personalised into a one-stop-shop to demonstrate your skills and experiences to supervisors and managers, colleagues, and potential employers. Many employees find their ePortfolio to be a valuable resource when it comes to participating in performance management and development processes, writing job applications and preparing for interviews. People who have used ePortfolios report having a greater awareness of their skills, greater confidence in their abilities, and feeling more independent as a learner.

In the professional context, an ePortfolio can assist you with your personal development by providing a single, organised repository from which you may:

- Develop an holistic overview of your learning/experiences/development
- Understand your achievements and experiences in terms of professional attributes and employability skills
- Extract evidence to represent your learning and achievements, for example to develop selection criteria responses
- Identify skills gaps through review of and reflection on your ePortfolio content
- Plan, set and review personal development targets.

An ePortfolio is not only a product, but more importantly a process, which can help you to better understand not just what you have learned, but how you have learned. As you reflect on your experiences to create your ePortfolio, you will also develop important lifelong learning abilities that complement your technical knowledge and skills.

"It was only when I could write about my experiences that the really great value of the ePortfolio became apparent. My confidence in myself as a valuable employee increased dramatically!...And when it came to applying for jobs, I could readily draw together evidence from a wide variety of areas to demonstrate my competence...I believe that this confidence and maturity was evident in both my written applications and interviews."

— ePortfolio user, QUT
What do I need to think about when creating and maintaining an ePortfolio?

What is my main reason for creating an ePortfolio?

Your reason(s) for creating the ePortfolio will guide you as to what evidence to incorporate. Your motivations might include:

- to help you address job or promotion applications
- to showcase your skills and experiences to your supervisor, potential employers or professional organisations
- to demonstrate the attainment of professional standards
  - Refer to the employability skills required by your industry (available from job advertisements, industry associations or career advisory services), and think about which of your experiences and achievements align with them.
- to help plan your personal development and build your lifelong learning skills
  - Refer to the skills and capabilities identified as important by your organisation, and think about which of your experiences and achievements align with them. Consider what training or experiences you require to be able to develop those skills you don’t yet have.
  - Use your ePortfolio to look for patterns in your learning. Are there certain types of experiences or activities from which you seem to learn more? Aim to structure future learning opportunities around those types of experiences.
- to support your application for the recognition of prior learning (RPL)
  - After you have entered a range of experiences, it can be helpful to reflect on which employability skill each entry represents. You will probably find that each entry can be used to demonstrate more than one skill or attribute.

Who will have access to my ePortfolio?

It is important whenever you add information to the Web to remember that it is a public space. While all ePortfolio systems provide privacy controls, it is essential that you understand exactly who can access your ePortfolio. In most cases, your institution’s ePortfolio tool will enable you to customise your ePortfolio for different audiences, for example by selecting some experiences/artefacts for your supervisor or colleagues to be able to see, while keeping other experiences for your eyes only. Check your institution’s ePortfolio guides to make sure you understand how this works.

What sort of experiences and artefacts should I include in my ePortfolio?

Think broadly when selecting experiences to include in your ePortfolio. You can include evidence of skills you have gained at work, at school or university, in volunteer roles, or in your personal life. Some examples might include:

- roles or achievements in employment or voluntary work
- assessment pieces you performed well in during your university degree
- awards you have won at work, university or in your personal life/the community
- whatever you include should provide clear evidence of a particular skill or attribute that you possess.

What will happen to my ePortfolio in the long term?

Some organisations may continue to provide former employees with access to ePortfolios after they leave the organisation. Check your organisation’s ePortfolio policy to find out whether this is possible. Alternatively, you may be able to download a copy or file of your ePortfolio experiences to take with you if you leave your organisation. Finally, it is important to know whether there is a point at which your ePortfolio will be deleted by the organisation storing it, for example, if it is inactive for a period of time.

How will I ensure my ePortfolio is kept up to date?

To ensure your ePortfolio gives you the greatest benefit, keep your information up-to-date. Think about how you are going to achieve this.

- Set aside half an hour every Friday to add the week’s achievements to your ePortfolio.
- After a major event (e.g. conference, presentation, project), take time to reflect on your experience and add an entry about it to your ePortfolio.
- At the end of each month, spend an hour browsing through your ePortfolio. Consider whether there are any new experiences or artefacts you could add to it as evidence of your learning or skills.
Remember
You are not alone! Other stakeholders are part of the ePortfolio process, so consider the issues that are relevant to your own perspective and context!

Need more information?
Visit www.eportfoliopractice.qut.edu.au
- ePortfolio concepts for academic staff
- ePortfolio concepts for institutional managers
- ePortfolio concepts for information technology and teaching and learning support services
- ePortfolio concepts for employers, professional bodies and career services
- ePortfolio concepts for learners

Further reading
Available from www.jiscinfonet.ac.uk/e-portfolios

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Australian ePortfolio Project
www.eportfoliopractice.qut.edu.au
August 2009
Appendix 2: ePortfolio communities of practice

The following were identified in 2009 as part of AeP2 project activities.

**THE NETHERLANDS**

**SURF NL Portfolio**
Community web address: http://www.surfspace.nl/enK/themas/Portfolio/start/pages/overzicht.aspx
Contact: Marij Veugelers, community manager SURF NL Portfolio, Veugelers@uva.nl

**UNITED KINGDOM**

**Centre for Recording Achievement (CRA), UK**
Community web address: http://www.recordingachievement.org/eportfolios/default.asp
Contact: Rob Ward, Director, rob@recordingachievement.org

**Learning development and innovation: Best practice models for E-Learning (inclusive of ePortfolios)**
Website: http://learning.staffs.ac.uk/bestpracticemodels
Community web address: http://crusldi1.staffs.ac.uk/moodle/login/index.php
Contact: Christa Appleton, c.appleton@staffs.ac.uk

**Midlands Eportfolio Group, West Midlands, UK**
Community web address: http://groups.google.com/group/rscmeg?hl=en
Community wiki: http://wiki.rscwmsystems.org.uk/index.php/Eportfolios
Contact: Kevin Brace, Coordinator West Midlands Regional Support Centre, Community Manager, k.brace@wlv.ac.uk

**PDP and ePortfolios UK**
Community web address: http://pdpandeportfoliouk.wetpaint.com (private wiki — password access only)
Contact: Tracey Madden, University of Hull, Higher Education Academy Physical Sciences Centre, t.madden@hull.ac.uk
Scottish Higher Education PDP Forum, UK
Community web address: http://www.heacademy.ac.uk/aboutus/scotland/institutions/pdpforum
Contact: Dr Alastair Robertson, Senior Adviser, Higher Education Academy Scotland, community facilitator, alastair.robertson@heacademy.ac.uk

UNITED STATES OF AMERICA

AAEEBL: Association for Authentic, Experiential and Evidence-Based Learning
Community web address: http://www.aaeebl.org
Contact: Trent Batson, AAEEBL Director, trentbatson@mac.com

EPAC: Electronic Portfolio Action and Communication
Community web address: http://epac.pbworks.com
Community blog: http://epaccop.blogspot.com
Contact: Helen Chen, Community Manager, Stanford University, hlchen@stanford.edu

ePortfolio Consortium (ePortConsortium)
Contact: Catherine Kaufman

AUSTRALIA

Australian Flexible Learning Framework: E-portfolios Community of Practice
Website: http://www.flexiblelearning.net.au/e-portfolios
Blog: http://www.flexiblelearning.net.au/e-portfoliosblog
Contact: Allison Miller, E-portfolios Business Manager, allison.miller@tafesa.edu.au

Australian PebblePad User Group (APpUG)
Contact: Meaghan Botterill, meaghan.botterill@rmit.edu.au
ePortfolios in the library and information services sector
Community web address:
PebblePad Gateway — closed website
Contact:
Gillian Hallam, community facilitator, g.hallam@qut.edu.au

ePortfolio Practice: ALTC Exchange
Community web address:
Contact:
Ann Gillespie and Gillian Hallam, Exchange facilitators and members of the AeP2 project

Personal learning plans and ePortfolio
Website:
edna Groups — password access only
Contact:
Pru Mitchell, Senior Education Officer, and Cecily Wright, Education Officer Education.au, pmitchell@educationau.edu.au, cwright@educationau.edu.au

RMIT University: Introducing ePortfolios
Website:
http://www.rmit.net.au/eportfolio
Contact:
Meaghan Botterill, ePortfolio Project Leader, RMIT University, meaghan.botterill@rmit.edu.au

NEW ZEALAND

ePortfolios in New Zealand
Community web address:
http://akoaotearoa.ac.nz/communities/eportfolios-new-zealand
Contact:
Justin Sampson, group manager, j.sampson@massey.ac.nz

University of Canterbury ePortfolio
Website:
Membership access only, University of Canterbury, http://www.canterbury.ac.nz
Contact:
Alan Hoskin, community manager, alan.hoskin@canterbury.ac.nz