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# **Picturing the future: Exploring the opportunities to develop an ePortfolio community of practice in Australasia**

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The Australian ePortfolio Project, funded by the Carrick Institute for Learning and Teaching in Higher Education, has revealed that a significant number of people in Australian universities are interested in and are exploring the use of electronic portfolios in academic programs, in transition into employment and in career development. As an area of emerging practice in Australian universities, the importance of further capturing their interest in ePortfolios as a process and a tool to reflect on and provide evidence about student learning should not be overlooked. The paper introduces the landscape of ePortfolio practice in higher education in general and describes the Australian ePortfolio Project in particular. The concept of communities of practice in academic life is discussed, with specific attention paid to a number of successful communities of practice internationally that encourage and support ePortfolio practice. The paper concludes by considering some options for establishing a community of practice that will benefit the higher education sector in Australasia.

Electronic portfolios; Digital portfolios; ePortfolios; Communities of practice

## **Introduction**

Many teaching staff in universities are concerned about the silo-based culture that can develop in their institutions. While there are many new initiatives that introduce exciting and innovative teaching and learning practices into the curriculum, it is often felt that many academics work autonomously, with little opportunity to share ideas and expertise. This all too frequently results in the wheel being reinvented on multiple fronts, both within the individual institution, across disciplines and across the higher education sector as a whole. The situation is made more complex as new educational technologies are developed, with individual staff independently trying out new strategies to design, develop and deliver engaging learning activities for their students.

Some institutions seek to address these problems through some form of collaborative approach, be it through a working party, a task group or even a committee. An alternative model moves into the domain of more informal and fluid networking, with the development of a community of people, local or distributed, who seek “to generate and appropriate a shared repertoire of ideas, commitments and memories” (Smith, 2003). Their interest in

organizing themselves around a specific topic or area of knowledge offers them “a sense of joint enterprise and identity” (Smith, 2003). From this shared enterprise, a ‘community of practice’ can evolve. Wenger (2002) defines communities of practice as “groups of people who share a passion for something that they know how to do and who interact regularly to learn how to do it better”.

Communities of practice have a special role to play in areas of emerging practice. In certain situations, people may be interested in a specific idea, technology or activity, but not yet fully understand or know “how to do it”. Churchman and Stehlik (2005) argue that the value of communities of practice is particularly pronounced in times of emergent practice or rapid change. Tennant (1997) has suggested that new knowledge and learning are properly conceived as being located in communities of practice, where there is the potential to address problems that are relatively unstructured, to share knowledge outside of the traditional structural boundaries and to work around the potential problems of slow-moving hierarchies in organisations (Lesser and Storck, 2001). While the authors consider the value of communities of practice within the immediate context of commercial organizations, the principles they discuss also apply to academic institutions.

One example of emerging practice in Australian higher education that is currently attracting considerable interest is the field of electronic or digital portfolios, or ePortfolios. This paper presents an introduction of a national research project funded by the Carrick Institute for Learning and Teaching in Education, the Australian ePortfolio Project (AeP). This research project has revealed that a significant number of people were interested in the use of ePortfolios in learning, in transition into employment and in career development. Many of these people feel that they are currently working in isolation and are keen “to make meaning or sense of their situation and ways in which to negotiate their professional identity in the new context” (Churchman and Stehlik, 2005). The paper discusses the opportunities presented by the Australian ePortfolio Project to engage the Australian higher education sector in that “sense of joint enterprise and endeavour” (Smith, 2003), highlights some international examples of ePortfolio communities of practice, and outlines some potential options that can paint a bright future for ePortfolio practice in Australia.

### **The landscape: ePortfolio practice in higher education**

There are many definitions of portfolio, most of which acknowledge that they are purposeful collections of works or items chosen by the owner to provide evidence of a particular nature. In the educational sense, Paulson et al (1991) define a portfolio as “a purposeful collection of student work that exhibits the student’s efforts, progress and achievements in one or more areas” (p. 60). Inevitably, ePortfolios have multiple purposes and are created from different perspectives according to individual need. The learning portfolio, the credential portfolio and the showcase portfolio types have been identified by Zeichner and Wrey (2001).

In the context of the wider community, the development of technologies and strategies for eLearning in Europe led to the vision of an ‘ePortfolio for all by 2010’. The view of ePortfolios as support to the concept of lifelong learning led to the establishment in 2001 of the European Institute of ELearning (EIFEL, 2006). However, while there are a few examples of ePortfolio

initiatives arising within the broader community, the majority of engagement with ePortfolios has been within the education and health sectors.

The concept of learner-centred education has contributed to the use of ePortfolios to focus on the individual student experience, to demonstrate learning both within the academic setting and in transition to employment. As a result, ePortfolio practice has emerged, to a great extent, within specific discipline areas. Teacher education has long promoted portfolio practice as a means of recording and presenting evidence of teacher registration standards attainment. In Australian states and in New Zealand, student teachers must show they have reached suitable standards for registration, as for example in Queensland (Queensland College of Teachers, 2008). ePortfolios are also used to provide evidence of competency and standards attainment, for example in medicine and nursing (Creagh, 2007a). To a lesser extent, portfolio use for reflective learning, self promotion and assessment has been developed within design and technology, engineering and psychology disciplines (Butler, 2006). However, while there have been emerging pockets of ePortfolio activity across the higher education sector, there has been no comprehensive picture of the breadth and depth of practice.

### **A portrait: the Australian ePortfolio Project**

To address this gap in research and practice, in 2007 the Carrick Institute for Learning and Teaching in Higher Education called for expressions of interest for a priority project to investigate ePortfolio practice in higher education in Australia. The project was awarded to a group of four universities: Queensland University of Technology as lead agency, The University of Melbourne, University of New England and University of Wollongong. Three of these universities were part of a consortium commissioned by the Department of Education, Science and Technology (DEST) to consider the development of a National Diploma Supplement (UNE, 2008). The final report for this research project is scheduled to be delivered in early 2008.

It can be argued that there is a potential relationship between a diploma supplement and an ePortfolio, in terms of both policy and practice. Consequently, there is an overlap between the diploma supplement project and the ePortfolio project, referred to as the Australian ePortfolio Project (AeP) (2008). The stated goals of ePortfolio project are to provide leadership in research into ePortfolio practice in higher education, which requires developing an understanding of the transitional linkages between ePortfolio practice in schools, the vocational education and training (VET) sector, employment and the community, as well as considering the policy environment that might actively inform and foster ePortfolio practice in this country. Beyond this, the project seeks to gain insights into international initiatives and to explore the potential to establish a community of practice to support the adoption and use of ePortfolios in education.

The AeP has been informed by an extensive literature review and environmental scan which has helped develop an understanding of the current national and international contexts. Data collection activities encompass an audit of ePortfolio practice in higher education to consider the range of initiatives and the drivers for development in diverse academic institution, with online surveys of academic staff, university administrators and human resources managers. These surveys have enabled the project team to examine the range of ePortfolio activities that may be mapped across diverse criteria to create a series of maturity models, augmented by case studies that will allow a richer picture to emerge of the contexts where ePortfolios are being used. A

series of regional focus groups has been conducted to better comprehend ePortfolio use in secondary education, vocational education, the professions and the wider community. Further work involves a survey of student expectations about ePortfolios (early in Semester 1) with a follow-up survey on student experiences with ePortfolios (at the end of Semester 1). Beyond the universities themselves, the research will also encompass a series of semi-structured interviews with people who represent the professional accreditation bodies, employers and employer groups, educational policy and eLearning standards and interoperability.

These activities have already help build a strong foundation for a possible community of practice. It goes beyond the scope of this paper to present a detailed analysis of the ePortfolio audit (this will be published in the project's final report in mid 2008). However, the widespread engagement with the project to date has been significant. The communications strategy involved a letter being sent to all Vice-Chancellors to introduce them to the Australian ePortfolio Project. Emails were then distributed to all Deputy Vice-Chancellors, Executive Deans and Assistant Deans (Teaching and Learning); to all senior academic managers and human resources managers; and to all careers and employment managers. The recipients of the emails were again encouraged to distribute the details of the surveys further to any colleagues who may have an awareness of or interest in ePortfolios.

The response rate, based on the number of emails actually sent, was 31%. Responses were received from all but one university (which, however, did advise the project team that there was no ePortfolio activity within their institution to report on). While it was not possible to reach every potential respondent in higher education, this specific data collection activity did enable responses to be received from 111 people, arguably in a relatively short space of time, from a broad spectrum of academic life in Australia. The survey results recorded indicate that by far the greatest use of ePortfolios was by coursework students, principally in subject-specific (N=35) or program- or course-based (N=19) contexts. The occurrence of faculty-wide (N=4) or university-wide use (N=6) was rare (Figure 1).

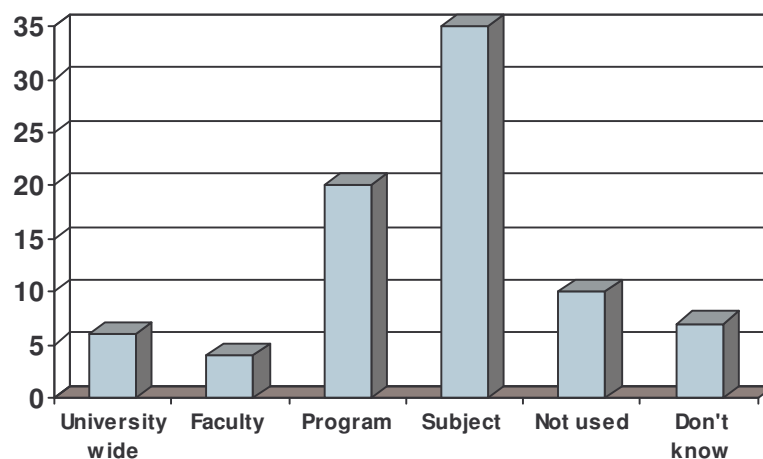
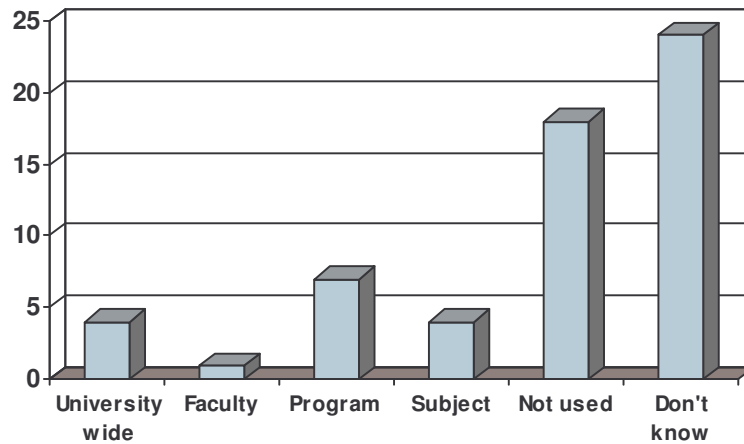


Figure 1: Use of ePortfolios by coursework students

ePortfolios were far less prevalent in the research student context, with four university-wide occurrences reported, one faculty-wide, five course/program-based and four subject-specific (Figure 2).



**Figure 2: Use of ePortfolios by research students**

It was apparent from the audit that many higher education institutions and many academics are positioned just on the shoreline of ePortfolio practice, ready to dip their individual and collective toes in the water, very keen to learn more about the potential impact of both the associated learning processes and the tools themselves.

The Australian ePortfolio Symposium (AeP, 2008) was held in early February 2008 to bring together representatives from Australian universities to discuss the educational, technological, management and policy aspects of ePortfolio practice. The event attracted more than 200 delegates from 38 Australian and New Zealand universities, plus one Scottish university. The research activities have enabled extensive consultation across the sectors, with the Symposium offering an opportunity for many of the key players to come together to share ideas and experiences, as well as to stimulate discussion about the future role of ePortfolios in higher education.

### **The big picture: the role of communities of practice in higher education**

Social constructivist learning theories emphasise the importance of collaboration between learners: "Learners construct their own reality or at least interpret it based on their perceptions of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures and beliefs that are used to interpret objects and events" (Jonassen, 1991). Beyond this, one specific aspect of social constructivism is the concept of situated learning, where learners become involved in activities that are directly relevant to the application of their learning (Brown et al, 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).

Communities of practice are “groups of people who informally share, develop and diffuse learning, knowledge and practice” (Churchman and Stehlik, 2005); they develop around things that matter to people (Wenger, 1998), so that the organisation around a specific area of knowledge and activity offers members “a sense of joint enterprise and identity” (Smith, 2003). Inevitably the community should link back to ‘practice’, so that ideas and activities are shared and further developed within the community itself. As such, the process is integral to the nature and attributes of the academic environment, both within and across institutions. Wenger (1999) has identified three dimensions that define the role and purpose of a community of practice:

- What it is about: Its joint enterprise as understood and continually negotiated by its members
  - How it functions: Mutual engagement that bind members together as a social entity
  - What capability it has produced: The ‘shared repertoire’ of communal resources (routines, sensibilities, artefacts, vocabularies, styles etc) that members have developed over time
- (Wenger, 1999, pp.73-84)

As discussed in this paper, the use of ePortfolios in higher education is an emerging area of interest to many academic stakeholders: teaching staff, students, instructional designers, academic managers, IT directors and careers and employment staff. The high level of interest and engagement from delegates attending the Australian ePortfolio Symposium intimated that there was indeed immense potential for the project team to consider future strategies that would allow the current knowledge and experience of people to be placed “at the centre of a process of dialogue and collaborative enquiry that can lead to transformative learning out of which new identities and practices emerge” (Newell Jones, 2006).

### **The international picture: examples of communities of practice to support ePortfolio activities**

Interest in and activities around ePortfolios in education have been in place for a longer period of time in the northern hemisphere. There are examples of ePortfolio communities of practice that have been established in Europe, including specifically the Netherlands, the UK, as well as the USA.

The European Institute for eLearning (EiFEL) was established in 2001 as an organisation that could focus on the policies and practices that underpin the concepts of a ‘knowledge economy’ and a ‘learning society’. The notions of learning technologies, reflective practice and lifelong learning are central to EiFEL’s activities. EiFEL is a membership organisation which began as a tight knit community, but has since opened up to a broader membership base of both individuals and organisations, embracing the spectrum of stakeholders in the eLearning environment. Members are informed about and guided in their professional practice through a series of activities that include research projects, pilot programmes, special interest groups, workshops, conferences and consultancy. The organisation has a specific role to play in supporting the initiatives introduced by the European Parliament, such as the Europass (2004), which seeks to become a single transparent framework for individuals to present their qualifications and competencies. In response to this, EiFEL developed the ‘ePortfolio for all’ as their objective for 2010. The campaign has provided a focal point for their activities, such as the International ePortfolio Conferences, European Portfolio

Initiatives Coordination Committee (EPICC) and the European Consortium for the ePortfolio (Europortfolio). Further information on EIFEL can be found on their website ([www.eifel.org](http://www.eifel.org)).

There are further communities of practice in individual European countries, such as The Netherlands. The organisation SURF has a longer history, evolving 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. NL Portfolio is a special interest group (SIG) within SURF which aims to “combine, share and develop further the knowledge in the field of digital portfolios in higher education” (SURF, 2008). The 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 as they move out of the experimental phase of ePortfolio practice to face the challenges of implementation at the institutional level. Knowledge is shared via the NL Portfolio portal, publications, seminars and congresses. Their recent work has included a study closely related to the Australian ePortfolio research project, examining ePortfolio practice in a number of Dutch universities (Aalderink and Veugelers, 2007). International collaboration is also a key focus of the NL Portfolio activities.

In the UK, ePortfolio activity was also initially stimulated by government policy, with the National Committee of Inquiry into Higher Education, chaired by Sir Ron Dearing (1997), recommending:

...that Institutions of Higher Education, over the medium term, develop a Progress File. The File should consist of two elements:

- A Transcript recording student achievement which should follow a common format devised by institutions collectively through their representative bodies;
- A means by which students can monitor, build and reflect upon their personal development (Personal Development Planning/Recording).

The Progress File comprises the two elements currently the focus of research in Australia: the National Diploma Supplement and ePortfolios. In the UK, 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, 2008). The CRA has a membership that encompasses major higher education institutions, smaller organisations and individual, providing a forum for dialogue about policy and practice in the area of ePortfolios. The organisation has close links to the Joint Information Steering Committee (JISC), the Quality Assurance Agency (QAA) and, of course, the HEA. The CRA has compiled a number of case studies on ePortfolio practice in diverse universities and has contributed to the development of communities of practice within and across institutions, eg the University of Manchester (O’Connell, n.d.). The UK has further avenues of support for specific academic communities through their Centres for Excellence in Teaching and Learning (CETLs) (HEA, 2008a) and Subject Centres (HEA, 2008b).

Once again, the international perspective comes to the fore. The CRA plays a leading role in the Inter/National Coalition for Electronic Portfolio Research. This agency, as the National Coalition, was established in the United States in 2003 to promote research on ePortfolio practice at colleges and universities. As it was felt that practice was in fact outpacing research in many areas of ePortfolio activity, the Coalition was founded to engage institutions in collaborative research efforts, using a cohort model. Each cohort is composed of about ten higher education institutions which commit to a three-year research project. The research focuses on both a question important to the institution's local practice, as well as on a cohort-wide enquiry into a common question, so that the investigative activities build on and contribute to scholarly theory and research into a range of learning, eLearning and organisational issues. The research teams are thus generally multidisciplinary in composition, eg with academic teachers, IT staff, learning support staff etc. There are two face to face meetings in the three year cycle, with some overlap between the different cohorts to ensure knowledge and experience is transferred between the groups. There are also two teleconferences with the Coalition leader each year. The Coalition website acts as a portal for resources, and virtual meetings are convened via discussion forums and webinars (D. Cambridge, personal communication, February 22, 2008).

### **The local picture: options for establishing an ePortfolio community of practice in Australia**

The Australian ePortfolio Symposium, following on from the audit of ePortfolio use in late 2007 and the series of focus groups, has aroused a strong interest in the topic from the perspectives of both research and practice. The project team is currently drafting the final report and giving consideration to the potential outcomes from the project itself and further opportunities that may emerge as a result. Feedback from the Symposium delegates stressed the urgency of 'continuing the dialogue' that has commenced in this country, to consider how to best share knowledge and expertise within and across universities, to foster collaboration and to establish a central resource or portal. These strategies are all elements of a community of practice.

The mission of the Carrick Institute itself is to "promote and advance learning and teaching in Australian higher education" (Carrick Institute, 2008a), with specific objectives which seek to develop ways to identify, develop, disseminate and embed good practice in learning and teaching, especially through national and international relationships. One of the AeP project goals also seeks to recommend ways to share excellent practice in the implementation and use of ePortfolios. The Carrick Institute itself is, at the time of preparing this paper, about to launch the Carrick Exchange. This is envisaged as follows:

The Carrick Exchange is a new online service that will provide learning and teaching resources and support communication and collaboration across the national and international higher education sector. The Carrick Exchange is a hub for the exchange of ideas about teaching practice in the Australian higher education sector. It is a place to explore, discover and experiment with issues, technologies, processes and ideas.

(Carrick Institute, 2008b)

Philip et al (2007) propose that “the Carrick Exchange may well support fully formed communities of practice, plus any looser and more brittle networks”. It is advised that there should be room for the community of practice “to self organise its own structure and facilities... [beginning] with a minimal set of activities and forums to encourage participation” (Philip et al, 2007). The AeP team believes that there is a strong – and growing – body of interest with academic circles to move in this direction.

While the Carrick Exchange may be a suitable mechanism to support knowledge sharing at the local and national levels, there is also clear interest in international collaboration, especially in the area of standards and interoperability to support eLearning. At the Federal Government policy level, there are already agreements and initiatives in place between the Department of Education, Employment and Workplace Relations and the Joint Information Steering Committee (JISC) in the UK, the Ministry of Education in New Zealand and SURF in The Netherlands, as evidenced by the eFramework for Education and Research (2008): “The primary goal of the initiative is to facilitate technical interoperability within and across education and research through improved strategic planning and implementation processes”. Australia is also a member of the IMS Global Learning Consortium, which focuses on the IMS ePortfolio specification to help make ePortfolios interoperable across different systems and institutions (IMS, 2008). The Inter/National Coalition for Electronic Portfolio Research, discussed earlier in the paper, has proposed discussions about the feasibility of a future cohort of research into ePortfolio practice being formed in the Australasian region. There is further potential for Australia and New Zealand to embark on collaborative projects with UK colleagues, through the CRA, and in Europe, through SURF.

## **Conclusion**

Many of the delegates who attended the Australian ePortfolio Symposium indicated that the forum was very timely: the audit of ePortfolio practice findings reveal that the majority of the respondents are only just beginning to paint their ePortfolio picture. The time is therefore right for educators, technologists and managers to determine how they might speedily build their knowledge and skills, avoiding the possible potholes along the way, so achieve outcomes that will enhance learning and teaching for both students and teachers. The fact so many universities are only just setting out on this journey means that there is considerable value in participating in national and international networks to create a richer and more diverse canvas that will appeal to a wider audience. The opportunities presented by the Carrick Exchange and initiatives in the UK, Europe and the USA should not be ignored.

Nevertheless, it is not only about being in the right place at the right time. Philip et al (2007) stress the challenges still to be faced: “the need for financial support; issues of academic time poverty; the need for well-placed institutional champions, the difficulty of identifying and quantifying outcomes from communities of practice; and the question of sustainability and ongoing support’. Arguably these challenges are common to many academic projects – immediate analogies can be drawn with ePortfolio projects – which indicate a common purpose and shared goals within so much of the work that takes place in the higher education sector. Through regular and frequent exchanges of knowledge and experience, the community’s own ‘practice’ can effectively move teaching and learning forward (Sherer et

al, 2003). The ability to share creative ideas, innovative practice and high quality resources is integral to the future success of higher education nationally and internationally.

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