# Table of contents

## Long and short papers

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scottish Qualifications Authority</td>
<td>6</td>
</tr>
<tr>
<td>Linn van der Zanden</td>
<td></td>
</tr>
<tr>
<td>YES - YOUTH employment support for SME</td>
<td>9</td>
</tr>
<tr>
<td>Katharina Toifi die Berater®, Beate Dall die Berater®, Franziska Steffen die Berater®, Alexandra Bruckmoser, die Berater®</td>
<td></td>
</tr>
<tr>
<td>Harnessing tools designed to support teaching, to support learning</td>
<td>13</td>
</tr>
<tr>
<td>Pallister J B, UKAN-SKILLS project, Mayes P, Teesside University</td>
<td></td>
</tr>
<tr>
<td>Integrating Big6 Information Literacy Skills in Project Based Learning: A Case Study in Higher Education</td>
<td>19</td>
</tr>
<tr>
<td>Şirin Karadeniz Bahçeşehir University Faculty of Arts and Sciences Department of Computer Education and Instructional Technologies</td>
<td></td>
</tr>
<tr>
<td>E-portfolios for staff Development – Using e-portfolios for an ITQ qualification</td>
<td>24</td>
</tr>
<tr>
<td>Neil Currant, University of Bradford</td>
<td></td>
</tr>
<tr>
<td>Easing People at Work into Self-Directed Learning: a New Role for Eportfolios</td>
<td>28</td>
</tr>
<tr>
<td>Kat Wehrheim, SummitSkills, Stuart Wood, University of Nottingham / Leapahead</td>
<td></td>
</tr>
<tr>
<td>ePortfolio for Kids in Social Networks Across Generations, Competencies and Cultural Backgrounds</td>
<td>34</td>
</tr>
<tr>
<td>Wolfgang Helmeth, EDEJU</td>
<td></td>
</tr>
<tr>
<td>Freefolio – an e-Portfolio and social knowledge management system</td>
<td>36</td>
</tr>
<tr>
<td>Raymond Elferink, RayCom BV</td>
<td></td>
</tr>
<tr>
<td>Mark E. Brown, Massey University</td>
<td></td>
</tr>
<tr>
<td>Implementing a trial of a scalable enterprise ePortfolio system at RMIT University: a case study</td>
<td>40</td>
</tr>
<tr>
<td>Meaghan Botterill1, Garry Allan1, Margaret Faulkner2</td>
<td></td>
</tr>
<tr>
<td>ePortfolios as a vehicle for recording Recognition of Prior Learning at RMIT University</td>
<td>46</td>
</tr>
<tr>
<td>Meaghan Botterill, Mark Mossuto, Callie Harvey, Laura Di Pietro</td>
<td></td>
</tr>
<tr>
<td>How to Incorporate ePortfolios into the Curriculum in a Developing Country: theCase of American University of Central Asia (Bishkek, Kyrgyzstan)</td>
<td>52</td>
</tr>
<tr>
<td>Sania Battalova, Sharon Bailey, American University of Central Asia (Bishkek, Kyrgyzstan)</td>
<td></td>
</tr>
</tbody>
</table>
Use of Video in an Eportfolio to Enhance Learning
Harry Owen, Clinical Skills and Simulation Unit, Sue Skinner, Computer Assisted Learning Unit, Chris Carapetis, Computer Assisted Learning Unit, Cyle Sprick, Clinical Skills and Simulation Unit, Department of Medical Education and Kris Hayres, School of Medicine, Flinders University, South Australia

Exploiting tacit knowledge through knowledge management technologies
Frank Nyame-Asiamah (Brunel Business School, Brunel University)

Use of an E-Portfolio to Support the Recording, Reflection and Presentation of Academic, Career and Personal Development
Mary Ann Kernan, City University London, Marie Williams, City University London, Olivia Fox, City University London, Rae Karimjee, City University London

Evaluation of the Implementation of an ePortfolio System – Processes Versus Platform?
Neal Sumner City University London, Olivia Fox City University London, and Ajmal Sultany City University London

Using e-portfolios to assist with professional portfolio development
Polly Lee City University

Interactive and Collaborative Sense Making
Roy Williams, Simone Gumtau, Regina Karousou

Abstacts and programme
Long and short papers
Background

The Scottish Qualifications Authority (SQA) is an executive non-departmental public body (NDPB) sponsored by the Scottish Government Schools Directorate. It is the national body in Scotland responsible for the development, accreditation, assessment and certification of qualifications other than degrees.

SQA believes e-portfolios have the potential to greatly enhance the learning and assessment experience; offer substantial operational benefits for institutions; and allow more flexible quality assurance. We have a policy in place to encourage learners and institutions to use e-portfolios for our qualifications.

Objectives

As part of this policy we also seek to minimise potential barriers, for example, we are looking at ways to:

- build capacity in institutions to support the implementation including learning technologists and technical staff, and train teachers who in turn can contribute to knowledge transfer within their institution.
- coordinate regional user events to allow sharing of experiences and encourage partnerships between schools and colleges, and explore regional e-portfolio deployments in remote areas such as in the Highlands of Scotland and in Shetland
- establish a dedicated SQA Academy course available online to take teachers through the e-portfolio system step by step, undertaking initial tasks before attending training, and on completion of the face-to-face workshop they can access follow up materials and videos as well as discussion forums facilitated by SQA staff.
- address the uncertainty about the acceptability of evidence collected through an e-portfolio, through working with External Verifiers to pilot the use of e-verification
- implement accessible customer support channels and training programmes

However, there is a growing range of e-portfolio systems, from commercially produced products to home-built e-portfolios, and we are considering how best to support our customers in relation to these different approaches. We have a large suite of qualifications which all have different elements and range from very structured courses to assessing softer skills. For example, the Scottish Vocational Qualifications (SVQs) require evidence to be cross-referenced and therefore need good document management capability in an e-portfolio, whereas the Skills for Work courses (SfW) focus on reflection and assessment of general employability skills which requires built-in reflection features.

In addition, institutions are already using a range of e-portfolios themselves which SQA is coming across at verification stage; some using structured e-portfolio software, others using VLEs or other learning systems. In schools, development is less widespread, partly because most development has taken place within the vocational qualifications domain and partly because, in terms of assessment, there is less portfolio based summative assessment. Nevertheless, the impact of
Glow\(^1\), Curriculum for Excellence\(^2\) and other curriculum developments in Scotland is beginning to change the way schools use technology and, over time, this is bound to impact on the use of technology in assessment and the use of e-portfolios for assessment. This in turn increases the need for SQA verifiers to be able to work with a range of e-portfolios.

**Current developments**

In order to ensure that e-portfolios are fit for purpose for the range of qualifications that SQA offers, we have commissioned a set of business models for further consideration of specific e-portfolio developments and our approach to e-portfolios generally. Models that are being explored include: endorsement of a set of commercial e-portfolios which can be used by institutions to present learner evidence; providing a fit for purpose e-portfolio as part of particular qualifications; and allowing evidence to be uploaded from institutions’ own e-portfolios to a single interface at SQA where verification would take place.

As with most UK awarding bodies, SQA has been piloting the use of e-portfolios and working with institutions wishing to introduce them. Projects and pilots include:

- Developing and implementing the SQA Deskspace e-portfolio system based on PebblePad® for use by institutions adopting the Skills for Work qualifications
- Encouraging EVs to work with centres to accept e-portfolio evidence for SVQs and similar qualifications
- Exploring the use of e-portfolios to recognise wider achievement and attainment where no formal qualifications are gained
- Development of the e-Competence e-portfolio to support the Oil and Gas sector qualifications
- Working with the University of Edinburgh and Goldsmiths to extend the use of e-Scape to schools in Scotland
- Adopting and publishing alongside the other three UK regulators the “e-Assessment – Guide to effective practice”\(^3\). In particular, the guide offered centres a set of criteria, adopted by all the UK regulators, which centres could use to help them procure e-portfolio systems.

**The SQA Deskspace e-portfolio**

This presentation will focus on its deployment in the Skills for Work qualifications suite: a national qualification for the age group 14-16 designed to encourage school pupils to develop the knowledge and skills they will need to gain rewarding employment by giving them personal experience of working in a particular vocational setting, for example in Construction or Rural Skills. In this area, the commercial product Pebblepad has been customised as ‘SQA Deskspace’.

The SQA Deskspace e-portfolio was first made available on a very small scale for a limited number of courses in the academic year 07/08 and following a successful bid for European Social Fund investment, SQA was able to significantly expand the project and distribute licenses to institutions at no cost. Since then, Deskpace has been deployed in all 13 Skills for Work courses with

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\(^1\) Glow is a Scottish Government-funded national schools intranet, digitally linking Scotland's 800,000 educators and pupils. It is funded by the Scottish Government and managed by Learning and Teaching Scotland (LTS) in partnership with RM. This service offers an opportunity for the national education agencies in Scotland to work collaboratively to provide a more accessible, user-friendly platform to make their resources available to schools. For more info see http://www.glowscotland.org.uk

\(^2\) Curriculum for Excellence is the programme of work undertaken by LTS, SQA, Scottish Government and HMIE that is reviewing the current Scottish curriculum. For more information see http://www.curriculumforexcellencescotland.gov.uk/

\(^3\) e-Assessment – Guide to effective practice SQA et al 2007
additional subject specific materials embedded in the e-portfolio. Deskspace is currently being used to deliver these courses by almost 30 institutions.

Initial feedback has been very positive from learners, teachers and senior staff alike, however SQA is now exploring the associated issues around increasing uptake and usage levels and supporting the scalability and sustainability of the implementation. While we would like to see increased usage of the e-portfolios, the model currently adopted is not sustainable for high volume use and we need to manage expectations and be able to cope with unknown numbers of scalability. As part of this the eAssessment and Learning team in SQA will look at embedding the administration and support into mainstream processes.

**Next steps**

Further questions for exploration are:

- How can we support the vision of how building an e-portfolio would differ from building a paper portfolio and inform thinking about what constitutes acceptable evidence when using a variety of methods to record evidence e.g. video, audio?
- How can we support the lack of confidence in institutions to move away from a tried and tested portfolio methodology based on paper?
- How can we build in sustainability for when external funding ends to give institutions confidence that the product will be available for the next academic year?
Addressing a clear need of Europe’s youth and SME

In many European countries integration into the labour market of early school leavers, young people who have failed to complete vocational education and training and other groups of youth with socio-economic and/or personal disadvantages is rather difficult. Most businesses, especially SME, are very reluctant to employ and/or train such young people or give them a second chance for vocational training, as those responsible for human resources are worried that these youngsters are too “difficult” to deal with and require too much attention and time of their supervisors. Especially in rural regions part of the barrier to cope with this challenge is based on intergenerational misunderstandings. At the same time many young people have got a highly occupational motivation [1]many SME in specific industrial sectors suffer from a lack of skilled employees, e.g. in Austria in the sector of manufacture of wood and metal.

The demand to create apprenticeship training positions in order to meet the existing demand of young people is expressed in many political announcements, programmes and initiatives [2,3]

Experiences from previous partner work with young people in large scale job insertion programmes as well as other initiatives indicate that SME are more inclined to employ and/or train “difficult” young people if they receive comprehensive and intensive coaching and training support. There are already many initiatives which target young people, but there is a clear lack of support and training offered to the other side, the potential employers. To meet this need the YES training has been developed.

Developing a training for SME recruiters, human resource managers and senior staff members

The main aim of YES is to respond to the clear need in Europe in general and the project partner countries in particular to strengthen staff managers’ interaction skills with “difficult” youth, who will make up a considerable proportion of the future skilled work force. Thereby SME are to be convinced to employ and/or train young persons that are members of the above described target group.

YES provides a training and support system for SME employers, responsible for human resources managers, in-company trainers and supervisors in order to decrease their reluctance to employ members of the described target group. The YES training offer includes five specific blended learning modules covering communicational aspects of apprenticeship training, motivation, pedagogical and didactical skills, conflict prevention and management, intergenerational learning. These blended learning modules consist of face to face meetings where SME employers meet to learn together and from each other. The module “Profile of in-company recruiter/mentor” identifies the different roles and tasks there are during the job insertion process and helps trainees to develop their competences as mentors for young “difficult” people in their company. Module “National Law and Support” provides information about European as well as national legislation and regulation in the field of youth employment. It can prove to be very useful for employers to get a clear picture of their rights and the obligations towards their employees, while at the same time getting acquainted with apprenticeships and subsidies for hiring difficult youth. Additionally, if everyone knows exactly what they are allowed and not allowed to do, it is more likely that a pleasant working environment will be sustained. The aim of Module “Behavioural Aspects” is to provide information on young people behaviours and reasons for that behaviour so that future employers can grasp their different understanding of motivation for work, their priorities and life styles. The module aims at raising self-consciousness on how to start cooperation with vulnerable young employees and offers the communication strategies for better mutual understanding of different generations. Module “Soft Skills” is intended for improving communication with young
people by increasing awareness and learning new knowledge and skills in three main domains: interpersonal communication, conflict resolving and coaching. The aim of Module “Pedagogical Aspects” is to provide recruiters, human resources managers and managers of companies, especially of SME, with useful information on basic pedagogical skills needed in knowledge transfer and to give instruction and pieces of advice on learning processes and intergenerational learning.

The YES concept is arranged for meetings of SME employers within specific economic sectors, as it was expected, that the face to face sessions are even more interesting and efficient, if participants are sharing similar experiences and problems. The content of the face to face meetings is also available as online content on a virtual support platform, which is being used as knowledge base as well as for peer communication. Participants of the YES training have the chance to look up information, to prepare for meetings, to check their state of knowledge in online exercises and to exchange experiences and thoughts in chats and a forum.

Further more the YES training is accompanied by a coaching offer to identify barriers, matching of needs, to support during first employment/training phase and to mediate in conflicts that may arise during the apprenticeship.

Effective working with “difficult” young people depends on several premises, besides specific knowledge provided in YES training, social competences and skills are necessary. Recruiters, mentors and other employees of SME working with young people often could use their potential to deal with youngsters more effectively. In order to enlarge those competences it is necessary to reflect the way of behaviour and interaction with young people.

By coaching responsible persons of the job insertion process in SME are being professionally accompanied. The achievement of the coaching process becomes visible to the clients, and even more to the companies that increase their competences of leadership and human resource management.

The YES coaching is based on the systemic coaching approach [1] Basing on this view coaching is comprehended as an active learning process in which individuals evaluate, adapt and insert the offered information and into their individual knowledge structure rather than independently save it as originally gained knowledge.

YES coaches usually avoid to contacting the youngsters directly. The YES support is aiming at the responsible persons in the enterprises with the intention to enable them for appropriate dealing with the young person themselves.

Piloting: Well developed theory meets real needs of SME

The complete YES offer has been carried out in 5 European countries so far: Austria, France, Czech Republic, Slovenia, Slovakia and Germany. All countries tried to focus on one special economic sector that suffers from a lack of qualified personnel at the moment as participants for their pilot YES course. This was not successful in every country, because it was not possible to find the envisaged number of 8 participants within one sector.

Piloting the YES blended learning scenario: Experiences

Having been planned to be “ordinary” trainings sessions, the face to face training sessions turned out be first of all opportunities for participants to exchange experiences with others about their apprentices and problems they have been facing or are facing at the moment. The content of the face to face training sessions in fact gave a framework and input for these discussions and exchange, therefore group work and reflective activities were very popular. It proofed as very useful to stick to the concept of focussing the YES-offer on special economic sectors where possible, as companies used the face to face sessions also for networking and had the feeling they are being “understood” by colleagues who have made the similar experiences.

New information about youth life styles as well as about communication techniques was very much appreciated. In Austria, as only country, the module on law and regulation was most popular. Suggestions for improvements very often were more lively case studies in order to get to know young people’s world better and to gain a deeper understanding for it.
The virtual support platform and online learning was not as much used as the YES blended learning concept suggested, although the average participant describes his or her computer skills as modest. Therefore the purpose of the virtual support platform changed into an information platform for those, who wanted to look up further information on a topic. The platform was not at all used for peer support (e.g. chat), which found his place within the face to face trainings sessions. This was on the one hand also due to the very little traffic on the platform. On the other hand, there were no interactive activities foreseen in the YES concept so far or initiated by pilot trainers, which might have lead to reduce the motivation of using the virtual environment.

Piloting the YES coaching offer: Experiences

Coaching was used to support companies during the process of integration of young people into the company and during the selection process in France. In Austria for example, coaching was trouble shooting most of the time. It was assisting to company owners, when they were experiencing any problems with their apprentices- so not every participant needed/wanted coaching. But there were also people who were only interested in coaching and being guided and supported through exceptional situations and did not want to come to the meetings.

When it comes to the YES coaching concept in theory and the way it was used in practice, a wide gap can be noticed. YES coaching concept envisaged to support participants to develop their social competences and skills through reflection on their relationship, communication strategies and interaction with their apprentices within a longer period of time. In practice the coach helped participants to solve situations they experienced as problematic. As coaching is based on the principle of voluntariness, participants have to see the advantages of coaching for themselves and their companies to respond to the offer. And advantages of coaching have been seen in cases of troubles or unsureness, where the feeling of need for support was growing.

A typical example of a YES coaching is the following situation:

The company employs an intern, who is the only woman at the repair shop. She always compares her qualification and skills with those of her male colleagues. She comes to the conclusion, that-although she has been an intern for quite a long time, she has gained fewer skills than her male colleagues, who have been interns for the same time or shorter. She is losing self-consciousness, she dares to do less and less, which avoids that she gains skills. The challenge for Mr. x is, to support his intern to gain more self-consciousness, so she dares to work on her own in the future.

The aim of the coaching process then was to develop ways with Mr. x, how he may improve his intern’s self-consciousness, so she dares to work on her own as a car technician in the future.

These cases can be a good starting point for the development of social and communicative skills, if the coach sticks to the principles of the systemic coaching approach: not giving advices, but leading the coachee to develop answers on his or her own.

Conclusions for SME training

Although the results are only based on experiences of the piloting trainers and coaches of the participating countries so far there can already be drawn several conclusions for the improvement for the YES offer in particular and for SME training offers in general.

First of all training groups that are homogeneous concerning the economic sector are being used for networking and collaboration additionally which makes the offer more attractive for companies. Furthermore the group should be able to exchange a lot of practical experiences, which is an important factor. It is easier to see similar experiences and problems, if participants are working in the same sector- but there are also similar “general” problems with young “difficult” apprentices that are not depending on a specific sector.

All in all knowledge imparted through training should have a focus on everyday experiences of the target group. As the need for connection of training content to their (individual) practice was clearly expressed by participants, a coaching offered to develop individual competences and skills is a good solution, because it gives the chance to relay on the individual needs. For the YES coaching
this means, that the coaching should be clearer connected to the training, in order participants are making use of the offer even though there is no actual problem at the moment they need to solve.

An effective insertion of an e-learning platform very much depends on its connection to the training, on the presentation of the content provided as well as on activities initiated by trainers to make participants using the platform and to adopt it.

References
Harnessing tools designed to support teaching, to support learning

Pallister J B  UKAN-SKILLS project, Mayes P  Teesside University

The learning environment provided by schools is now complemented by environments enabled by technology. If learning is metered-out and controlled by teachers in a ‘traditional learning environment’ during school hours, the learner can now access learning opportunities whenever they want to, as long as they have internet access; the required skills and the motivation. The boundaries between formal, planned learning and unplanned learning are likely to evaporate as the internet increasingly provides, and is recognised as providing a spaces and a tool-sets capable of supporting learning.

The tools and technology required to create a Personal Learning Environment are available now. Learners, generally outside of the classroom, are increasingly experimenting with the tools. Whether schools are ready or not learners are beginning to personalise their learning. Whether planned or otherwise learners will find themselves having to take decisions about their learning.

Curriculum choice is an important component of personalised learning whether you believe that it is the learner who should be personalising the learning for themselves; or that it is the teacher who should be personalising the learning for the learner. In either scenario the learner will make decisions about what they need to learn, how and when they learn; they will have a ‘say’, a voice in the design of their learning experiences. They will be ‘active’ learners who value their own ideas and respect those of others; they will have the confidence an ability to put their ideas forward; they will reflect on their learning, identifying how they can improve and exercising choice as they develop as independent, lifelong learners. It is likely, in the twenty first century, that learners will be following the ePortfolio process.

In addition to being able to select from the curriculum opportunities offered by their school they will also be able to benefit from those available from a wide range of other sources. They will decide what is appropriate to their learning needs or plans. They will follow a personalised learning journey, sharing their thinking and reflections with their teachers, peers and others. Schools and providers will need to investigate how they can make sure that their curriculum ‘offer’ is visible and accessible to learners.

There are implications for schools and providers. Schools no longer have ‘captive’ learners; learners have personal learning environments that enable them to access learning opportunities 24/7, opportunities that can be provided by anyone, anywhere in the world. Personal learning environments are here already. Schools need to package up their learning offer and make it accessible and available to learners who ever they are where ever they are. The competition is no longer just the school next door.

There are implications for learners. If they do not have the opportunities to develop the skills that they need to manage their own learning they will struggle in their personal learning environment. They will not be able to take maximum advantage of the available learning opportunities.

In this new learning environment, where the emphasis shifts from teaching to learning, the learner takes on new roles and responsibilities. They will be expected to reflect on their learning; identifying how they can improve and exercising choice as they develop as independent, lifelong learners. They will need to be self motivated and self regulated making decisions about what they need to learn, how and when they learn.

It will require imagination, determination and significant curriculum planning on the part of schools, if they are to create a new learning environment; if they are to make the shift from teaching to learning happen. Traditionally, teachers would plan a curriculum and deliver it by guiding the learner; by metering out and controlling the learning diet. Controlling not only the formal learning experiences but the pace at which they are experienced.

The teacher driven curriculum will need to evolve, to be developed into a curriculum that supports the individual learner. It needs to become something that the learner can use to help them make
their own decisions about what it is that they learn; when and how. To be able to make these
decisions the learner would need to know what it is that they need to or are expected to know, to
be able to do or learn. The tools and techniques that we currently use to ‘push’ learning towards
the learner need to be either adapted, or traded-in for something that will support and service this
learner ‘demand’

To support the shift from teaching to learning that Personalised Learning requires we need to work
out how we can ‘ensure’ that young learners have access to, and can navigate through the
prescribed national, and any local curricula. The curricula that will provide the set of “essential
learning experiences that will provide them with the knowledge, skills and competencies that they
will need to develop as successful learners, confident individuals and responsible citizens”. Somehow, learners will need access to a ‘curriculum map’, or menu of opportunities, that they
could use to help them to decide what learning they need to plan, before they take over the
planning and doing.

It would be unwise for us to delegate, to young learners, total responsibility for their own learning,
without having first given them access to something that provides them with suggested learning
opportunities and learning expectations. It would make sense for teachers to design these
‘curriculum maps’ and for teachers to ‘teach’ learners how to use them until they are motivated and
have the skills to take over the planning and management of their own learning.

The curriculum plans currently being used by teachers are teaching plans that are generally not
available to learners. We need to investigate ways in which these plans can be made available and
accessible to the learner. We need to produce an individual learner facing curriculum by
decomposing the national curriculum/expectations and then reconstructing them in a format
suitable for learner consumption.

By being able to ‘see’ the map, learners would be better able to see the ‘big picture’ and that in turn
could result in greater learner engagement. Having access to a map that shows learners what their
available or ‘planned’ learning diet is, has the potential to support the assessment for learning
process and in turn personalisation. When learners get involved in this process they will be using
the ePortfolio process. The ePortfolio process will be integrated into their ‘curriculum’; the learner
will derive the benefits of the ePortfolio process. Personalised Learning will be happening. Learner
accessible curriculum maps would also be a useful ‘scaffold’ to support the learner as the teacher
weans them off the support while still ensuring that they have the opportunity to follow a national or
local curriculum.

A Busy time for curriculum thinkers and planners

As well as having to develop a learner facing and accessible curriculum map to support the move
towards personalised learning, schools also are expected to integrate the generic skills into their
curriculum as well as developing and supporting the collaborative palming and delivery that the
new curriculum emphasises and demands.

The revised National Curriculum emphasises the value of personalised learning and requires
schools to re-think their curriculum and practice. Schools are expected to design “dynamic,
forward-looking curriculum that creates opportunities for learners to develop as self-managers,
creative thinkers, reflective learners, problem-solvers, team workers, independent learners, and
effective communicators.” They will need to provide learners with opportunities that engage them in
their own learning and equip them with the Personal, Learning and Thinking skills (PLTs) that they
will need to succeed in education, life and work.

This curriculum, reflecting the UK skills agenda, values skills and gives particular importance to
Functional Skills. They are embedded in the revised programmes of study for English,
mathematics and ICT and are an essential component of all learning pathways (GCSE, FLT,
Apprenticeships and 14-19 Diplomas).

While Functional Skills and PLTs underpin the new curriculum, their introduction is likely to create
significant curriculum development challenges. Schools are committing effort and resource to work
out what it is that they need to do to introduce Functional Skills and Personal Learning and
Thinking skills (PLTs) into their curriculum.
The common message is that Functional Skills are important and should be integrated into the curriculum of all learners; that learners should be provided opportunities to develop the skills and to practise applying the skills in a range of different situations and contexts, before they are placed in an assessment situation. The situations and contexts should be real and should engage learners in problem solving, critical thinking and independent learning. They will be expected to be able to apply their skills to solve real-life problems.

This ‘new’ environment for learning relies on, and values collaboration. Learners are expected to “form collaborative relationships” while schools and colleges are expected to collaborate to design their Diploma courses, and then to collaborate as they deliver them. As learners work in a number of different settings; school based, college based and training provider based it will be vital that all partners have a common understanding of the Functional Skills and PLTs. This common understanding must permeate through into the experiences and opportunities provided for the learner in each of the settings that they work in.

New qualifications, learners working and being assessed in different schools and colleges, the increased emphasis on life long learning and the need support learner progression has led to the development of national frameworks and systems to record achievements in a common electronic format. The learner achievement record (LAR) aims to track all learners’ achievements through the use of a unique learner number (ULN). It is also hoped that it will give the learner control of their record of lifelong learning and achievement, while streamlining the collection, handling and sharing of information. [http://www.miap.gov.uk/benefits/](http://www.miap.gov.uk/benefits/)

Individual schools and providers will need to review their current curriculum provision and engage in processes that will help them to integrate opportunities that will enable their learners to develop and practise their Functional Skills and PLTs.

Schools are very familiar with change. They frequently audit their curriculum looking at what they need to ‘include’ as a result of their revised thinking, aspirations, external demands or expectations. The revised curriculum will be documented, stored and presented in many different formats ranging from simple text based paper documents to linked database systems.

While common, agreed formats for storing information about learner’s achievements are in place, there does not appear to be any standardisation in terms of the way in which a learner’s curriculum is described or presented. If a learner is to be involved in making choices about their learning, they should be able to ‘see’ their planned curriculum. If a learner in one school gets used to using a curriculum described in one format, it would be useful for them, if the curriculum plan that they access in others schools or colleges that they work in were in the same format. If schools are to collaborate on the design and delivery of courses, it would be useful to provide all partners with access to common curriculum documents. There would be an argument for a common format for a learner’s curriculum plan and for learners and teachers to be able to share and access curriculum plans and documentation.

All secondary schools are re-thinking their curriculum and are working through an audit and mapping process as they attempt to introduce Functional Skills and PLTs. Tens of thousands of teacher hours are being consumed by this process.

Web-based curriculum mapping is a process that focuses on what is taught, how it is taught, when it is taught and how it will be assessed. Teachers start by translating an existing planned curriculum into a standardised digital format. The format requires the curriculum to be broken down into topics or units that are then defined in terms of content, skills, assessment methods, the resources required and the teaching strategies that will be used. The topics or units are allocated learning/delivery time and are organised on a timeline.

The immediately obvious outcome from the mapping process is the curriculum map itself, however the actual process of constructing the map has the potential to engage and empower the teachers involved. This would be a very valuable by-product from a curriculum development process that in turn can feed the process. Supercharged curriculum development! It might prove useful in the current environment as teachers review what they teach and more importantly how they organise and provide learning opportunities.
Most of the demands or initiatives that present themselves to schools require a change in the way they organise their teaching, or manage and support their learning environment. The initiatives or challenges often require a shift away from traditional teaching towards independent or personalised learning.

A Web-based mapping package with search and export facilities would allow the learner to select courses, modules or activities that would help them to meet their personal learning needs. By selecting programmes and materials that are ‘visible’ and available to them in the curriculum maps, they will use the curriculum maps to support their personal learning. This would go some way to satisfy the requirement for learners to be "actively engaged with, and help to shape, the curriculum they experience."

By being able to ‘see’ the map, learners would be better able to see the ‘big picture’ and that in turn could result in greater learner engagement. Having a map available that shows them what their available, planned learning diet is, and has the potential to support the assessment for learning process and in turn improved achievement. If we encourage learners to use maps showing their planned curriculum it might help them to understand what the Functional and Personal Learning skills are. The conscious competence model suggests that this would, in turn, help them to realise that they need to do something to develop their competence.

Curriculum mapping can support reflective learning. Reflective learning can benefit the learner in two ways; firstly, the teacher, by reflecting on the learning that they had planned and what the learner had actually learnt or experienced, will refine and adapt their practice. This in-turn should improve the learning opportunities available to the learner. Secondly, if the learner is encouraged to use curriculum maps to plan their own learning and if they are encouraged to reflect on what had actually happened prior to revising their learning plans, they will develop their own reflective practice. They will develop as reflective learners, selecting and using appropriate curriculum mapping tools as part of their Personal Learning Environment.

The natural place for the teacher to record their reflections would be their Professional Development ePortfolio; the natural place for the learner to reflect on what they had planned to learn and upon what they had actually experienced or learnt would be their learner ePortfolio. Providing learners with access to Curriculum Maps and encouraging them to use them forces them to use the plan, do and review process that underpins the Personal Learning and Thinking Skills. Asking learners to record their experiences and reflections would help to support their Personal Development Planning and would satisfy the requirement for them to evidence their Personal Learning and Thinking skills.

The developing 14-19 curriculum requires teachers working in a range of different institutions to collaborate in the planning and delivery of the new 14 -19 Diploma Courses. A Web-based Curriculum Mapping tool would have a lot to offer. It could provide both teachers and students, regardless of the institution that they are currently working in, with access to a common view of the planned curriculum. This would go some way to provide the consistent approach that both the learners and teachers, working in this new environment, will need. It could become both the catalyst that promotes the dialogue and collaboration between teachers that will be needed at the planning stage and the vehicle for communication that will be needed between the teachers in the delivery team and between teachers and learners.

Curriculum development is a continuous process. Web-based Curriculum Mapping tools have the potential to support the constant dialogue, evaluation, revision and communication that the process requires.

These new demands on schools will mean that it will no longer be possible to plan individual courses in isolation. Whole school curriculum demands require whole school planning; the new Diploma courses require schools, colleges and training providers, to collaborate in the design of the course, and then to collaborate as they deliver them.

Increasingly, learners will work in a number of different settings; school based, college based and training provider based. All partners will need to share a common understanding of the Functional Skills, Personal Learning and Thinking skills, Diploma requirements etc. This common understanding must permeate through into the experiences and opportunities provided for the learner in each of the settings that they work in.
Schools are very familiar with change. They frequently audit their curriculum looking at what they need to ‘include’ as a result of their revised thinking, aspirations, external demands or expectations. The revised curriculum would be documented, stored and presented in many different formats ranging from simple text based paper documents to linked database systems.

While common, agreed formats for storing information about learner’s achievements are in place, there does not appear to be any standardisation in terms of the way in which a learner’s curriculum is described or presented. If a learner is to be involved in making choices about their learning, they should be able to ‘see’ the curriculum that they are ‘expected to’, or should follow; i.e. the planned curriculum.

If a learner in one school gets used to seeing and accessing a curriculum described in one format, it would help them if the curriculum plan that they access in the others schools or colleges that they work in were in the same format. If schools are to collaborate on the design and delivery of courses, it would be useful to provide all partners with access to common curriculum documents. There would be an argument for a common format for a learner’s curriculum plan and for learners and teachers to be able to share and access curriculum plans and documentation.

With this backdrop, we set out to explore whether existing curriculum planning processes could support personalised learning and support the collaboration required. Collaboration; that pointed us towards Web 2, that in turn refined our focus to Web based Curriculum Planning or Mapping tools. The UKAN-SKILLS project had began to explore the potential of Web based curriculum mapping in a HE/FE environment.

Web-based curriculum mapping is a process that focuses on what is taught, how it is taught, when it is taught, how it is resources and how it will be assessed. What follows is a commentary written by a secondary school teachers who experimented with Web-based mapping:

“I started out on my curriculum mapping learning journey by finding my way around the RubiconAtlas software. I translated an existing Key Stage 3 and 4 ICT course into the curriculum mapping format. A format required the curriculum to be broken down into topics or units that are then defined in terms of content, skills, assessment methods, resources required and the teaching strategies that will be used. The topics or units are allocated learning/delivery time and are organised on a timeline. I used Janet Hale’s book, ‘A Guide to Curriculum Mapping: Planning, Implementing, and Sustaining the Process’ (www.curriculummapping101.com) to develop my understanding of the Curriculum Mapping process. I was very fortunate in that I was able to call upon Janet, via Skype, for advice and the support.

I found the process of translating the existing course to be time consuming in that it forced me to think about what it was that I wanted students to learn, what activities and opportunities that I would need to provided them with to encourage the learning to happen and how I would assess them. Although the process did take quite a lot of time, I think that the process was really useful and valuable in that it did promote reflection about objectives and practice that in turn influenced the planning.

Although I worked through the process as an individual, I recognised the value and potential of the process if a team of teachers were to work together, to collaborate on the planning process. While one outcome from the mapping process would be the curriculum map itself, the actual process of constructing the map has value and has the potential to engage the teachers involved.

Having planned the Units for years 7, 8, 9 and 10 I was running short on time. As I was defining the content and skills sections, I found that I reverted back, and rather than using the quite precise conventions of the curriculum mapping process, I tended write/define the content and skills in my own words. I convinced myself that by getting the volume of the content and structure set-up first was the best way forward, allowing me to explore the potential of the tools and process more quickly. I planned to revisit and re-word/structure the Units at a later stage.
At this stage I was able to select, for each Unit, the ICT Functional Skills performance criteria that learners would be introduced to, or have the opportunity to develop, master or reinforce. I repeated this for the Personal Learning and Thinking Skills.

I was then able to generate reports that showed, for either particular years or for years 7 to 10, what content had been planned, what skills were scheduled to be developed, what activities and what assessments were being used.

The analysis tools enabled me to generate reports that showed what Functional ICT skills were not being developed, when and in what Units specific skills were being introduced, developed etc.

The hard work of setting up the curriculum map was starting to pay dividends. “

We now have now set up curriculum maps that we can use to demonstrate and explore the potential of the curriculum mapping process. The intention is to identify sources of funding that will allow us to move this project forward; to create a learner facing view of the curriculum map that can support personalised learning and support the ePortfolio process.
Integrating Big6 Information Literacy Skills in Project Based Learning: A Case Study in Higher Education

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Abstract

This case study aims to share the experiences gained in developing students’ information literacy skills through the integration of the Big6 Model to project based learning in higher education. The study conducted in ‘Operating Systems and Applications’ course in Department of Computer Education and Instructional Technologies with 25 students. ‘Big6 Research Framework’, ‘Project Evaluation Form’ and ‘Perceptions on Big6 Project Research’ survey were developed and used. Findings of the study revealed that students were successful in using Big6 information literacy skills through project based learning and Big6 model was a useful framework for their project process.

Keywords: Information literacy, Big6 Model, Project based learning

Introduction

Information literacy is a key competency for active citizenship and lifelong learning in the information society. Information literate citizens can live in a harmony with the current digital information age through acquiring such competencies. They can recognize the need for information, formulate questions based on information needs, identify potential sources of information and develop productive search strategies. They are able to use technology to search for and locate information from a wide variety of sources, access required information effectively and efficiently, evaluate information critically and use, organize and present information in meaningful ways through problem solving, decision making and critical thinking. They are further able to evaluate their information problem solving processes and products (ALA, 1989; Sayers, 2006). Hence, information literacy is a set of skills which should be acquired by learners in formal or in informal learning processes in order to be a lifelong learner.

Information Literacy Models and Big6 Skills

Some information literacy models and teaching methods have been used to teach information literacy skills in formal education (Abdullah, 2008; Breen & Fallon, 2005). One of the most popular among the information problem solving models is Big6 Skills Model. Although Big6 Model is often used by K-12 settings, this model could have contribution to higher education settings (UNESCO, 2008). Big6 Model is a systematic approach for information problem solving which was developed by Eisenberg & Berkowitz (1990). The Big6 Model has six skill stages: task definition, information seeking strategies, location and access, use of information, synthesis and evaluation. Every stage has two sub-stages (Eisenberg, 2007); in the first stage; students define the information problem and identify the information need. Then they determine all possible sources and select the best sources in the second stage. In the third stage they locate the sources on the internet or in the library and find the required information within these sources. In the fourth stage they engage and use the sources to extract the relevant information. In the fifth stage they organize information from different sources and present their conclusions. In the last stage they evaluate their process and products.

Project based learning

Project based learning (PBL) is a valuable instructional method for higher education that integrates various skills such as critical thinking, problem solving, negotiating and interpersonal skills. PBL engages students in acquiring knowledge and skills through defining a problem, planning the process, searching and finding relevant information, evaluating and drawing a conclusion,
developing products, presenting and discussing the acquired knowledge and evaluating the process and products collaboratively (Perkins, 1992; McGrath, 2003). Because of these benefits of PBL, it will be a beneficial instructional method to empower the students’ information literacy skills (Breen & Fallon, 2005).

Although PBL is a powerful method, students have faced with some problems such as determining meaningful research problems, managing time, accessing relevant sources, synthesising the meaningful information from the sources. Therefore instructors could have integrated information literacy models to PBL environment to help the students to overcome these problems.

Aim of the Study

This paper aims to share the experiences gained in developing students’ information literacy skills through the integration of the Big6 Model to project based learning in higher education. In this study; Big6 Model and project based learning method were used together to benefit from their strengths.

Method

Participants

This case study was carried out in the 'Operating Systems and Application' course in Department of Computer Education and Instructional Technologies in Bahçeşehir University. The participants of the study were 25 students who enrolled in the course. Students worked in groups in two or three to complete the projects. The groups were free to choose the project topic and group members.

Instruments

The “Big6 Research Framework” was developed and used by students for planning and studying according to their project timeline, and also evaluating their products and processes. It was also used by the instructor to track student process, to give the required feedback and to evaluate the students’ project processes.

The ‘Perceptions of Big6 Project Research’ survey was developed and used to investigate student perceptions of these processes. Students were asked about their acquisitions, problems and their solution techniques, and the efficiency of instructors’ scaffolding and feedback.

The ‘Project Evaluation Form’ was developed and used by the instructor to evaluate the whole project process, the products which were founded on the Big6 Model and the project based learning. Student project successes were determined by the following criteria: developing and studying according to the Big6 Research Framework (20%), developing presentation materials according to design principles (15%), presenting the information using presentation skills (25%), developing worksheets or reflection papers (10%) and writing a project report in accordance with the APA Style (30%). Course success was determined by midterm exam (20%) and the whole project studies (80%).

Procedure

Instructor introduced the course goals, contents, project based learning method, the importance of information literacy, Big6 Model and its phases, and assessment and evaluation techniques of the course in the first week of the semester. Students formed their own project groups and they selected their project topics. “Big6 Research Framework” was also introduced to students. Students downloaded the file from Learning Management System (LMS) and completed the file with their groups in two weeks. Students planned the following issues in the Big6 Research Framework: project sub topics, meeting times, the general purpose and the research questions of the project, the project timeline, and the tasks of group members, possible sources and information accuracy techniques, ways to locate, access, record and use the required information, the presentation mode and the worksheet paper format.

Students worked in groups during the project and they met the instructor every week. Two of these meetings were graded by instructor. The instructor used the groups’ Big6 Research Framework plans to monitor and scaffold the students’ information problem solving processes. Students accessed and synthesised required information to answer their research questions. Students
developed presentation materials and worksheets/reflection papers. Worksheets/reflection papers were used to stimulate practicing newly acquired knowledge or using their critical thinking skills to construct their own knowledge on project topics with the guidance of the project group members. Students also wrote a project report in accordance with the APA Style. They reviewed and fulfilled the evaluation part of the Big6 Research Framework in order to evaluate their information problem solving processes, their presentations and their products. Students were requested to answer the survey at the last week of the semester and 19 students were fulfilled the survey.

Findings

Project and Course Success

Students’ successes in the phases of Big6 Model and project based learning are summarized in Table 1. As seen from the Table; students had high scores on Big6 Model and Project based learning phases. The course success of the students is also high.

<table>
<thead>
<tr>
<th>Groups</th>
<th>Midterm (20 points)</th>
<th>Big6 Research Framework (20 points)</th>
<th>Material (15 points)</th>
<th>Presentation (25 points)</th>
<th>Worksheet/Reflection Paper (10 points)</th>
<th>Report (30 points)</th>
<th>Total Project Success (80 points)</th>
<th>Course Success (100 points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group1</td>
<td>14,00</td>
<td>15,00</td>
<td>14,00</td>
<td>17,00</td>
<td>8,00</td>
<td>22,00</td>
<td>76,00</td>
<td>74,80</td>
</tr>
<tr>
<td>Group2</td>
<td>16,53</td>
<td>16,00</td>
<td>12,00</td>
<td>21,00</td>
<td>9,00</td>
<td>22,00</td>
<td>80,00</td>
<td>84,00</td>
</tr>
<tr>
<td>Group3</td>
<td>18,40</td>
<td>17,00</td>
<td>11,00</td>
<td>18,00</td>
<td>9,00</td>
<td>22,00</td>
<td>77,00</td>
<td>80,00</td>
</tr>
<tr>
<td>Group4</td>
<td>11,60</td>
<td>17,00</td>
<td>12,00</td>
<td>20,00</td>
<td>7,00</td>
<td>22,00</td>
<td>78,00</td>
<td>74,00</td>
</tr>
<tr>
<td>Group5</td>
<td>12,20</td>
<td>16,00</td>
<td>12,00</td>
<td>17,00</td>
<td>8,00</td>
<td>16,00</td>
<td>69,00</td>
<td>67,50</td>
</tr>
<tr>
<td>Group6</td>
<td>12,00</td>
<td>19,00</td>
<td>11,00</td>
<td>19,00</td>
<td>9,00</td>
<td>24,00</td>
<td>82,00</td>
<td>78,00</td>
</tr>
<tr>
<td>Group7</td>
<td>18,13</td>
<td>18,00</td>
<td>11,00</td>
<td>16,00</td>
<td>8,00</td>
<td>24,00</td>
<td>77,00</td>
<td>80,00</td>
</tr>
<tr>
<td>Group8</td>
<td>18,00</td>
<td>14,00</td>
<td>19,00</td>
<td>8,00</td>
<td>18,00</td>
<td>77,00</td>
<td>61,60</td>
<td>81,00</td>
</tr>
<tr>
<td>Group9</td>
<td>12,00</td>
<td>13,00</td>
<td>18,00</td>
<td>6,00</td>
<td>12,00</td>
<td>61,00</td>
<td>48,80</td>
<td>63,33</td>
</tr>
<tr>
<td>Total</td>
<td>15,22</td>
<td>16,17</td>
<td>12,35</td>
<td>18,22</td>
<td>7,96</td>
<td>20,26</td>
<td>74,96</td>
<td>75,18</td>
</tr>
</tbody>
</table>

Perceptions on Big6 Model and Project Based Learning

Students’ perceptions on the phases of the course were gathered with the ‘Perceptions of Big6 Project Research’ survey. Content analysis was used to analyze students’ answers. The first question of the survey was “What acquisitions have you got with Big6 Research and Project based learning method?” As seen from Table 2, students have developed their skills in time management, team working, project management and presentation skills. One student emphasized that he learned the content in detailed manner.

<table>
<thead>
<tr>
<th>Acquisitions</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning time management</td>
<td>8</td>
</tr>
<tr>
<td>Studying with the group according to the plan</td>
<td>7</td>
</tr>
<tr>
<td>Learning how to manage the projects</td>
<td>7</td>
</tr>
<tr>
<td>Developing presentation skills</td>
<td>2</td>
</tr>
<tr>
<td>Detailed learning</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 2. Students’ acquisitions with Big6 Model and PBL

The second question of the survey was “Have you had any problems during your project process? If yes, How have you solved the problems?” As seen from Table 3; students had faced problems in searching and locating the resources, meeting with the group members, eliminating the unnecessary information and complexity of the project topic during the project process. 8 students stated that they didn’t have any problems. Students stated that they solved the problems with the help of their group members (n=6) and the instructor (n=3).
Table 3. Problems faced by the students during the project process

<table>
<thead>
<tr>
<th>Problems</th>
<th>f</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>8</td>
</tr>
<tr>
<td>Searching and locating the sources</td>
<td>7</td>
</tr>
<tr>
<td>Meeting with the group members</td>
<td>4</td>
</tr>
<tr>
<td>Complexity of the project topic</td>
<td>3</td>
</tr>
<tr>
<td>Eliminating the unnecessary information</td>
<td>3</td>
</tr>
</tbody>
</table>

The third question of the survey was “Your project works have been followed and you have been given feedback by the instructor. Has the instructor’s feedback and help been efficient for your success in the project?”. All students stated that the instructors’ scaffolding were useful for their project process. 11 students emphasized that instructors’ guidance was effective in understanding the project topic and outlining the project subtopics. 14 students emphasized that graded regular meetings with the instructor were effective in being motivated, planning according to the project schedule and correcting their deficiencies through project phases.

The students’ suggestions to the course process were also asked in the survey. 6 students suggested that Big6 Model was useful and they would use this model in their projects. 6 students criticized that the ratio of the project success scores was 80% of the course score so these students suggested that this ratio should be decreased.

Conclusions and Recommendations

The findings of this case study indicated that students improved their skills in presentation, and time, group and project management. Big6 Model was a helpful framework for their project process. However, they had difficulties in searching and locating the resources, eliminating the unrelated information and studying timely with the group members. They overcame these problems with the help of their group members and the instructors’ guidance. Students’ success scores were high in every phases of the project so it can be interpreted that they accessed the required information in accordance with their research questions, synthesized the main ideas from a variety of resources collaboratively and they developed presentation materials and reports effectively and efficiently.

In this study; project success ratio was 80% of the course success so final exam were not used. This high ratio caused students to be more stressed in presentations and increased the absenteeism after their presentations. Some students did not follow the lessons after their presentations because they felt that they did not need to learn the other topics of the course. Therefore it is recommended to use final exam to motive the students to learn the whole topics of the course.

Although, this integration method increased the workload of the instructor, it was helpful in variety of ways to facilitate students in planning and managing project based learning and empowering information literacy skills of the students in higher education. Consequently, integrating information literacy skills in higher education could be beneficial to develop key competencies of information literate citizens.

References


E-portfolios for staff Development – Using e-portfolios for an ITQ qualification

Neil Currant, University of Bradford

Introduction

E-portfolios are an increasingly common feature in Higher Education (1) with many universities having already implemented institution-wide e-portfolio system. Whilst they are often introduced to support student learning (1) it quickly becomes obvious that these systems can support a myriad of uses for staff and organisational development.

The University of Bradford introduced an institution-wide e-portfolio system in 2007 initially to support student personal development planning (PDP). In 2008, the university started to look seriously at how this system could be used to support staff in their continuing professional development (CPD). A range of uses were introduced:

- supporting performance review,
- supporting the academic development of teaching staff,
- professional accreditation submission,
- assessment of vocational qualifications for staff.

It is the latter of these that this paper will address. This paper will look at the implementation processes of using an e-portfolio for the evidencing and submission of work for the ITQ National Vocational Qualification (NVQ), which demonstrates staff competence in the use of IT (Information Technology) in the workplace. It will also look at the views of those involved in delivering the ITQ from in-depth qualitative interviews conducted with assessors.

Methodology

This research is a work in progress. The findings presented here are based on documentary evidence of the process involved in implementing the e-portfolio for the ITQ as well as semi-structured interviews with three assessors taking a phenomenological approach. Ten staff learners (candidates) and six assessors were involved. Further semi-structured interviews with four staff members and a focus group with eight students studying a professional-body accredited course will also be drawn upon to provide the wider context of using e-portfolios for professional development at the University of Bradford.

Electronic portfolios for CPD

In Higher Education, much of the research on e-portfolios has focused on student learning. Research has been particularly strong in the use of portfolios and e-portfolios on professional courses such as medicine, health-related courses and teacher training. Klenowski et.al. note that “What is lacking is research that provides insights into how a portfolio for learning can be used in HE to develop understanding into one’s own learning, assessment and professional practices.”(2) However, research into the use of e-portfolios for professional development in Higher Education is a growing area in the UK. The UK government funded body JISC, which supports education and research in new technologies, has funded a range of projects in the last few years looking at e-portfolios and professional development.

Journey to the start

The institutional system at Bradford, Pebblepad, is not a specific e-NVQ system. It offers more flexibility but that flexibility can pose challenges for learners and assessors involved in the highly structured processes of vocational qualifications. This section highlights these challenges and the
procedures documented in getting the university from the initial idea, of using an e-portfolio for the ITQ, to having learners using the system.

With the implementation of an institutional system, it made sense that an IT qualification requiring a portfolio of evidence should be one of the first to make use of the e-portfolio. Particularly as “by using Pebblepad it is ... giving them (learners) extra evidence for their NVQ.” Assessor 2

A paper based system for NVQs had been in place at the University since 1997 which, after several revisions of the evidencing and recording procedures, provided a robust and reliable quality assurance method. The first task was to get approval from the awarding body that they would accept our e-portfolio systems as a valid system for learners to use.

The awarding body keeps a list of approved systems and will carry out an approval process on an e-portfolio system measured against a minimum specification for e-portfolios. This implied that any system used had to be approved by the awarding body in this formal process. This was not a practical option from a time or financial perspective. So “I ended up contacting (the awarding body) and complaining ... I claimed that to not allow candidates to use an institutional portfolio breached their equality standards for fair assessment. They were happy for us to use Pebblepad as long as the External Verifier was happy to use it and he was.” Assessor 3

The second task was to design the e-portfolio processes to reflect previous practice and maintain quality assurance to ease the anxiety of assessors who were used to operating in a particular way. By moving to an electronic format, the taken-for-granted assumptions and beliefs about how the assessors operated were brought to the surface, “We were thinking we should be really prescriptive...(but) as long as they are doing it, it doesn’t matter how ... because they are going to get the same results. It was quite a shift in thinking for us old NVQ assessors’” assessor 2. An initial anxiety was around whether the existing processes could be replicated, “we’ve got things we’ve got to do for that and my concern was that is Pebblepad going to meet those requirements?” Assessor 2. Another anxiety was about the perception that electronic work and electronic feedback was less permanent and easier to change or ‘fake’ than if it was printed out on paper.

Some of the processes that were noted for needing careful consideration were:

- verifying evidence,
- feedback processes,
- monitoring progress,
- how to incorporate assessor generated evidence into learners portfolios – the system would not allow learners to use evidence that the assessor had shared with them through the system,
- ‘locking’ learners work for assessment when the assessment is a rolling process – the system assumed that deadlines were fixed so we had to develop ways of allowing learners to submit at their own pace and still maintain an accurate record of the work at that point in time.

One of the hardest parts of the transfer from paper to electronic was the audit, ‘paper’ trail which has been constantly modified during the initial stages of assessment, “we’ve had to change the way we do things to make sure that the paper trail is followed through from start to finish because it is a very different way of doing it electronically” assessor 1. One of the key lessons from implementation is that you cannot always anticipate every eventuality when using a system not specifically designed for NVQs. However, we have found that there are always “...ways and means around...,” assessor 1, any difficulties that arise.

Lesson in use

Although as educators we would like the learning benefits to drive adoption of e-portfolios, it is often the practical benefits that get peoples initial attention. The practical benefits for assessors include, being able to assess the portfolios from any location without need to carry heavy paper files around and the hyperlinks make linking the evidence to the competences easier to follow for assessment.
For learners, the practical benefit of not having to transfer a physical object becomes even more important. In the past, learner portfolios have resided in the individual staff members offices and were transported to the training sessions. It was not uncommon to find that a learner wanted to do something with their portfolio but it was in another location, so they couldn’t. With ubiquitous internet access in the workplace this is no longer a problem. Staff also tended not to take the portfolios home to work on. However, with an e-portfolio “some people have gone on and done things at home” assessor 2. Getting formative feedback from assessors has been quicker and easier because the assessor does not have to have the physical portfolio which prevented the learner from working on it whilst the assessor was looking at it.

The issue of whether e-portfolios make the summative assessment process easier seems to depend on the individual assessor. Some are amazed at how much easier and quicker it is to do the assessment and others are not sure. It may be the case that as assessors become more familiar with assessing online, the efficiency of this process will improve.

The e-portfolio allowed structured to be built-in to help learners develop their portfolio. All the learners were new to the process of putting together a portfolio of evidence and this can be a barrier. However, the additional scaffolding of the e-portfolio helped. “With the paper based they had to get used to the culture of what competence based assessment was to be able to build their portfolio ...So it’s (the e-portfolio) offering them a structure that actually builds up their understanding of the ITQ competence assessment culture” assessor 3.

Learners have successfully completed modules up to twice as fast as in previous years. “Candidates are moving much more quickly through their assessments” assessor 3. Learners choose when they are ready for submission. “In the past ... they have been taking 6 months to get an assessment done. Within 6 months of these candidates starting they have actually all been assessed twice” assessor 3. This is partly due to the change to an e-portfolio system prompting a review of how the training is delivered “PebblePAD gave us that opportunity to change not only the electronic portfolio system but actually the way we do things” assessor 1. It is also down to the benefits afforded by the e-portfolio as already mentioned; ease of assessor feedback, portfolio always available to all parties and structure provided by e-portfolio.

Discussion

Whilst this work in progress has found benefits of using an e-portfolio for staff taking accredited development course, there are still a number of issues that need to be highlighted before e-portfolios can thrive for staff development in Higher Education.

A lot of staff development and CPD is linked to either an accredited qualification from an awarding body or to a professional body. In the case outlined above, whilst “the awarding body, encouraged people to use electronic portfolios” assessor 3, it was not clear that they would accept the institutional system and it ultimately rested on the decision of one person, the external verifier. Some professional bodies are moving in the direction of allowing e-portfolio submission on institutional systems such as the Association of Learning Technology but others are not. So I would echo the finding of the Flourish project that “Awarding bodies / professional bodies need to encourage use by allowing submission of a learners own system or institutional system.”(3)

From the interviews, there was a definite sense that electronic was different to paper. Nobody put it into words in a clear way but I sense that the prominence of plagiarism as an issue in the electronic world, security of online systems and the ethereal nature of the e-world, such as the fact that physical signatures and physical objects were not used, played a part. None of these factors proved to be a problem. The big difference proved to be in replicating processes. In this case, the paper based processes had to be replicated as closely as possible because of the awarding bodies procedures. All the interviewees felt that this caused some problems and suggests that the awarding body has not fully got to grips with the use of e-portfolios which could prove a barrier for centres and learners.

When introducing any new IT system, there is a learning curve placed on both learners and tutors in getting familiar with using the system. “Transferring activities from paper-based processes to electronic ones can reveal anxieties and skills deficiencies which were often otherwise masked.”(3) There were certainly anxieties even though the assessors were very IT confident but the skills side
was not a problem for either assessors or learners. This was obvious due to the nature of the qualification but the support given to learners by the assessors and the e-portfolio team played a crucial part. “The attitude of the person receiving, assessing or introducing the ... e-portfolio (such as a tutor, an assessor or a line manager) is critical.” (3)

In moving the role of e-portfolios forward and trying to embed them into the professional development of all staff, there will be a number of lessons we will be taking from this work:

- emphasise the practical benefits,
- emphasise the flexibility of the system that both allows for a structure to support development and can be adapted to meet differing needs,
- emphasise the benefits of sharing with others and receiving feedback.

It will also be important to acknowledge anxiety and develop ways of minimising it and to make sure that any changes from paper to electronic processes are carefully thought through so they are less likely to cause problems later on. And of course, to keep asking the awarding bodies and professional bodies to accept our e-portfolio system!

Conclusion

There is still much to be done in evaluating and researching this work but it has highlighted some benefits of using an e-portfolio for accredited staff development courses. It has shown how centres can move from paper to electronic systems and has highlighted some of the concerns and issues associated with this.

References


Sector background and regional economic background

Plumbers, electricians, and other members of the Building Services Engineering sector in the UK, have experienced learning largely as 'being taught'. Being taught, for the majority, stops when fitness to practise is achieved. For most trades in the sector, fitness to practise roughly equates to a level 3 qualification (which means an advanced apprenticeship of three to four years’ duration). Plumbers are an exception to this, as plumbers are only regulated if they work with gas.

Recent research, which was done as part of the Sector Skills Agreement project for building services engineering and is available via a link on the www.summitskills.org.uk website, identifies two challenges for the sector which relate to this, and which employers in the sector see as critical:

- The sector, particularly in the East Midlands where the situation is exacerbated by an overall low pay / low skills equilibrium, has a shortage of people who are qualified beyond skilled trade level. Both regional development agency and 'employment skills and productivity' partnership state HE progression as a key theme in their strategic documents; employers identify the need to access appropriate HE provision as a key challenge for the sector in the region.
- The plumbing subsector has the additional challenge of having people working in it who do not have any formal evidence of their fitness to practise. This means that
- On paper – and to a client – an experienced and competent plumber (who just did not take time out to obtain a formal NVQ2 qualification in plumbing) can look exactly the same as a plumber who is neither experienced nor competent. Employers identify being 'undercut by cowboys' as a key threat to those who are competent.
- A large proportion of the plumbing subsector is going to encounter barriers when the need arises to access upskilling and progression options – and the need arises regularly in a technical sector, for example at the moment due to the arrival of renewable technologies.

Implications for emerging initiatives in the sector

In order to meet these challenges, a shift from a culture of being taught to a culture of active, independent, and eventually self-directed learning is going to be essential:

- Train to Gain brokers identify project pressures as the main dropout reason in their clients. (Train to Gain is a government initiative that funds additional qualifications for people already in work.) Sector members can find it difficult to attend college at a set time each week, as this can mean having to travel back from site at a different time from the rest of their team. Upskilling and progression options offered to them will need to include some distance learning, and this will require learners to become competent at learning without being taught.
- The vast majority of the sector works in small and micro businesses, where there may be no one available whose dedicated function it is to take a structured approach to staff development. The options usually available to a sector member are either to take charge of their own development, or to be in danger of missing out.
- About half of those who are expected to be working in 2020 are already working now. This means that any intervention will have to include those already in work as well as those who are about to join the sector as new entrants.
Three case studies from building services engineering in the East Midlands region

Case study 1; members of the existing workforce who left learning before gaining a qualification in their trade

Our first ePortfolio is an aspiration-raising tool to encourage experienced, but as yet unqualified plumbers to come forward and gain their NVQ level 2 qualification in plumbing under the Train to Gain scheme.

Train to Gain on its own – before the tool existed – did not succeed in convincing a sufficient number of experienced but unqualified plumbers to obtain their NVQ 2. In a subsector where a high proportion of contracts are won as a result of word-of-mouth recommendation, it is likely that reluctance to publicly admit to not having this qualification played a part. This meant that it made sense to introduce a tool where plumbers could self-assess in the privacy of their own office first, thus minimising the length of time in which anyone else needed to know they did not have this qualification.

ePortfolio 1, available on www.closer-than-you-think.org, is a self-assessment tool containing a Plain English version of the NVQ 2 requirements for plumbing according to the City and Guilds qualification handbook C&G 6089. Users are encouraged to mark which of the requirements they already work with on a day-to-day basis; a traffic light system then indicates how much more work it would be for them to tackle all the requirements. If they were closer than they thought, they are encouraged to go round again and consider acceptable evidence. In a third step, they are encouraged to get in touch with us or with a college near them to access Train to Gain funding and obtain their qualification.

Case study 2; members of the existing workforce who obtained a level 3 qualification in the past and are now working at this level, but have not yet made a commitment to enrol on a Foundation Degree

Our second ePortfolio encourages learners to own the process of identifying mutually beneficial work-based Foundation Degree projects in collaboration with their employer.

ePortfolio 2 was designed in the context of a progression route of taster events for its target audience. The events make use of the arrival of renewable technologies as a vehicle to raise awareness of the benefits of progression beyond level 3: sector members are contacting training providers for renewables training; once they are there, we have an opportunity for a more strategic intervention and to whet their appetite for higher level learning.

ePortfolio 2 makes use of the high work-based learning content of the new Foundation Degree framework for building services engineering. It works on the premise that

- Learners can, and should, be encouraged to view their experience at work to date as a valuable asset that will stand them in good stead if they choose to embark on the next level of learning.

Using the framework appropriately, learners and their employers can create a genuine win-win situation where work-based Foundation Degree projects enable the learner to learn at and through work, and the employer to have access to additional expertise for a real-life situation.

In order to achieve this – and, crucially, to provide a first platform where the learner can practise independent learning skills and IT skills that they will need later on for the distance learning elements of their programme – ePortfolio 2 encourages the learner to take responsibility for this process in a sequence of steps designed to relate the Foundation Degree’s learning outcomes to their experience at work, and to enter into an informed dialogue with their employer in order to identify and set up mutually beneficial work-based Foundation Degree projects.

Case study 3; apprentices in the sector: ePortfolio to encourage their early identification as independent ‘learners at work’ in the sector.

Our third ePortfolio is going to be a mapping tool to help apprentices recognise and own the relationship between learning outcomes at college and at work, and take responsibility for creating
a win-win situation for themselves and their employer where the learning of one is enhanced by performing a task that benefits the other.

As well as encouraging apprentices’ early transition from identification as dependent pupils to identification as responsible learners at and through work, this win-win situation will make it more feasible for employers to have an apprentice in a sector where there are not yet enough apprentices to meet demand for appropriately qualified new entrants.

ePortfolio 3 is going to encourage apprentices to use a list of college learning outcomes to enter a selection of tasks at work against each item on it to meet the following criteria:

- With the skill and knowledge gained by completing this college learning outcome, the task must be safe to perform
- With the skill and knowledge gained by completing this college learning outcome, the task must be useful to the employer’s business
- Facing the other way, performing the task must enhance the learner’s competence in relation to this college learning outcome.

Learning outcomes and tasks will have an m:n relationship: one learning outcome will often be a prerequisite for more than one task; at the same time, one task will often need more than one learning outcome to have been achieved as a prerequisite before it is attempted.

The tool will provide scope for apprentices to add tasks they have performed at work to the ‘prerequisite’ side (which is originally populated by college learning outcomes): the dynamic of the thought process involved usually enables them quickly to understand this additional relationship, and to make use of this new understanding enhances both the win-win situation between learner and employer and the learner’s reflection on their learning.

Emerging results: what is going to be helpful in making it work

Three distinct but interrelated questions are relevant to this cluster of interventions:

ePortfolios 1 and 2: ePortfolios as aspiration raising tools; are ePortfolios going to be successful, initially in this sector and in this region, in raising aspirations and encouraging enrolment on programmes leading to the next level of qualification – and if so, how?

ePortfolio 1 had two highly successful usability tests with members of its target audience in the second half of 2008. Its live version was telemarketed to the East Midlands region’s 650 plumbing businesses in the first half of March 2009, as well as being advertised to these businesses by mailshot and promoted to the sector’s trade associations and professional bodies HVCA, ECA, and CIPHE in the region. (Members of these are unlikely to belong to our target audience, but are likely to see a benefit in promoting the tool to their subcontractors.)

The telemarketing campaign resulted in 34 businesses agreeing to use the tool, out of which 21 agreed to be available for a feedback telephone call with us. Feedback calls, however, were brief in most cases: those who did provide feedback were enthusiastic without exception; the majority however were reluctant to give too much away, saying that the information was ‘quite personal’ or apologising that they were too busy to talk. From the feedback calls alone, it was impossible to tell whether we have done exactly the right thing by providing a tool that potential learners can use confidentially in the privacy of their own office, or whether our intervention on its own is not going be enough to encourage significant numbers of experienced but unqualified plumbers to gain their qualification.

Google Analytics data suggests that not all of the 34 businesses from the telemarketing campaign, and only a small number of additional ones accessed by our other marketing activities, used the tool. Those who did use the tool spent sufficient time on each screen to suggest that they were seriously engaging with the tool, and were using it for its intended purpose.

Taken together, the information gathered through usability test, feedback calls, and Google Analytics suggests that once an individual engages with the tool, they continue through all its screens and find it useful.
The number of individuals who reach this crucial stage of engaging with the tool, however, is currently too small to make a noticeable difference to the sector’s economy in the region. We are going to continue to address this by asking partners to link to the tool from their web sites to generate more traffic, but we anticipate that awareness and promotion of the benefits on their own may not be enough:

- Despite significant external influence on the subsector making it desirable to become qualified (need to access further learning as a result of technology development; increasing proportion of clients asking for a formal qualification), it is possible that a high proportion of subsector members still feel relatively untroubled by these pressures: sector skills agreement research indicates a wide-spread absence of future planning especially in small businesses in the sector.
- Independent use of a web-based tool requires an initial openness to and competency in independent learning and IT. It is possible that more than an offer of hotline support is needed initially in a sector where sector skills agreement research indicates lower than average IT use.
- Our cohort’s very selection criterion was that they had previously steered clear of assessment. It is possible that in a number of cases there are reasons for this which are not going to be successfully addressed by encouragement on its own, and it would take additional research to gain a more detailed understanding of this.

In summary, it is possible that with ePortfolio 1 we are dealing with a complex situation where on the one hand we have to give people the chance to self-assess without our involvement (in order to minimise perceived damage to professional reputation), and on the other hand we have to be on site to give them a good start with the tool so that they are able to reach the crucial stage of engaging with it (after which everyone who did reach it fed back that their time had been well spent).

ePortfolio 2 was reviewed by the regional CIBSE representative and his colleague at mockup stage. Both responded positively and provided valuable advice on appropriately streetwise wordings.

The litmus test is going to take place at the final event of our progression route of renewables tasters the week before the conference, on Monday 15 June, when sector members attending the series are going to be using the tool. It is likely that this scenario will prove easier to turn into an instant success than the previous one:

- Everyone in the room is likely to reach the crucial stage of engaging with the tool (after which experience with ePortfolio 1 shows that they are likely to have a positive experience):
  - We are going to be in the room to help everyone get started.
  - Delegates come well prepared to deal with an element of independent learning and with use of IT, as both were integral parts of previous events in the series, and everyone coped well.
  - The progression route of taster events itself has been highly successful to date; delegates are highly motivated:
  - More than 20 businesses attended the first taster event (at just above level 3) on 9 February despite serious traffic problems due to the unexpected snowfall
  - The masterclass event on 11 May (at level 4) was oversubscribed
  - At the end of the masterclass event, delegates took it in their stride when we briefed them that the final event was going to be at Nottingham University, and encouraged them to be confident to ask questions when we get there. Over 90% of feedback forms stated that they wanted to learn more, and more than 20 bookings for the final event came in within 24 hours of the masterclass event.
  - Last but not least, our cohort for ePortfolio 2 already has a history of positive engagement with learning and assessment because they are currently working at level 3.
ePortfolios 1 and 3: ePortfolios as self-directed learning tools at and below skilled trade level; are ePortfolios going to be successful, initially in this sector and in this region, in replicating the success of other self-directed learning initiatives at skilled trade level and below – and if so, how?

We know that self-directed learning works at and below skilled trade level: relevant examples, e.g. from the car industry, have been around for more than ten years, and one of the authors has personal experience of successfully introducing self-directed learning for apprentices in the IT sector.

The question for us is whether, and how, ePortfolios will be able to support this culture change in a sector whose sector skills agreement quotes a lack of IT skills as a key challenge stated by employers.

At the moment, we are optimistic. IT skills are lower than average in the sector, but generally high enough to cope with an electronic tool if it is user-friendly: a growing number of employers are asking for their quarterly newsletter to be sent by email; ePortfolio 1 received a positive response from those who had engaged with it; apprentices (for ePortfolio 3) are usually in an age group that has grown up with computers now, and that is already using ePortfolios successfully on other projects around the East Midlands. A first example from the sector is the successful use of simple ePortfolios as an assessment tool for electrical apprentices in the Eastern part of the region.

The challenge with ePortfolio 1 seems to be more related to the particular scenario in which it is being used than to the fact that it is being used at and below skilled trade level in the building services engineering sector. With initial support to get new users started, our target group seems to cope well.

ePortfolios 2 and 3: ePortfolios as mapping and matching tools; are ePortfolios going to be successful, initially in this sector and in this region, in supporting the identification of win-win situations for learners and their employers in learning at and through work – and if so, how?

Again we know from existing work in other areas that this is feasible in principle:

- The success of job search websites and electronic application forms is tangible evidence of working people’s ability to match their skills to employers’ job requirements using a web tool.
- One of the authors has personal experience of apprentices using an electronic tool to match skills they were able to offer and learning outcomes they required with skills that possible projects required and learning outcomes that these projects were able to offer them.

The question is where, and how, working people in the building services engineering sector are going to be able to make use of this ability in their own context of work and learning. ePortfolio 2’s first live use will have happened by the time the conference takes place; ePortfolio 3 is currently being promoted as a pilot project to selected employers in the region who may want to be involved in its detailed design.

Again, at the moment, we are optimistic for both mapping and matching tools: both are going to be used in situations where it will be feasible to support learners initially until they are able to engage with the tool, and both are going to be used in situations where the user is already interested in (and in the case of ePortfolio 3 even committed to) the benefit that comes with a successful match.

Conclusions and recommendations

All three scenarios look promising, our one caveat being our ePortfolio 1 dilemma of offering initial support while maintaining confidentiality – a dilemma that is likely to be solved at least in part once ePortfolios become more widely known, and users start supporting each other informally.

In terms of the building services engineering sector, especially once interfaces are established between aspiration-raising tools and tools supporting learners’ actual learning and assessment,
users are likely to make continued use of their content, e.g. for membership applications with their professional body.

In terms of transferability to other sectors, lifelong learning at and through work has become an economic necessity, as well as usually being enjoyable and satisfying for those involved. The better we are able to introduce potential learners and their employers to the use of self-directed learning at and through work, the better equipped we are going to be for a future driven by curiosity and innovation.

**European Initiative for the Promotion of Informal Learning.**

Most learning in the workplace occurs informally through working with other employees, clients, customers, suppliers and reacting positively to their feedback. Much of this learning goes unrecognised by the employer and also by the individuals themselves. This initiative seeks to promote the recognition, validation and accreditation of this informal learning in the workplace.

Phase 1a. (Completed in 2007). A simple framework was developed and trialled with a number of companies across France, Germany, Latvia, Spain, Sweden and the UK as part of a Leonardo Da Vinci project (www.inflow.eu.com). Participating businesses from the tourism / hospitality sector ranged in size from 6 to 223 employees and were found in all six countries.

Informal learning was identified within companies. Its impact on their business performance was identified as were other business benefits. Support was offered to company staff for the internal management of strategic and operational processes to enhance it. Successful companies were awarded a pan-EU Quality Mark and individuals achieved qualifications rewarding their capacity to up-skill in the workplace through informal learning.

Phase 1 b (On-going). Hotels are continuing to use the framework as part of on-going activities. (http://www.eipil.net/pages/course.htm)

Phase 2. (Start date 2008)

Funded under the Lifelong Learning Programme of the EU, this phase will adapt and transfer the model, framework and instruments developed under Phase 1 into:

Three new countries – Greece, Poland and Romania

- Two new sectors – Retail and IT Service.

- Cultural differences between Member States and Sectors will be identified and suitable adaptations made to the originals. These will then be piloted across the partnership.

This phase will also seek to support work towards the implementation of a single framework for transparency of competencies and qualifications by supporting the use of common validation instruments such as the European CV and a common e-portfolio.

This will extend both the concepts and implementation of the validation and accreditation methodologies developed under Phase 1 and will incorporate managerial competencies as well as those of other workers.

To achieve this, research will be carried out to identify emerging practices and technologies that will play a key role in the recognition of competencies acquired informally in the workplace. Based on this State of the Art report, a prototype will be identified for further work within this phase. This prototype will take into account interoperability standards and multilinguality.

Based on the knowledge gained during piloting in phase 2, a document compiling updated specifications of the prototype will be produced to be used by publishers and implementers of technical infrastructures in future developments.

An invitation to you.

If you have an interest in this phase of work as well as using the “join-in” link on this page, please join our community http://eipil-pan.ning.com to follow progress, to contribute to discussions and to assist in our research.

We look forward to your contributions. The EIPIL-PAN partnership
### Context
The classical education system is not capable to awake and promote individual competencies of children and the youth. Instead, the academic socialisation aims to create an ideal type with a specific character, abilities and soft skills. Hereby, the system discriminate against children who do not fit into this frame and intend to homogenise the variety of individuals although our society would rather profit from versatile talented people of all sorts.

Existing intentions to improve the educational system often reach their limits, due to the rather rigid structure of the classical system. Such ostensible unparalleled system is not only sustained by its administration, but also by the broad society. Therefore, the educational concept of EDEJU (Promotion of the Development of the Youth) targets the entire society across cultures and competencies to create a social learning network with the help of ICT (Information and Communication Technology).

### Objectives
EDEJU aims to realise an alternative method of self-development, which begins in early childhood and leads to a life-long process of the individual development of personality embedded in an autonomous social learning network.

The educational concept of EDEJU, namely “INSEL-Netz” (Intercultural Self-learning Network) offers an alternative to the abovementioned classical system:

Based on the “uneducated” child with its natural ambition to develop its competencies, INSEL-Netz intends to create an optimal environment, which reacts according to the child’s emerging talents ‘just in time’. The concept involves parents, early child teachers, educators as well as the society with its various institutions (nurseries, schools, public administrations, political entities, economies etc.). By creating a social learning network via ICT across societies and national borders, the concept aims to develop a worldwide network appropriate for children within a child-friendly society.

The pilot projects “Cleverle” in the Ivory Coast, “Denzlinger Cleverele” in Germany, and the international project “Cyber-Cleverle” are testing aspects of the concept successfully. Kids (here referred to as “cleverle”) develop their various competencies through self-organised projects and share their acquired knowledge and expertise with children across ages and borders through their self-developed ePortfolio. Hereby the programme “EDEJU-Atlas” intends to categorise, organise and connect activities of cleverle, so that a self-learning network may arise.

### Summary of results
The application of the EDEJU-concept “INSEL-Netz” in the form of Cleverle-projects exhibits successful results, which is foremost supported by highly satisfied children and parents. Participating children can not only develop their individual talents within the stimulating environment of the projects, but more so they share their acquired knowledge and expertise with children across ages and borders through their self-developed ePortfolio. Thereby social self-learning networks arise in which for example Anika (8 years old) from Germany produces an animated cartoon in cooperation with Gungun (6 years old) from India.

Collaborators and children of the pilot projects in the Ivory Coast make also use of EDEJU’s webspace to present their educational activities via ePortfolio. The already existing network among them is hence expanded to “Cleverle” from other countries.
The EDEJU-Atlas is still in a probational phase, however, the programme is already accessible online. As an interactive programme, users are welcome to further develop it and to suggest improvements according to their needs.

Conclusions and recommendations

After decades of developing the educational concept INSEL-Netz and its application through pilot projects, emerging tendencies towards the EDEJU philosophy can be observed. These are to be promoted in order to create a critical mass, which in turn would propagate a child-friendly self-learning network by the means of ICT. As an active participant of Cleverle-projects, each person not only develops its own talents, but also contributes to a dynamic knowledge exchanging and collaborative society. Furthermore, the INSEL-Netz concept invites interested people to realise Cleverle-projects within their own societies, which would then be linked to already existing projects via the EDEJU-Atlas. This would enable new cleverle to present their competencies and collaborate with other cleverle around the world.
Freefolio – an e-Portfolio and social knowledge management system

Raymond Elferink, RayCom BV

1. Introduction

Freefolio is an ICT supported e-Portfolio and social knowledge management system in which learners report and reflect on their personal development. It allows learners to interact with peers, coaches and teachers within their own institution or in other institutions on the basis of their own competence development plan. This system includes:

There are four key technical elements to the system:

(1) Personal achievement log for each a users to be able to construct a personal space in which to: record learning; reflect on activities and future plans. Users have rights over whom (if anyone) to share their work with.

(2) A social networking platform providing aggregation of public posts and group functionality. The platform can be configured as open to the web or closed to a particular community, institution or group of users.

(4) 'Knowledge and Information' section to electronically store resources identified as useful by the individual and/or organisation. This section should function as a repository of key documents and web resources which can be discussable.

The system is designed to

• enable learners to record and reflect on personal achievements;
• Support and promote feedback by peers and teachers / trainers;
• Provide information and access to knowledge resources

2. Platforms and systems

Freefolio was originally developed as an e-Portfolio for on-line careers coaches against a specification provided by the contracting organisation. Initial work involved considering the specification against the functionality of existing platforms and systems. We considered five different systems:

• the ELGG social networking system
• the OSPI open Portfolio platform
• the Mahara social e-Portfolio system
• the Edu Drupal e-Portfolio platform
• the Wordpress weblog platform

This provided us with a contradiction. The e-Portfolio systems provided limited functionality in terms of social networking and knowledge development and sharing. On the other hand the social networking platforms provide little facility for structuring portfolio inputs and for a more structured construction of knowledge artefacts.

Our final decision was to build a system based on the Wordpress Multi User system. Wordpress describes itself as “ a state-of-the-art semantic personal publishing platform with a focus on aesthetics, web standards, and usability”. It has a large user base, is stable and reliable, has been widely praised for ease of use and is flexible and scalable. Furthermore there is a large and active development community, contributing to the development of plug-ins for customisation and added functionality.
This has allowed us to rapidly develop the platform, through customising and integrating plug in functionality. The platform integrates the use of WordPress MultiUser version with Media Wiki and BBpress through a single login.

The platform we have developed is called Freefolio (figure 1).

![Figure 1: Freefolio](image)

### 3. Further development

Freefolio has continued to be developed through a series of projects and initiatives. These include:

- Use as an e-portfolio for careers advice and guidance with 14-18 year old school students
- Use as a social networking platform by the European Network for Trainers
- A Design Study undertaken for the EU Mature-IP Research programme

Development has been iterative with regular meetings with users to provide feedback for further development.

Whilst Wordpress provides a powerful and extendable platform a number of issues have arisen in the development process.

a) Usability issues related to the Wordpress navigation systems especially at the backend of the application.

b) The desire by users to be able to personalise the appearance of their e-Portfolio.

c) Issues related to updating to new versions of Wordpress.

d) Issues in providing access to a stable release whilst continuing to develop new versions of the system

e) The lack of functionality for producing reports and presentations of work.

Despite this, we remain convinced of the utility of Freefolio as an open source e-Portfolio system. However, given different pedagogic approaches to e-Portfolios, Freefolio might better be regarded as the basis for developing a Personal Learning Environment, through the integration of widgets in the platform. As such, we feel it better suited for Continuing Professional Development or for use with apprenticeship and work based programmes, than for use as a school e-Portfolio system. We will be further exploring this approach through the Mature-IP project in the coming months.

Deep Reflection and Constructive Alignment: The Challenge of Translating Theory into Practice
Introduction

This paper explores the challenge of translating educational theory into transformation practice within a higher education context. Two early works in progress are described of efforts to embed Mahara within and across different undergraduate programmes at Massey University. Massey was the lead developer of Mahara, an open source eportfolio system, collaboratively developed with the Auckland University of Technology, the Open Polytechnic of New Zealand, and Victoria University of Wellington funded by the New Zealand Tertiary Education Commission (TEC).

Case Study 1 – Initial Teacher Education

The first work in progress describes how eportfolios are being conceptualized within the area of teacher education. It reports how a robust conceptual framework built around the pillars of learning: learning to be, learning to do, learning to know, learning to live together, along with an additional pillar of learning to change and transform has been developed to scaffold deep reflection and constructive pedagogical alignment. This initiative involves a new four-year initial teacher education degree for primary teachers and includes a cohort of students taught entirely by distance. The intention is to anchor critical reflection and professional growth around a set of core questions for example:

• What does it mean to be a teacher in a diverse but inclusive society?
• What do students need to do to become literate citizens in a socially just democracy?
• What do students need to know in an uncertain world needing to address future sustainability?
• What does it mean to live in Aotearoa/New Zealand in today’s globalized world?
• How can teachers help to change the education system to make it fair and socially just for all?

In this context the real value of the eportfolios is not so much about the artefacts students collect over the course of their study, but rather the reflections, connections and changes to thinking and behaviour that such higher order questions promote.

Case Study 2 – Undergraduate Business Education

The second work in progress is a large undergraduate business studies degree. It reports how the first year of the Bachelor of Business Studies (BBS) has been redesigned with a new graduate profile to reflect the requirements of today’s global business environment. Coupled with the adoption of Moode, including a programme community environment, the eportfolio experience is intended to help overcome the problem of a series of disconnected courses where students fail to see the links between key concepts, theories and principles. In this sense, the use of Mahara is designed to weave together some of the historically fragmented parts of the foundation programme. Set in the framework of a suite of guiding principles the use of Mahara is intended to produce business graduates who:

• Are innovative, critical thinkers
• Are independent and self-directed life-long learners
• Are committed to high social and ethical standards
• Have foundational knowledge in a range of business disciplines
• Can apply advanced research-informed knowledge in one or more business disciplines
• Are able to work effectively with people from diverse backgrounds
• Understand leadership and can assume leadership roles in organisations
• Are effective communicators, skilled in the use of information and communication technologies
• Understand bi-culturalism and the New Zealand relevance of the Treaty of Waitangi
• Can proactively shape organisations in complex, multi-cultural and international contexts

Discussion

In both cases there is a tight strategic fit between the use of eportfolios and the goals and intended outcomes of the respective programmes. Although in theory we have the tools to operationalise our intentions, it remains to be seen whether this can be achieved in practice. Put simply, will it work?

In the backdrop of this question, the experience so far raises the concept of readiness, the importance of a champion with sound understanding of eportfolios and the difficulty of innovating in an intensive research culture. It also warns of the dangers of eportfolios being tainted by institutional driven conceptions of learning rather than a broader understanding of life-long learning.

The reality is that there has been limited progress in neither case study as staff grapples with the institutional demands of implementing a substantially revised degree programme along with the adoption of Moodle as a replacement Learning Management System (LMS). The first lesson is that the capacity for further innovation is severely limited under the current circumstances. This problem is not helped by the lack of a clear champion in either case study. In both cases the Centre for Academic Development and eLearning (CADeL) has centrally funded over the last two years potential champions to attend the Australian ePortfolio Symposium. However, this artificial seeding of eportfolio implementation has failed to lead to programme-wide innovation. Thus, the second lesson is that champions must have genuine passion in the idea if an innovation is to flourish beyond individual and localised efforts.

The third lesson to emerge is that every innovation has its day and the institutional context has to be ready for the change. In the current New Zealand context, there is huge pressure on academic staff to improve their research performance. This pressure is not new within universities but it has been greatly amplified by the Performance-based Research Fund (PBRF) which individually ranks research outputs of all staff. Ironically in the area of Teacher Education the implementation of eportfolios provides a great opportunity to pursue the scholarship of teaching and learning. However, staff have their own specialist discipline interests and coupled with the intensification of academic workloads, understanding and implementing eportfolios is ‘just another thing to do’.

This point leads to the fourth lesson. The growing interest in professional standards and generic competencies provides a natural ‘place’ for eportfolios in institutional contexts. However, this may be counterproductive to ‘learning and development’ as using eportfolios for credential or institutional purposes does not by itself advance the life-long learning agenda. It may even seriously damage the perception of the value of eportfolios.

Summary

In summary, the overarching lesson is that deep and critically reflective learning, augmented by well design institutional use of eportfolios, must be rooted within a sound, systemic and institutional-wide digital culture. This paper shows that such a culture has yet to be truly established at Massey University but the journey has begun. However, it remains to be seen to what extent Massey will embrace Mahara to promote life-long learning.
Implementing a trial of a scalable enterprise ePortfolio system at RMIT University: a case study

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Abstract

In Australia, there has been a marked increase in the use of ePortfolios within the university sector over the past several years. It is acknowledged that ePortfolios can assist in producing skilled professionals and reflective learners who are able to demonstrate career readiness, along with graduate capabilities and employability skills (AeP, 2008). At RMIT University, ePortfolios are being strategically positioned as a vehicle to enable the 'ongoing compilation of learning achievements and experiences that can be used for authentic, evidenced-based assessment and demonstration of career readiness' (RMIT, 2008, para 1). While some disciplines have used traditional paper-based portfolios for assessment and accreditation purposes, the practices are not consistent within or across universities. In the broader domain of flexible and/or online learning, ePortfolios are seen to allow for greater integration of ubiquitous Information and Communication Technologies (ICT) to further support learner engagement. However, while students have little choice but to adapt to new technologies, especially if they are positioned as integral to assessment, introducing new technologies into both organisational systems and learning and teaching practices, is both a complex and challenging process.

This case study reports on work-to-date around the introduction and implementation of a potential enterprise-wide ePortfolio system at RMIT, a large multi campus, dual sector university in Australia. Following a review of ePortfolio systems at RMIT in 2007, it was decided to initiate a trial of an ePortfolio system, PebblePad, in 2008 which has consequently been extended to 2010 (Botterill, Allan & Brooks, 2008). Using Geoff Scott’s (2003) key themes and lessons learnt in effective change management in Higher Education as a framework, this case study will explore the issues, challenges and achievements to date around introducing and supporting a scalable trial of PebblePad at RMIT. This framework highlights the link between individual and organisational learning, as well as the acknowledging the complexities of instigating major change initiatives that encompass cultural shifts. These need to be managed carefully. A failure at an organisational level to properly support, integrate or implement a major change initiative can cause widespread mistrust and passive resistance by both staff and students. Thus while there are processes and systems being developed to support a stable integration of ePortfolios into existing institutional systems, it is also important to build an informed community of practice across all areas of the university. Together these can lead to a managed, successful and sustainable implementation of ePortfolios within a university.

Background

In Australia, there has been a significant increase in the use of ePortfolios within the university sector over the past several years (AeP, 2008). It is acknowledged that ePortfolios can assist in producing skilled professionals and reflective learners who are able to demonstrate career readiness, along with graduate capabilities and employability skills (AeP, 2008). At RMIT University, ePortfolios are being strategically positioned as a vehicle to enable the ongoing compilation of learning achievements and experiences that can be used for authentic, evidenced-based assessment and demonstration of career readiness (RMIT, 2008, para 1). While some disciplines have used traditional paper-based portfolios for assessment and accreditation purposes, the practices are not consistent within or across universities. In the broader domain of flexible and/or online learning, ePortfolios are seen to allow for greater integration of ubiquitous Information and Communication Technologies (ICT) to further support learner engagement. However, while students have little choice but to adapt to new technologies, especially if they are positioned as
integral to assessment, introducing new technologies into both organisational systems and learning and teaching practices, is both a complex and challenging process.

This case study reports on work-to-date around the introduction and implementation of a potential enterprise-wide ePortfolio system at RMIT, a large multi campus, dual sector university in Australia. Following a review of ePortfolio systems at RMIT in 2007, it was decided to initiate a trial of an ePortfolio system, PebblePad, in 2008 which has consequently been extended to 2010 (Botterill, Allan & Brooks, 2008). Using Geoff Scott’s (2003) key themes and lessons learnt in effective change management in Higher Education as a framework, this case study will explore the issues, challenges and achievements to date around introducing and supporting a scalable trial of PebblePad at RMIT.

Thematic change lessons as guides for ePortfolio implementation

Geoff Scott (2003, p 73) identifies three key insights underpinning the introduction of new technologies in flexible learning environments.

1. Change is learning, and learning is change
2. There is a profound difference between “change” and “progress”
3. Individual learning and organisational learning are inextricably linked.

The development of organisational capability is both a response to, and process of, supporting and managing individual as well as organisational capability. He states that ‘[t]he strategic development priorities of organizations can be achieved in practice only if the individuals responsible for their implementation are willing and enabled to learn how to do them’ (2003, p. 73). Thus, motivation is a key feature and any change initiative will fail unless it is seen as ‘relevant, desirable, and feasible’ (p. 73). Progress though is a subjective and value-laden judgement, as it involves ‘a judgement that...change is moving in a desirable direction’ (p. 73). So how can progress be measured in a way that captures valid individual and organisational capability and learning? Scott outlines eight lessons (pp. 73-76) that have been used to guide strategic development of flexible learning environments at the University of Technology, Sydney. These, along with their key points, will be used as a framework to map RMIT’s progress to date in the introduction of ePortfolios. Although these are listed as individual lessons, they are not always mutually exclusive.

Lesson One. There are far more options for improvement or innovation than there is time or resources to address them

General university prioritises and the strategic plan have been used to systematically select courses for the PebblePad trial. Specific priority areas include: graduate attributes, Work Integrated Learning (WIL), progressing RMIT’s Vietnam Campus initiative, dual sector articulation, professional accreditation and Recognition of Prior Learning (RPL). The introduction of ePortfolios into these areas provide high value return for minimal organisational effort as ePortfolios are considered to be ‘relevant, desirable and feasible’ to student learning, career and personal development and course outcomes.

The trial of a single ePortfolio tool is underpinned by a whole of university standardised approach and implementation. Firstly, the trial is sponsored by the DVC (Academic), and is managed in the central Educational Technology Advancement Group (EduTAG). All information and processes related to the trial are accessed from a single location on the RMIT website, www.rmit.edu.au/eportfolio. Here staff members can apply for a personal ePortfolio account and / or nominate their courses or programs for the trial. This allows those selected to be matched to the university’s strategic priorities and thus allows the tracking of program / course usage, student licence numbers as well as individual staff accounts. This therefore, allows for the systematic reporting of specific course outcomes, improvements and innovations in learning and teaching. The website also contains staff and student experience surveys to facilitate research into staff and student experiences with ePortfolios, so that the general implementation is complemented by systematic research that informs the subsequent execution of the ePortfolio initiative.
Lesson two: Change is not an event but is a complex and subjective learning / unlearning process for all concerned

The introduction of new technologies into existing learning and teaching practices can be both empowering and threatening to academic staff. Staff engagement is essential (Cosh, 2008) and voluntary early adopters need to be supported through challenging and complex situations. Support can take many forms: e.g. financial, funds for time release; pedagogical, access to someone who can assist in embedding ePortfolios into curricula / assessment tasks; technical, fast and responsive just-in-time technical support as and when needed; or peer mentoring, having someone they trust and can turn to as required, for whatever ePortfolio-related reason.

To assist staff develop confidence and capability with the technology and curriculum changes, individual and group mentoring professional development sessions have been used. These sessions can address every aspect of ePortfolio usage, so that a complete end-to-end support response is available. Staff are able to book time with the ePortfolio project leader as required, and all staff participants are able to call or send emails to address specific issues / problems, including their students when necessary. The RMIT ePortfolio website contains a broad range of contextualized staff and student learning and teaching support resources. Community of practice building events and forums are held to minimise feelings of isolation (AeP, 2008) and to share personal learning stories and insights. Importantly, staff have been provided with the opportunity to chose their personal level of engagement with the tool. This has allowed time for them to develop confidence in their ability to teach with an ePortfolio, improve their skills, learn from problems, and adapt their teaching practices to suit their needs and those of their students'.

Lesson three: Enhancements in learning programs generate a need for improvements in the systems and infrastructure that underpin them.

To address the need for greater collaboration and cross-functional understandings across various organisational and administrative boundaries, relationship building with relevant technical teams has been essential. Firstly, a strategic decision was made to host PebblePad service external to the University, to lower infrastructure change issues and to provide greater flexibility with product uptake. As a consequence, it has been important to develop organisational thinking around the value of hosted services. Regular communication and project action teams have been convened to address recurring issues as an enterprise-level hosted environment has been introduced. Procedures and protocols have been formulated with key ITS personnel and areas for processing and linking PebblePad into the Learning Hub, the access point for staff and student online systems, and specifically the university’s BlackBoard VLE. Helpdesk protocols have been written containing common FAQ issues and standardized actions / responses. The ongoing management of these relationships is central to the seamless integration and operation of PebblePad in the university.

Lesson four: The most-successful changes are the result of a team effort in which the most-appropriate and best-positioned people are involved in a process of action learning

The explicit identification of key staff and inter-organisational relationship building are essential components of successful change initiatives. This project has brought together academics and professional services staff from across the university which in turn has helped to establish interdisciplinary teams and approaches to the rollout and uptake of the PebblePad trial. For example, the secondment of the ePortfolio Project Leader from Student Services (Study and Learning Centre) to EduTAG exemplifies the collaborative and interdisciplinary approach adopted in this project. This approach has also underpinned staff and student support resource development. Career Development and Employment (CD&E) have developed an interactive website, Career Track, which has been positioned centrally to the university’s ePortfolio initiative to support Work Integrated Learning and the achievement of graduate attributes. The work-to-date across the university both through central services and teaching staff have developed an early adopters’ community of practice (CoP). This is one of the project’s key performance criteria and is considered vital, especially in relation to establishment and promulgation of an action learning capability within the implementation. However, the project is now at a stage where it is important to
broaden organisational stakeholder support. As a consequence, a formal steering committee will be established to define the relationships and foster wider organisational support.

**Lesson five: The change process is cyclical, not linear.**

Ortrun Zuber-Skerritt defines action learning as ‘learning from action or concrete experience as well as taking action as a result of this learning’ (2001, p. 1). The implementation of this trial has consequences across organisational learning, academic teaching, innovation and student learning. Thus, it is important that we are able to learn from experience before extending the trial in iterative cycles across the broader university. Currently, we are trialling the use of ePortfolios in semester-based academic courses which has allowed us to evaluate usage, uptake and outcomes in specific courses. However, from 2010, we will start program-based evaluations in two first year areas, Engineering and Medical Radiations, which will see ePortfolios used across the entire duration of the programs.

The development of a staff and student experience survey will be an important tool for measuring and monitoring outcomes, which in turn will form the basis of action research and build individual and organizational capability. The ability of staff to explore their practices and their students’ experiences for peer-reviewed research, allows a valid and recognized process for developing reflective practice and enhancing organisational learning.

**Lesson six: Change does not just happen—it must be led.**

Leadership is a mixture of both organisational and individual commitment and actions. Parallel processes (Alderfer, 1987; 2002) refers to a dynamic where there is cross level influence between macro or supra systems and their sub systems, that is what occurs at an organisational level can affect sub-groups and individuals, and in turn, what individuals do can impact back on the organisation. Firstly, the importance of a key organizational sponsor, in this case the DVC (Academic), is a major factor in the prioritisation and implementation of the project. However, the leadership role of the teaching staff must be acknowledged. In relation to change, the teaching staff are major instigators of change, as it is their efforts in using new technologies and systems in their practice that will impact most upon the student experience. Acknowledgement of staff efforts and public opportunities for acknowledgement are therefore important. Events such as teaching awards, learning and teaching expos, internal learning and teaching seminars and forums are valid ways of supporting teaching staff in their practices and to publicly acknowledge the leadership positions they take. These are also important vehicles for feeding back into organizational learning thereby making it a dynamic and public process.

**Lesson seven: Change is a mix of external forces and individual action.**

The knowledge economy, underpinned by advances in ICT, has irrevocably changed the paradigms and practices of tertiary education (Botterill & de la Harpe, 2009). Being able to understand the broader environment, potential future directions and present conditions is important in instigating and managing change. This is an ongoing process, but relies heavily on active collaboration across organisational boundaries and between institutions. Close collaboration with the University of South Australia and the development of networks across professional bodies and associations have been deliberate ways of fertilising institutional ePortfolio practices with external thinking, thereby reducing duplication of processes and facilitating knowledge sharing based on identifiably good practice. For example: participating in established and emergent communities of practice, such as the Australian ePortfolio Project and the Australian Flexible Learning Framework has helped to minimize potential pitfalls, foster inter-organisational and institutional learning and created networks for current and future reference and problem solving.

**Lesson eight: We must look outside as well as inside for viable change ideas and solutions.**

Entropy is a condition of deterioration in closed systems (Alderfer, 1976). It is therefore important to develop key strategic networks and partnerships, both internally and externally, with relevant institutions and organizations. Because of the rate of change in contemporary educational technologies, universities need to collaborate to expedite advancement in the integration of new
tools and systems, e.g. ePortfolios (Allan et al., 2009). RMIT has developed strong strategic collaborations with other institutions, in particular the University of South Australia. This strategic decision has seen close collaboration across ePortfolio implementation, in particular IT support, resource sharing and staff professional development and has recently been formalised with a Memorandum of Understanding signed by the DVCs (Academic) of both universities. Learning from, and with, others ensures that we are organisationally better equipped to deal with the manifold issues associated with an ePortfolio implementation.

Reflections

Resistance to change can take many forms from, ‘scepticism, lack of interest and even outright hostility’ (Balshaw & Senter, 2002). It is therefore important that institutions recognise the role of early adopters and support their efforts. However, this can be difficult when there are competing priorities. Staff are now under such pressure to improve their teaching performance measures, such as Course Experience Survey results, that they can be adverse to the introduction of a more pedagogically sound learning process in the online environment, especially if they risk negative student feedback because of problems or student attitudes. This is especially true when introducing students to more student-centred learning paradigms through the use of ePortfolios which ask students to engage in reflective practice and their own action learning. Therefore, finding a balance between fulfilling organisational strategic goals, managing student expectations and learning outcomes while allowing staff to learn without fear of reprisals, are all important factors that need to be considered when introducing scalable enterprise technologies in learning and teaching.

References


Abstract

The Vocational Education and Training (VET) sector in Australia provides skills and knowledge for work through a nationally recognised training and accreditation system that operates across all states and territories. The national training system, known as the National Skills Framework, comprises of three key elements: training packages, the Australian Qualifications Framework (AQF) and the Australian Quality Training Framework (AQTF). Training packages are sets of nationally endorsed standards (units of competency) and qualifications (groups of units of competency) that are used to assess people’s skills in specific industries, industry sectors and / or enterprises that are underpinned by generic key competencies (Mayer, 1992) contextualised for a specific industry and more recently have also incorporated employability skills (Allen Consulting Group, 2006). The AQF is a framework for the fifteen nationally recognised qualifications, eight of which are competency based in the VET sector. Finally, the AQTF is the national set of standards and quality indicators used to ensure high quality training and assessment services provided by Registered Training Organisations (RTO) (DEEWR, 2008).

An underpinning premise of Competency Based Training (CBT) is that learning occurs in both formal and informal contexts. Under the AQF, each qualification must provide a Recognition of Prior Learning (RPL) pathway as an alternative, or non-institutional, access point for a source of credit. RPL is a process whereby an individual’s non-formal and informal learning experiences can be assessed against nationally accredited competency standards, and in turn used for entry into, or partial or total credit towards, nationally accredited qualifications (AQF, 2004). While there are various ways to assess RPL, for example on the job observation, reflective journals, photographs etc, these are generally presented as a paper-based portfolio of evidence. This portfolio of evidence is then submitted as part of an assessment process which also includes an interview with an RPL assessor and a Subject Matter Expert.

This case study reports on a work-in-progress trial of PebblePad, an ePortfolio platform, as a vehicle for recording RPL in Certificate IV in Financial Services (Accounting) in the Business TAFE School at RMIT University. PebblePad is being trialled as a potential enterprise based system in areas of strategic importance, including its potential to provide a systematically structured and transparent online RPL process. Recent changes to Australian government regulations stipulate that all financial services practitioners must have a minimum qualification of a Certificate IV in Financial Services which will also allow for professional recognition / accreditation with the Association of Accounting Technicians (AAT). This will affect many people who are already working in the area, who will need to complete the qualification. RMIT has been selected as the provider of choice to run the training and RPL process on behalf of AAT across Australia, and will commence the rollout of training in Victoria in July 2009.

While it is a requirement that all VET programs offer an RPL process, the process is a complex and time consuming one for both staff and students. This case study is evaluating PebblePad, in particular the capability of its Profile Builder function, as a means to provide an electronic and streamlined procedure to improve and simplify the RPL process university-wide. In addition, the University is also evaluating the effectiveness of an ePortfolio to replace the traditional paper-based portfolio so as to appropriately utilise Information and Communication Technologies (ICT) to further support learner engagement It believed that the fully online approach to RPL will also offer students greater flexibility and access to vocational education and training, particularly for those students who are not physically located close to the RMIT Melbourne campus.
Background

The vocational education and training (VET) sector in Australia provides skills and knowledge for work through a nationally recognised training and accreditation system that operates across all states and territories. The national training system, known as the National Skills Framework, comprises of three key elements: training packages, the Australian Qualifications Framework (AQF) and the Australian Quality Training Framework (AQTF). Training packages are sets of nationally endorsed standards (units of competency) and qualifications (groups of units of competency) that are used to assess people's skills in specific industries, industry sectors and/or enterprises. The AQF is a framework for the fifteen nationally recognised qualifications, eight of which are competency based in the VET sector. Finally, the AQTF is the national set of standards and quality indicators used to ensure high quality training and assessment services provided by Registered Training Organisations (RTO) (DEEWR, 2008).

Training packages consist of core and elective units of competency each of which is sub-divided into elements and performance criteria. The performance criteria outline the specific skills and knowledge sets that need to be demonstrated in order to be assessed as competent in a unit. These are based upon a generic set of key competencies (Mayer, 1992) contextualised for a specific industry and more recently have also incorporated employability skills (Allen Consulting Group, 2006).

An underpinning premise of Competency Based Training (CBT) is that learning occurs in both formal and informal contexts. Under the AQF, each qualification must provide a Recognition of Prior Learning (RPL) pathway as an alternative, or non-institutional, access point for a source of credit. RPL is a process whereby an individual's non-formal and informal learning experiences can be assessed against nationally accredited competency standards, and in turn used for entry into, or partial or total credit towards, nationally accredited qualifications (AQF, 2004). While there are various ways to assess RPL, for example on the job observation, reflective journals, photographs etc, these are generally presented as a paper-based portfolio of evidence. This portfolio of evidence is then submitted as part of an assessment process which also includes an interview with an RPL assessor and a Subject Matter Expert. However, the concept of ‘portfolios’ in current practice is being moved away from, ‘as it conjures up the idea of large lever-arched folders and collections of evidence which is no longer considered good practice’ (AFLF, 2009).

According to the Australian Flexible Learning Framework (Framework), ‘a good practice RPL model includes facilitated self-assessment, links to units of competency and qualifications, evidence validation (not gathering and collection), use of a variety of evidence forms that corroborate the individual’s competence and a conversational approach to assessing’ (2009, p. 1). The Framework acknowledges the potential role ePortfolios can contribute to RPL candidates, in particular remote candidates, through:

- utilising templates to structure the presentation of RPL evidence, and tags to organise and find artefacts, which helps streamline the assessment process
- reducing the need for paper based, hard copy evidence and limiting excessive evidence collection
- developing and strengthening information and communication technology (ICT) or digital literacy skills (p. 1).

While the uptake of ePortfolios for RPL is in its infancy, this case study reports on a work-in-progress trial of PebblePad, an ePortfolio platform, as a vehicle for recording RPL in Certificate IV in Financial Services (Accounting) in the Business TAFE School at RMIT University. RPL can be a difficult and vexatious process for candidates, assessors and institutions alike, with the belief that it is often easier to do the course than apply for RPL (Cameron, 2004). We believe that the use of an ePortfolio will offer a transparent and streamlined RPL process that addresses the points outlined by the Framework above.

Case study: The Association of Accounting Technicians RPL Project

Recent changes in Australian government policy have seen the introduction of The Tax Agent Services Bill (2008) which was approved in March 2009 and will come into effect from January 1, 2010. Among the new regulations are:
• Tax agent services and BAS (Business Activity Statement) services will need to be registered by a national Tax Practitioners Board.
• To be eligible for registration, providers must meet minimum educational qualifications and relevant experience requirements which would be equivalent to a Certificate IV in Financial Services (Accounting).

This will affect many practitioners with long standing work experience who are already working in the financial services area. They will now need to complete a minimum of a Cert IV qualification in order to comply with the new legislation, professional standards and accreditation requirements. The Association of Accounting Technicians (AAT) has recognised that many practitioners will have a great deal of knowledge that can be mapped against competencies offered in the Cert IV in Financial Services (Accounting), so therefore RPL will need to be offered as a means to identify if applicants can be given full or partial credit toward the units of study required in the Certificate.

RMIT has been selected as one of the provider of choice to run the RPL process for members of AAT as well as provide selected gap training in collaboration with other providers. A series of forums explaining the new requirements and the RPL process will be held across Victoria from July 2009, and extend across Australia from 2010. It is anticipated that there will be up to 30 RPL applicants in the initial Victorian trial, with numbers expecting to reach up to 300 applicants when it is rolled out nationally.

There have been many challenges and issues identified so far in this process. Firstly, AAT stipulated that RPL has to be offered nationally for all applicants. The issues this raised for the RMIT TAFE Business School included:

• How could they deliver a consistent service across Australia?
• How could they manage candidates who do not have student numbers to access the university’s virtual learning environment, BlackBoard?
• What options were there to facilitate RPL, especially outside of central Melbourne?
  • Online or paper-based self-assessment tools?
  • Which of these options would be less onerous for applicant and assessor?
• How would they make it easy to access and simple to use?
• What questions would they ask of applicants to help them prepare for RPL?

These questions in themselves reflect the key points identified in the Framework’s ePortfolios for Assessment report (see above).

Within the broader university context, RMIT started a trial of a potential enterprise-based ePortfolio system, PebblePad, in 2008. As part of the evaluation process, areas of strategic importance were identified for inclusion in the trial, including RPL (Botterill, Allan, Faulkner, 2009). This TAFE Business School case study was well suited to participate in this trial, and could be used to assess the ability of an ePortfolio system to address candidate, client and organisational needs. As a result, they have agreed to participate in the trial, as PebblePad fulfilled their criteria to offer a flexible means of evidence gathering and assessment.

The design and development of the RPL process

With the decision made to trial an ePortfolio for RPL in the Cert IV, the design and development of an appropriate process started. Upon an initial enquiry for RPL, applicants will be sent an appropriate information pack giving an overview of the units of competency, procedures, costs etc. Once the applicant has decided to proceed, they will be sent a registration form and an RPL self assessment matrix. Once this is completed, they will have a one-to-one consultation with an assessor in a manner that best suits the applicant, e.g. face-to-face, phone, email or an online environment such as Elluminate. In this interview, the assessor will help the applicant fill in the RPL application, and give advice regarding potential RPL credits and gap training. It is at this stage that the applicant can nominate how they would like to collect and present their evidence, either as a paper-based portfolio or as an ePortfolio. This choice is considered important so that applicants can chose the most appropriate format to suit their needs and digital literacy abilities. If the applicant chooses to undertake the evidence collection using an ePortfolio, they will be given a
PebblePad account. They will then have a month to complete the evidence collection and attach it to a specially designed Profile. Once this has been submitted, a formal RPL interview will be convened in which the applicant will be granted full or partial credit for the Cert IV and appropriate gap training identified if applicable.

The Profile Builder

The profile builder function within PebblePad has been a key element in the decision to trial this application in the Cert IV. The profile builder allows staff to create frameworks of competency/capability statements and students can then attach the supporting evidence against these. In this case, the TAFE Business School has taken the units of competency required for the full certificate and used these as a basis to create profiles for the RPL process. In the initial phases of consultation with the ePortfolio Project Leader, the team realised that there was some overlap among the different units of competency and that the same evidence could be used for a number of them. As a result, they grouped the elements and performance criteria into clusters and skills sets so as to eliminate repetition for the applicant. The clusters are:

- work environment
- budgets
- accounting operations
- law.

Figure 1 shows part of the work environment skills set. Here, the unit of competency FNSICIND401B - Apply Principles of Professional Practice, has been converted into a profile. This shows the second element and its associated performance criteria. Applicants are able to provide evidence of their knowledge and how it underpins their practice through written responses. Once they have added their responses, they can finish and attach evidence to their profile.

Figure 1: Profile builder in PebblePad

Figure 2 depicts the evidencing page. Here applicants can attach evidence to the performance criteria as well and explicitly reflect on why they have used this evidence. Therefore the profile becomes a working RPL document as applicants work through the clusters and gather evidence for the RPL interview. The visual guide provided by the traffic light sequence makes this a powerful tool for applicants to independently manage their RPL application. A green traffic light indicates that there is evidence attached to the performance criteria, while the red indicates that there is no evidence attached at this time.
Once the applicant has completed their profile, they will be able to submit it to the assessor. The assessor is then able to review the evidence and the reflections before the final interview. The assessor is also able to make comments upon evidence and direct the applicant to areas that may need more input. This profile creates a transparent process for both the applicant and the assessor.

Next steps
The TAFE Business School at RMIT is still in the development phase of this process. They see that an ePortfolio can add flexibility and transparency to the RPL process and allow applicants, who may be geographically removed from RMIT, a way to complete an RPL assessment. The use of ePortfolios also allows for greater use of multi-modal evidence, as well as reducing the need for large paper-based portfolios. Additionally, applicants own and manage their ePortfolios at all times as they decide with whom they will share their ePortfolio content. This therefore supports the views of the Framework, that an ‘e-portfolio is able to streamline evidence identification and validation, and enable assessors to effectively make judgements about the authenticity of evidence when it is verified through legitimised sources’ (AFLF, p. 1).

References


How to Incorporate ePortfolios into the Curriculum in a Developing Country: the Case of American University of Central Asia (Bishkek, Kyrgyzstan)

Sania Battalova, Sharon Bailey, American University of Central Asia (Bishkek, Kyrgyzstan)

Introduction

In spite of the dynamic global development of ePortfolios, the Central Asian academic community has not yet taken a deep interest in this phenomenon. What is the reason? Could ePortfolios find their niche in the academic and professional development of students and professors in our region?

Objectives

American University of Central Asia is an international, multi-disciplinary learning community in the American liberal arts tradition and is almost the only liberal arts institution in Central Asia (Kyrgyzstan, Kazakhstan, Tajikistan, Uzbekistan and Turkmenistan). Our University, established in 1993 in Bishkek, Kyrgyzstan, is a small but powerful engine of intellectual freedom and critical thinking that fuels education in a caring, corruption-free and student-centered environment.

Students and faculty are eager to study and pursue their dreams. Our goal is to enhance our distinctiveness as a learning community, grounded in the liberal arts and preparing a new generation of leaders for the democratic transformation of Central Asia and the world beyond. On the basis of these principles, the University aims to establish an educational and research environment which will instill critical thinking skills, effective intellectual diligence, creativity, and lifelong learning skills in the students. Another important task of the University is to give students the complex of skills and knowledge that will help them to adapt successfully to the modern labor-market. For this reason, we are also exploring ways to incorporate technological skills into our curriculum.

To be more effective in the area we have combined IT and Library to establish a new department – Information Resources and Technology. The new department’s mission is to maintain, improve and develop an integrated, comprehensive, forward-looking technological and informational infrastructure for delivering high quality information and technological services to the University community.

In the past two years we have implemented several important projects:

• We are only the university in Kyrgyzstan which is successfully using Moodle as a course management system, and we are making very good progress in incorporating the e-course system into the University curriculum.

• We are one of the leading universities in the region in creating an electronic repository of Central Asian scientists’ theses or dissertations.

• We are using interactive collaboration tools, such as international videoconferencing, to improve face-to-face classes and to provide more opportunities to improve teaching quality.

• We are working on multipoint videoconference implementation to organize collaboration between faculty and students in Central and South Asia (especially Afghanistan), and between students working on corporate projects.

Goals and Methods

The vital task of the University is to improve students’ skills on independent intellectual work. We have to teach them to compile and systematize information. We wish to teach them to critically evaluate their own intellectual potential, to determine the tasks necessary to gaining knowledge and to be able to present in an effective way their knowledge and skills to potential employers.
An ePortfolio can be a tool, allowing students to 1) present in an effective way their own knowledge and achievements, 2) manage their own learning process, 3) inform potential employers about their creative and professional potential.

A survey of 12 leading universities in Kyrgyzstan revealed that no universities in the country use ePortfolios and most of them had never heard about the electronic tool. Among the regional universities (Uzbekistan, Tajikistan, Kazakhstan), we found very few examples of implementation of ePortfolios in the curriculum. We did find a couple of web-site reviews that argued for the importance the student’s life long learning and suggested electronic portfolios as a tool to help them to develop professional life (Tashkent University for Information Technology, http://www.infocom.uz/post/?id=4035). Some of universities and colleges in Kazakhstan are beginning to work with the tool in a limited way. For example, there is a database of students resumes at the Karaganda State Technical University, http://www.kstu.kz/vypusknik.html).

AUCA is only beginning to explore the possibilities of ePortfolios. A survey among the AUCA faculty, the Academic Affairs staff, and career center staff has shown that only a few people had any knowledge of the tool, but almost all of them have taken a great interest. However, we have been strengthening our IT foundations for many years. The successful experience in electronic course system implementation, the great achievement in this process and deep motivation of students and teachers give us reason to believe that there will be broad support for ePortfolio implementation.

We are actively studying the experiences of other universities which implement e-Portfolio successfully in their curriculum. We are especially focusing on analyzing Open Source ePortfolio program implementation and Moodle LMS ePortfoloi module. In the next year, we plan to introduce ePortfolios to narrowly targeted groups, in order to learn the specific needs of our community and potential for wide-scale development.

The target groups in AUCA with whom we are going to work next year:

- Students of Journalism and Software Engineering Programs: students in these programs have strong computer skills even in the Freshman year, whereas the same is not always the case for students in other programs.
- Seniors who are completing honors theses: many AUCA seniors are conducting socially relevant and original research, and an electronic record of their research will help them find employment or gain admission to graduate programs.
- AUCA instructors and researchers who are working on their research projects: the opportunities afforded by e-Portfolio will be a key tool to deepen professional contacts, enhance research results, create new contacts and further professional development.
- Staff and administrators: many of our staff and administrators have extensive experience in projects implementation and aim at professional and career growth.

We expect that the AUCA Career Center will take a lead in developing and implementing an ePortfolio course for career development through the AUCA Continuing Education Program.

**Implementation**

The basic model of new ideas implementation within the University consists of the following phases: building a work group; selection, evaluation, analyses, testing, and implementation new programs, software, or corporate principles; and developing the technological, organizational and normative basis for sustainability.

Selection of the target groups and working team members will help us build the framework for the project. We will also organize open discussions, group meetings and workshops to discuss the results of our research and to design tools for measuring the level of AUCA’s maturity in ePortfolio practice.

Challenges of ePortfolio adoption and implementation in AUCA:

- Lack of awareness in the AUCA community of ePortfolio opportunities and of the potential for career development.
• Limited opportunity for collaboration with other universities and organizations experienced in this direction within our country and region.

• Uncertainty about which software will offer the right degree of flexibility and will allow integration with the existing electronic environment of the University.

Conclusion

ePortfolio implementation should be the vital part of the learning experience of AUCA students, setting them on the same footing as students of the leading universities of Europe and America. Being in the early phases of selection, evaluation, and analyze, we consider future development of ePortfolios, from student portfolio to the University portfolio, as a key area for University development, with rich potential for development throughout the country and region as well.

The implementation of departmental and institutional ePortfolios provides additional ways for institutional development, internal improvement and external accountability.
BACKGROUND

All health professionals should be able to provide Basic Life Support (BLS) [1] and many are required to perform Advanced Life Support (ALS). The component clinical skills that make up BLS and ALS must all be performed promptly and effectively if someone who is seriously ill or injured is to be successfully resuscitated. In most countries there are peak bodies that publish best-evidence guidelines on resuscitation. An international panel of experts (ILCOR) appointed by the national bodies published updated guidelines approximately every 5 years.

Research reveals that much resuscitation teaching is not having the desired outcome and many new medical graduates are not confident in their ability to provide acute and emergency care [2]. These findings can be partly attributed to fewer opportunities in hospitals for students to learn and practise essential clinical skills and apply knowledge. This has come about through an increased number of medical students to address a projected shortage of doctors, economic forces that have changed the way medical care is delivered and changed societal attitudes to be learnt upon. Also, BLS trainers often depart from the curriculum and pass trainees even when performance is poor [3].

The traditional format of an acute care skills course is based on a fixed curriculum and intensive massed learning in a training area. [1] Educationally, learning distributed over time that is individualised to learners’ needs and work environment is more likely to achieve desired outcomes. We wanted to develop a more flexible approach to learning and assessment of BLS and ALS skills that would both record competence and engage learners in self-analysis of the knowledge and skills needed to continually improve performance.

A major barrier to flexible learning has been how to record and track learning and achievement of students at different stages of development and those at distant and remote locations. The Flinders University School of Medicine has campuses in Adelaide, Darwin, Alice Springs and several rural clinical schools in regional centres in South Australia. Some students undertake a whole year of the course in a community setting [4] and all spend some time on a rural healthcare attachment. A web-based product would be best for students to record their learning and experiences and give the faculty a way to track progress. When we recognised the need for reflection and for feedback it became clear that we wanted an e-Portfolio. This paper describes how we are using an e-Portfolio to develop the basis for recognising medical students as achieving BLS and from 2009, ALS provider status.

THE PROJECT

We identified three medical education needs associated with acute care skills:

1. To ensure all students acquire essential knowledge and become proficient in core acute care skills
2. That students can evaluate their own performance and identify how it could be improved
3. A web-based system with data security for students to aggregate evidence of acute care clinical skills achievement from multiple sources

After an extensive search we chose PebblePad, a mature e-Portfolio platform. The core of PebblePad is a personal digital archive (repository) holding a wide range of files (assets). Assets can be tagged when they are saved to the repository and this facilitates searching and repurposing them. PebblePad also has scaffolding features that help students collate evidence of achievement
(e.g. Action Plan) and encourage reflection (e.g. Thought and Experience) to help the transition from healthcare 'novice' to ALS 'expert'.

Components and links in PebblePad (Used with permission of Pebble Learning)

The most recent guidelines on emergency care [5] were used to determine the curriculum, what competencies and related skill sets needed to be learnt and what learning outcomes needed to be assessed. We then considered what activities would be the most efficient in demonstrating that necessary knowledge, skills related skill-sets or competencies and attitudes had been acquired. The curriculum was communicated to students via course booklets and the clinical skills website on the University intranet. The competencies were translated into a series of ‘profiles’ in PebblePad. Students could import these templates into their e-Portfolio and begin populating them with evidence of learning. Items can be submitted to the e-Portfolio by smartphone or PDA as well as by PC.

For BLS, students received comprehensive teaching over several sessions and practised undertaking patient care using whole body patient simulators in a number of settings. Students were assessed on how they managed the scenario of discovering someone who had collapse. A video-recording of the simulated encounter was used for assessment and for providing feedback to students. The video file was offered to students for inclusion in their e-Portfolio where they could reflect and comment on their performance and indicate how they would improve their skills over the next 12 months.
OBSERVATIONS

There are differing interpretations of BLS and some accredited BLS training does not include all the components described in the guidelines. We are now encouraging students to publish links to their BLS video and reflections to demonstrate the high quality of achievement to a wide audience. We are approving BLS competencies locally and we expect the video of skills performance will be used to validate our teaching as well as the achievement of students. Accrediting and other external organisations can see that any and all our students have achieved a high level of attainment in acute care skills (e.g. BLS, etc.) and also other related requirements for clinical placements or work that are often overlooked (e.g. safe use of oxygen, etc.).

Several studies have concluded students and recent medical graduates do not have the competence or confidence to undertake resuscitation [2] but many of our students from all years of the medical course have reported their involvement in providing emergency care (often taking leadership roles) in both hospital and community settings. Clearly our methods are having the desired results.

There are four themes that outline advantages of using an e-Portfolio for acute skills in medical education, including:

- Teaching and learning
  - All faculty can see the curriculum and how and where they are contributing to the big picture
  - All students have reliable access to the same current and explicit curriculum
- Formative assessment
  - Faculty can ascertain that teaching is achieving the desired outcomes amongst students and can identify poorly-performing students and provide additional coaching
  - Students can see the progress they are making in acquiring knowledge and skills and what needs their attention and have a secure and widely accessible location to record experience and achievement and aggregate reflections on this.
- Summative assessment
  - Faculty can track student learning and confirm achievement for award of certificates
  - Students have a record of achievement suitable for job applications, employers and supervisors
- Acculturation and professionalism
  - Faculty can see students are becoming reflective practitioners, developing relevant attitudes and professional behaviour
  - Students can show they can identify gaps in learning and respond to feedback (self regulation)

CONCLUSION

An acute care skills e-Portfolio is transforming our assessment of BLS from being occasional staged snapshots to one of recurrent self-analysis and reflection on personal capabilities and continuing professional development. This self-regulation is the foundation of life-long learning and quality of care, both core attributes of graduate health professionals. We are now extending e-portfolio use to include ALS and acute care skills generally.

Resuscitation (BLS and ALS) cannot be learnt ‘on the job’ without exposing patients to significant risk of poor outcome. Immersive simulation gives students a safe way of to learn. A comprehensive self-audit is needed to avoid gaps in essential knowledge and skills and an e-Portfolio gives faculty and students a way of ensuring competence in all areas of resuscitation and reaching ALS-provider status. Students can also generate a narrative of their development to demonstrate they can analyse their own performance and have acquired life-long learning skills. This process is designed to generate a culture of continuous performance improvement.
Integration of teaching and learning with clinical experience in the e-Portfolio means students have both performance and capability evidence. We need to develop a reporting template for students to record information on medical emergencies they help manage. Our GREAT debriefing tool is a useful aid for reflection and providing feedback. [7]

This approach can be used more widely by trainees and trained staff who have to satisfy requirements of professional and credentialing bodies and employers. These layers have developed independently and individuals now have to maintain multiple collections of evidence of generic achievement in portfolios or logbooks. Items in an e-Portfolio can be tagged and repurposed to make the process more time-efficient. Profiles in the e-Portfolio can be designed to make learning more relevant to health professionals working in specialist areas. In the future, we envisage employers will use e-Portfolios to ensure an appropriate skills mix in healthcare teams tasked with resuscitation.

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Exploiting tacit knowledge through knowledge management technologies

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Abstract

The purpose of this paper is to examine the contributions and suitability of the available knowledge management (KM) technologies, including the Web 2.0 for exploiting tacit knowledge. It proposes an integrated framework for extracting tacit knowledge in organisations, which includes Web 2.0 technologies, KM tools, organisational learning (OL) and Community of Practice (CoP). It reviews a comprehensive literature covering overview of KM theories, KM technologies and OL and identifies the current state of knowledge relating to tacit knowledge exploitation. The outcomes of the paper indicate that Internet and Web 2.0 technologies have stunning prospects for creating learning communities where tacit knowledge can be extracted from people. The author recommends that organisations should design procedures and embed them in their Web 2.0 collaborative platforms persuading employees to record their ideas and share them with other members. It is also recommended that no idea should be taken for granted in a learning community where tacit knowledge exploitation is pursued. It is envisaged that future research should adopt empirical approach involving Complex Adaptive Model for Tacit Knowledge Exploitation (CAMTaKE) and the Theory of Deferred Action in examining the effectiveness of KM technologies including Web 2.0 tools for tacit knowledge exploitation.

Key Words: Knowledge; Tacit knowledge; Knowledge Management Technologies; Organisational Learning; Web 2.0

INTRODUCTION

The era of knowledge economy has been increasingly transforming organisational working practices from a traditional management style into a new management role of using informal commitments and networks to set goals in order to meet customers’ wants (Mullins, 2005; Miles et al, 1997). Macintosh (1999) posited that as marketplace becomes progressively more competitive and innovation increases, knowledge must correspondingly evolve and be assimilated by organisations at a faster rate so as to survive in dynamic business environments. Consequently, organisations could remain competitive in future if they embraced knowledge sharing strategies which would involve human and technological network capabilities for exploiting collective expertise and experience (Greengard, 1998; Drucker, 1998; Turban et al, 2006; Sharif, 2008).

In this respect, embedded knowledge localised in minds of individual workers or a group of employees within a particular department is potentially valuable to organisations but these unstructured, intangible, gut feelings and intuitions are usually difficult to capture and codify (Turban et al, 2006). In addition, early retirements and rising mobility of workforce can lead to loss of knowledge and at same time it takes longer to develop experience that would increase organisational knowledge (March, 1991; Macintosh, 1999). Further to the difficulty of identifying existing knowledge from outside the organisation, lack of time or reward precludes individuals from sharing knowledge in organisations (Turban et al, 2006, p. 373-374).

Similarly, while there are many technologies to support knowledge extraction, the design of some does not provide an enabling environment for members to freely communicate, share ideas and solve problems without information overload or reprisal (Chen et al, 2003; Nyame-Asiamah, 2009). Likewise, many knowledge management (KM) technologies are not fit for cognitive mapping particularly higher level learning (Chen et al, 2003; Firestone and McKiroy, 2004).

The question which unravels in the literature is: ‘What KM technologies are more suitable for capturing tacit knowledge and how effective are these in knowledge creation?’ As a result, the purpose of this paper is to examine the contributions and suitability of the available KM technologies, including the Web 2.0 in exploiting tacit knowledge. It proposes an integrated...
framework for extracting tacit knowledge in organisations, which includes Web 2.0 technologies, KM tools, organisational learning (OL) and Community of Practice (CoP).

This paper synthesises a comprehensive literature covering KM, KM technologies and OL to identify the current state of knowledge relating to tacit knowledge exploitation. It compares and contrasts previously published work as well as connecting empirically reported evidence to the issue of tacit knowledge exploitation. The paper is structured to cover a definition of knowledge, relationship between OL and KM, tacit knowledge and KM technologies, specific KM technologies for exploiting tacit knowledge, KM failure, complex adaptive model for tacit knowledge exploitation, and conclusion and recommendation.

KNOWLEDGE

Knowledge is very difficult to define and as a result, some scholars have tried to describe it as: “Valuable information from human mind, includes reflection, synthesis and context” (Davenport and Prusak, 1997); “a body of facts and principles accumulated by mankind in the course of time” (Clarke, 1992); and “data and/or information that have been organised and processed to convey understanding, experience, accumulated learning, and expertise as they apply to a current problem or activity” (Turban et al, 2006, p.52).

In many instances, the definition of knowledge has been viewed from its taxonomical perspective and primarily, sources of knowledge are categorised into tacit and explicit forms (Polanyi, 1966; Nonaka, 1991). Tacit knowledge exists in the form of mental models, beliefs, values, assumptions and other know-how of individuals which are not easily conveyed (Polanyi, 1966; Nonaka, 1991; Bennet and Tomblin, 2006). On the other hand explicit knowledge resides in various forms of artifacts including procedures, texts, reports, memos and books (Nonaka, 1991; Bennet and Tomblin, 2006). In correspondence with tacit and explicit classification, knowledge is similarly viewed as softer and harder (Hildreth et al, 1999); informal and formal (Conklin, 1996); unstructured and structured (Hahn and Subramani, 2000) and symbiotic and semiotic (Sharif, 2008).

Notwithstanding these classifications, many knowledge management writers agree that both tacit and explicit forms of knowledge are inextricably intertwined (Nonaka, 1991; McAdam et al, 2007). This interdependence of knowledge parts was represented as the duality of participation and reification (Wenger, 1998) and soft-hard duality (Hildreth et al, 1999). Yet another common agreement is the difficulty involved in exploiting softer knowledge (Polanyi, 1966; Nonaka, 1991; Hildreth et al, 1999; McAdam et al, 2007).

In economic sense, knowledge is an intellectual asset for organisations (Davenport and Prusak, 1997) but in the context of information technology, it is defined as: “Information that is contextual, relevant and actionable” (Turban et al, 2006, p. 368). In this regard, technologies for extracting, sharing and managing knowledge in a fast moving digital economy should be robustly useful for communication, collaboration, storage and retrieval of information.

ORGANISATIONAL LEARNING AND KNOWLEDGE MANAGEMENT

In looking at the issue of tacit knowledge extraction, Elliot (2004) proposed that KM techniques should involve the coordination of cognitive understanding of people and knowledge within a given organisation. This dimension of creating knowledge intensive organisations originated from the field of OL, which is defined as: “the capacity or process within an organisation to maintain or improve performance based on experience” (Navis, et al, 1995). In this respect, organisational knowledge obtained through learning processes, development and nurturing of new patterns of thinking are invaluable assets (March, 1991; Senge 1990; Navis et al, 1995; Davenport and Prusak, 1997). Similarly, Argyris and Schon (1978) formulated in their theory of OL that in a double loop learning, people learn to understand organisational environment, develop appropriate responses suitable for new requirements, test and evaluate learning outcomes and provide room for organisations to adapt.

From a holistic perspective, Tsang (1997) conceived that OL is an attempt to engage everyone in an organisation to learn in a conscious, systemic and synergistic way. In a related contribution, Burnes et al (2003) posited that OL and knowledge acquisition are new alternative approaches to
managing organisations, as centralisation approach is no longer applicable in a complex and fast
changing business environment, which requires immediate, wide and varied responses to
addressing problems. From a technical point of view, Easterby-Smith and Araujo (1999) observed
that OL is a way of processing, manipulating, deducing and reacting to information which is open to
people through a public gateway. In his work on 'CoP', Wenger (1998) perceived learning as an
everyday life experience in which members of common interests or ideologies interact and share
knowledge on a topic relevant to a group. Members become actively engaged in a social learning
environment in which they develop and spread new ideas in an attempt to improve professional
practice.

On the other hand, KM is defined as: ‘the set of processes developed in an organisation to create,
store, disseminate, and apply the firm’s knowledge’ (Laudon and Laudon, 2003, p. 317). In this
regard, Davenport and Prusak (1997) outlined KM schemes aimed at making knowledge more
visible, developing knowledge intensive culture and building a knowledge infrastructure in order to
maximise the use of knowledge. Recent advancements in KM have been spearheaded through
knowledge life cycle (KLC) framework in which problems in business processes arise and through
which new knowledge is produced (Firestone and McElroy, 2004). To put it in another way, KLCs
are mechanisms through which individuals in organisations learn new generalising and
unambiguous problem-related knowledge including mental and cultural models, and find solutions
for organisational adaptation (Firestone and McElroy, 2004). In other words, the connection
between OL and KM is eminent, particularly in the area of double loop learning (Firestone and
McElroy, 2004). Hence, OL and KM are recommended to be studied jointly (Bennet and Tomblin,
2006; Firestone and McElroy, 2004).

The issue is where do we implement OL and how should we do it? There is a reasonable
agreement in the literature that the implementation should be carried out in an unpredictable
environment where emergent change, task culture and network structures can be achieved
(Burnes, 2003; Nyame-Asiamah, 2009). However, opinion differs on the implementation methods
(Burnes, 2003). Amongst these are: Senge’s five inter-related disciplines consisting personal
mastery, mental models, team learning, shared vision and system thinking (Senge, 1990), four step
approach comprising knowledge acquisition, information distribution, information interpretation and
organisational memory (Huber, 1991) and a three-dimension organisational learning framework
(OLF) consisting mental systems, main/business processes, and individual and joint learning
(Mets, 2002). Similarly, Nonaka (1991) propounded ‘Knowledge Spiral Model’. Scarbrough and
Swan (1999) and McCampbell et al (1999) proposed that knowledge exploitation and management
strategies should include: Knowledge leadership support, knowledge friendly culture, knowledge
strategy, organisational design, incentive systems and technology deployment. Likewise, Bhatt
(2001) recommended five stages of harnessing knowledge, which are knowledge creation,
knowledge validation, knowledge presentation, knowledge distribution and knowledge application.
Firestone and McElroy (2004) further conceptualised at least nine processes of managing
knowledge and these include knowledge production, knowledge integration and changing
knowledge processing rules.

Despite differing views on the above approaches, these authors aim at generating new ideas,
sharing them amongst individuals and groups, and using a new kind of collective thinking for
institutional improvement or transformation. In effect, they all try to achieve agile organisations
which exhibit the following features: Effective and efficient use of communication networks; easily
accessible information and knowledge repositories; software for updating and integrating new
information, systems and attitudes for improving managerial processes and business value chain;
and ability to adopt renovations (Laudon and Laudon, 2003; Mullins, 2005; Turban et al, 2006).

TACIT KNOWLEDGE AND KM TECHNOLOGIES

Traditionally, tacit knowledge of individuals was extracted through storytelling techniques where
people sat around fire camps and swapped stories in village communities (Denning, 2000).
Storytelling unveils unseen tacit knowledge and generates meanings from sentences, which are
told messily from narratives to reminiscence. Storytelling is therefore capable to connect
knowledge with emerging context, introduce masterly skills, provide meanings for association and
structures, create an environment for dialogue, explain adaptive changes, reveal the creativity of
an individual and reconstruct authenticity (Denning, 2000). Storytelling is therefore an effective
learning technique for persuading people to externalise their values and beliefs, to share their knowledge, to work together, to change and to lead them into the future.

In his 'Knowledge Spiral Model', Nonaka (1991) noted that knowledge creation is a continuous process of interaction between tacit and explicit knowledge of human activities which twirl around socialisation, externalisation, combination and internalisation stages. According to Nonaka (1991), socialisation involves discussions and sharing of implicit knowledge, experiences and observations amongst individuals with no intention of transferring such ideas into explicit knowledge. Externalisation involves various processes which translate tacit knowledge into explicit form while combination re-arranges existing explicit knowledge into a more structured form for an organisational use. Finally, internalisation converts explicit knowledge into tacit form by learning through codified knowledge and ascribe to it.

In relation to the above, March (1991) proposed a Model of Mutual Learning which examines how individuals and organisations learn to increase and utilise knowledge in his oft-cited publication on: ‘Exploration and Exploitation of Organisational Learning’. March (1991) recognised that employees who are slowly socialised into the organisational procedures and beliefs are likely to increase the organisational code, and more importantly the knowledge they contribute remains in the organisation even after their departure. In the model, March (1991) assumed that:

• a reality which is independent of belief about it
• the continuous modification of individuals' beliefs resulting from organisational socialisation
• adaptation of organisational code to the beliefs of individuals

In this respect, tacit knowledge can be exploited through externalisation where as explicit knowledge can be acquired through internalisation.

Similarly, McAdam et al (2007) introduced an interesting model of knowledge which examines the boundaries of tacit knowledge and how it can be transcended into explicit knowledge. They postulated that tacit knowledge is a separable knowledge and at the same time an embodiment of all knowledge which can or cannot be converted into tacit knowledge. They maintain that through codification and conversion mechanisms, tacit knowledge can be externalised and shared within a social domain. In this respect, McAdam et al (2007) share a common view with Bennet and Tomblin (2006) on tacit knowledge exploitation. However, McAdam et al (2007) place emphasis on experience and social interaction rather than codification and externalisation of mental models.

Looking at the knowledge model from a different angle, Bennet and Tomblin (2006) examined knowledge including tacit knowledge from an input-output framework in which knowledge is considered as input and output of learning as well as a source of knowledge management. In addition to marrying KM and OL as a synergistic paradigm for managing organisations, Bennet and Tomblin (2006) incorporated information and communication technology (ICT) as enablement for individuals and groups' learning and knowledge processing tools. Similarly, Firestone and McElroy (2004) upheld the same conception of creating knowledge through a combination of OL and KM philosophies. In contrast to the inclusion of ICT in Bennet and Tomblin’s knowledge creation model, Firestone and McElroy (2004) conceptualised that an organisation should be seen as an open enterprise with a distributed knowledge-processing environment which continuously adapts to its changing environment. In this regard, they proposed that knowledge exploitation process should be considered within a framework of KM, OL and complex adaptive system (CAS) perspectives.

KM technologies are built to support continuous improvement of business processes and they include communication, collaboration, and networking functionality to support knowledge capture, storage, structure and distribution (Scarbrough and Swan, 1999).

Examples of the technologies are e-mail, the Internet, intranet, fax machines and telephones for communication; collaborative computing tools including groupware and electronic brainstorming capabilities; and databases including data marts and data warehouse for storage and retrieval of information (Turban et al, 2006, p. 377-381; Laudon and Laudon, 2003, p. 318-327). For instance, BP exploited knowledge stored in the minds of its employees through the use of communication technologies including e-mail, internal web and video conferencing, which linked employees in cellular forms (Brooks, 2000). Similarly, Dotsika and Patrick (2006) identified that proportion of
corporate knowledge management systems often depend on Internet-based collaborative computing tools including corporate portals, knowledge management suites and intranets. Likewise, Chen et al (2003) disclosed a number of technologies which have capabilities to support building and dissemination of individuals’ shared mental models within organisations. These include executive cognitive support, expert systems, learning laboratory, collective and cognitive mapping systems and most of them have functionalities to represent, modify and share individuals and organisational members’ personal convictions.

**SPECIFIC KM TECHNOLOGIES FOR TACIT KNOWLEDGE EXTRACTION**

In this section, we would examine some technologies used for exploiting tacit knowledge and how they relate to the models of OL and knowledge creation. These include executive cognitive support, learning laboratory, collective cognitive mapping systems, enterprise knowledge portals and personal information portals, knowledge management suites, emails, electronic discussion boards and brainstorming applications.

**Learning Laboratory**

This is a consultative technique of higher order learning where individuals’ assumptions, beliefs and insights are brought into action in a simulated problem solving environment. According to Pourdehnad et al (2002), such environment is: “Neutral and non-threatening”. Learning Laboratory is a form of a ‘virtual world’ often called a microworld system where individuals can examine the effects of their own decisions and share them with the other agents in a collaborated environment (Chen et al, 2003). Learning Laboratory helps participants to develop deeper understanding of their beliefs and discover inconsistencies in their mental models and that of their organisations (Pourdehnad et al, 2002). In this regard, an interactive experimentation and learning between members in the team allow the exploitation of individuals' tacit knowledge.

In a recent success story, United Parcel Service Inc (UPS) used Integrad Learning Laboratory comprising online learning, three-dimensional models, podcasts, videos, and traditional hands-on and classroom methods for exploiting new drivers and trainees skills on the task of carrying a package across a slippery surface without getting hurt (Ketter, 2008). UPS used focus group involving hundreds of UPS staff, eight professors and 16 students from Virgin Tech to design the Integrad Learning Laboratory; and the company has acknowledged that the safety performance of their drivers since the launch of the technology has exceeded their expectations (Ketter, 2008).

However, one major disadvantage of this tool is that people may not premeditate careful over their actions as simulated spaces are not reality (Chen et al, 2003).

**Collective Cognitive Mapping System**

This is an archetype system consisting four key functionalities for exploiting soft knowledge: An episodic memory representing a container of individual cognitive maps; organisational memory representing a reservoir of collective cognitive maps; a local cognitive map generator which translates individual mental models into graphical representations; and a central collective cognitive map generator which exploit cognitive maps of all members and use them for collective problem solving. Chen et al (2003) emphasised that collective cognitive mapping systems have capabilities to assist individual members in an organisation to articulate, share and synthesise their visions with their peers. In other words, collective cognitive mapping systems are tools for replicating the mental model discipline of Senge (1990), as it can support people to unearth their internal pictures of realities, bring them to surface and hold them thoroughly to examination. In this case, individuals' tacit knowledge become authentic for organisational use thereby confirming the applicability of storytelling technique (Denning, 2000) and, socialisation and externalisation processes of knowledge creation (Nonaka, 1991).

**Executive Cognitive Support**

This system helps higher level learning and knowledge creation, and provides opportunity for organisational executives to identify tacit knowledge and externalise it into graphical representation (Chen et al, 2003). This is often referred to as Executive Support System (ESS) and Laudon and Laudon (2003, p. 45) defines it as: “Information systems at the organisation’s strategic level
designed to address unstructured decision making through advanced graphics and communications”. One great advantage of ESS is that they are tailored to meet the executive decision style and executives with minimum computer skills can use the user-friendly tools of ESS to generate graphic comparisons of data on business processes (Laudon and Laudon, 2003, p. 367). In addition, ESS provides easy and quick opportunities for managers to identify problems themselves instead of placing reliance on their subordinates (Leidner and Elam, 1995).

**Enterprise Knowledge Portals and Personal Information Portals**

Enterprise Knowledge Portals (EKPs) are information gateways which provide access to internal and external sources of information including web-browser interfaces, structured and unstructured content management, integrated data and applications, and collaborative work capabilities (Campos, 2008). In other words, EKPs include internet, intranet and extranet sites of organisations (Dfouni and Croteau, 2004).

Internet is defined as: ‘International network of networks that is collection of hundreds of thousands of private and public networks’ (Laudon and Laudon, 2003, p. 17). Thus, Internet provides tools for inter-group contact with advantages of creating a secure environment, minimising anxiety, removing geographical barriers, creating equal status and maintaining friendly atmosphere in such contacts (Amichai-Hamburger and McKenna, 2006). Intranets are corporate communication networks which are normally linked to the Internet technologies with restricted access to the internal users of organisations (Turban et al, 2006). Intranets provide platforms, especially emails for shared individual and corporate knowledge as well as improving creativity and innovation (Hills, 1997). Contrary, extranet is a private intranet which allows access to authorised third parties (Laudon and Laudon, 2003, p. 23).

Therefore, EKPs provide collaborative platforms for knowledge production and sharing which can be tested and incorporated into previously knowledge claims capabilities (Davenport and Prusak, 1997; Campos, 2008). In view of the above, the second generation of web technologies (Web 2.0) which include social network sites, wikis and audio podcasting, video sharing and collaborative tools, and online chat technologies are very effective for learning and knowledge creation.

Emergence of Web 2.0 technologies have provided opportunity for many personal information portals which contain knowledge confined to individuals to be migrated into EKPs. In this respect, some professional bodies and educational institutions are using web-based Continuing Professional Development (CPD) and Virtual Learning Environment (VLE) to enhance the transfer of tacit knowledge into explicit knowledge (Harris, 2008).

In relation to the above, Harris (2008) elicited the views of 200 business managers through personal and focus group interviews, and mail-based questionnaires to find an effective technique for CPD support within the University of Wolverhampton. The author established that a web-based portal would be an ideal KM technology to support an effective CPD delivery within the university. In addition, Harris (2008) concluded that smart phones like Blackberry support the conversion of Personal Digital Assistant (PDA) platforms into a Collaborative Learning Environment where learners could share ideas and experiences. Similarly, Arani (2008) established that mobile-based interactive learning tools like SMS and PDA are useful tool for classroom interaction, communication and feedback. In his research involving literature review and a survey of forty English for Medical Purpose students, he identified that over 90 percent of the respondents found ‘SMS Feedback’ very useful, efficient, interesting, interactive and preferred method of communication among learners.

However, the cost of using SMS as a learning tool was considered expensive (Arani, 2008). In a related argument, Dotsika and Patrick (2006) posited that a 24/7 technologically linked world throws information by bucket when only glassful is needed. In other words, the deployment of intranet on a firm’s Internet site may lead to unproductive staff hours as some staff may be tempted to stay on the internet browsing some site for their own interest.

**Knowledge Management Suites**

These are complete KM solutions which integrate communication, collaboration and storage technologies into a unified package (Turban et al, 2006; Dotsika and Patrick, 2006). As a strategy to learn more about its customers and meet their expectations, Commerce Bank deployed a
workflow-based knowledge management system which could offer immediate online solutions to staff and customers' queries. Thus, the collaboration and communication capabilities of this technology help employees to learn business processes, unlock their tacit knowledge and share them among their peers. In the case of Commerce Bank, the development of Knowledge Management Suite, Wow Answer Guide proved very effective with a weekly cost saving of $20,000.00 (Turban et al, 2006, p. 385).

**Email**

In his study involving the effective framework for CPD support within the University of Wolverhampton, Harris (2008) observed that email was highly ranked as an effective and most important method of knowledge conversion from one person to another. Similarly, Dfouni and Croteau (2004) identified email as a topmost socialisation tool for extracting and sharing unstructured knowledge. The authors used web-based Delphi survey to gather data on ten popular KM technologies from 150 Knowledge Leaders and mapped them against the Nonaka and Takeuchi’s knowledge creation. Overall, email was ranked as third effective KM initiative tool but it attracted far higher rating than electronic discussion boards which was ranked eighth and also classified under tacit-tacit quadrant (Dfouni and Croteau, 2004).

**Electronic Discussion Boards and Brainstorming Applications**

Electronic Discussion Boards are virtual communication tools which allow individuals in ‘CoP’ to post questions and comments online and engage others in discussions. These virtual engagement environments are often called message boards, bulletin boards and discussion forums. As highlighted above, electronic discussion boards are useful KM tools for sharing beliefs and mental models of individuals (Dfouni and Croteau, 2004). Such virtual discussions resonate the patterns of primal narratives of storytelling and convey the potent meanings and implications behind assumptions for organisational transformation. To put in a different way, these technologies reaffirm the rationale behind Denning’s storytelling techniques (Denning, 2000) and correspond to the participation and reification duality map postulated by Wenger (1988) in his work on CoP.

Brainstorming Applications are resourceful tools for sharing, recording, organising and evaluating ideas, and thereby useful for creating knowledge. These applications support creative thinking and translate tacit understanding into explicit knowledge (Offsey, 1997). In the context of Denning’s storytelling technique, collective cognitive mapping tools repeal the conventional way of discussing ideas at the highest level and enact the order of interacting with people at the middle or lowest level for the needed information (Denning, 2000).

One potential disadvantage of electronic discussion is that some governments uphold stiff rules regarding people’s conviction or what they may say (Tolley, 2008). In particular, Tolley (2008) indicated that the Italian government would shut down blogging servers and prevent people from articulating their views online if she could.

**KNOWLEDGE MANAGEMENT FAILURE**

Despite the effort being made by organisations to use technologies in their knowledge creation and management strategies, many publications have revealed evidence of KM failure in organisations (Ambrose, 2000; Desouza, 2003; Turban et al, 2005). The reasons for this include: Failing to communicate KM strategies well with staff, refusal of best employees to publish their good ideas on KM platform, staff showing lack of interest when KM systems become fully implemented, poor content management techniques and lack of incentives for KM system users (Turban et al, 2005; Barth 2000). Others maintain that Web 2.0 and social software developers usually base their design approaches on ‘technology to the user’ (Dotsika and Patrick, 2006) and this undermines the cognitive maps of individuals who will use the tools for knowledge extraction (Chen et al, 2003; Firestone and McElroy, 2004).

Expert System failed in 1980s because it was focused more on the harder aspect of knowledge at the expense of softer knowledge thereby making it inadequate for extracting tacit knowledge (Hildreth et al, 1999). In view of this, Patel (2005) postulated in his Theory of Deferred Action (ToDA) that KM systems and social software need to be designed in the context of a valid theory of organised action and this needs pursuing.
COMPLEX ADAPTIVE MODEL FOR TACIT KNOWLEDGE EXPLOITATION

Drawing from the inspiration of the above knowledge and learning models: Model of Mutual Learning (March, 1991); Knowledge Spiral Model (Nonaka, 1991); Model of Tacit and Explicit Knowledge (McAdam et al, 2007); KM, OL and ICT (Bennet and Tomblin, 2006); KM, OL and CAS (Firestone and McElroy, 2004) and Storytelling (Denning, 2000), we have proposed a new framework for tacit knowledge exploitation. Please see Figure 1 below. The Complex Adaptive Model for Tacit Knowledge Exploitation (CAMTaKE) combines KM technologies and Web 2.0 tools with the fundamental ideas of a Mutual Learning, CoP, Storytelling, OL and KM models in a CAS where individuals, teams and groups use multiple interactions to extract latent knowledge.

Within a CAS, various agents of learning exploit new knowledge and solve problems in sincerity as demonstrated in the funnel in Figure 1. Thus, there is a distributed knowledge-processing platform which creates equal opportunity and autonomy for participants’ interaction without reprisal. Tacit knowledge is therefore exploited and shared between individuals, teams and groups, and transferred into all forms of explicit knowledge through externalisation. Reified knowledge is further developed to invigorate agents’ cognitive maps for emerging knowledge and sharing of new experiences. The inclusion of the Web 2.0 collaborative tools makes the CAMTaKE more effective for creating knowledge at a faster speed.

![Figure 1: Complex Adaptive Model for Tacit Knowledge Exploitation (CAMTaKE)](image-url)
CONCLUSION AND RECOMMENDATION

One key point of noting is that the above KM technologies provide enormous support for creating knowledge not previously known to a ‘learning community’. Once hidden knowledge is reified and shared, organisations can further explore it for knowledge diffusion and management innovation. The overall knowledge powerhouse begins to expand. In this case, departure or retirement of knowledge workers will not have a huge negative impact on business processes. Therefore, we have to give credit to KM technologies and tools, especially the web enabled ones which readily support group learning, multiple collaborations and communication, to unearth tacit knowledge. It is evident from our discussion that these emerging technologies have brought huge improvements in many businesses and continue to support organisational transformation.

We have also established that technologies for extracting tacit knowledge should be designed in the confines of individuals’ cognitive behaviour while human techniques should be formed around natural processes of individuals. In other words, extraction of soft knowledge should be considered in a dynamically real time environment where there is a continuous interaction among learners who harness user-friendly tools for learning. Evidence from this paper has revealed that Internet and Web 2.0 technologies have stunning prospects for creating learning communities for people and extracting tacit knowledge. However, the issues are: What happens if people refuse or stop sharing their ideas and experiences on these platforms? Should we use sanctions to enforce them or should we use more democratic working ethics to persuade these individuals? Can we still claim the possibilities of exploiting tacit knowledge through KM technologies in such circumstances? Thus, the effectiveness of these tools in tacit knowledge creation needs further empirical study, particularly in relation to human responses to emerging learning technologies.

Notwithstanding these, it is believed that the status quo of digital economy will not detract the world from using Internet and Web 2.0 technologies and as a result, organisations need to find as many channels as possible to attract their employees into learning communities. In this respect, the author recommends that organisations should design procedures and embed them in their Web 2.0 collaborative platforms persuading employees to record their ideas and share them with ‘X’ number of staff, depending on the size of a particular setting. It is imperative to stress that no idea should be taken for granted in a learning community where an organisation wants to exploit tacit knowledge for transformation.

As a consequence of the above, we recommend that knowledge creation and management strategies must encompass transparent and multiple interactions of organisational agents, shared mental maps, new generation of collaborative and distributed knowledge technologies including Web 2.0, absolute commitments of organisational members and self-organising attitude. We also propose that researchers and practitioners should consider the integration of these strategies (CAMTaKE) for tacit knowledge exploitation and management for organisational transformation. Design of KM technologies also needs to consider the application of ToDA.

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Use of an E-Portfolio to Support the Recording, Reflection and Presentation of Academic, Career and Personal Development

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Introduction

This case-study paper analyses the affordances of an e-portfolio in relation to supporting students on placement and in developing, recording and reflecting on employability skills during the City University MA Publishing Studies programme.

This paper draws on the collaborative working model established between the Programme Director, City University’s Learning Development Centre (LDC) and the Centre for Career and Skills Development (CCSD).

Since the introduction of the e-portfolio on this programme in 2006-7, this paper attempts to capture the evolving practice in the use of e-portfolios which as will be demonstrated started as a bolt-on activity, but is now moving to the heart of curriculum delivery. The paper will examine the reasons for this development, both from the point of view of the needs of the students on the programme and a growing recognition of the potential of e-portfolios to meet the programme learning outcomes.

Background

The MA in Publishing Studies at City University is a one-year MA with 20 weeks of teaching, a five-week compulsory placement, and a dissertation element. The programme recruits from a wide base including overseas and mature students. Some students are straight from a first degree whereas the mature students are either career changers or publishers seeking to develop their career prospects or move sector. In 2006-7 there were 17 students on the programme, 16 in 2007-8, and 17 in 2008-9.

The job market in the publishing sector is traditionally very difficult to enter; having gained some experience, individuals with skills can often move between companies and sectors. The Programme Director’s ‘career’ aim for the programme is to equip the students to identify their career focus and have the knowledge and skills to apply for appropriate roles.

E-Portfolio implementation

The University’s e-portfolio system, PebblePad, was introduced to this Programme’s 2006-7 and 2007-8 student cohorts in order to develop reflective diaries and to capture evidence towards CV preparation and job searches. However, the uptake was low in 2006-7 because reflective and professional learning was not fully integrated into the assessment criteria. In 2007-8 the students opted instead to keep group blogs on Blogger. This proved difficult for the Programme Director to administer as there were continuing permission problems in gaining access to the students’ work. Students also found it difficult to develop a Placement Report on the blog as the structure was chronological rather than thematic; and they could not easily add links to evidence of their skill gains.

The e-portfolio system was more fully integrated into the 2008-9 programme delivery and assessment to encourage the students to reflect on their learning and development throughout the programme. Students received a hands-on technical induction in September 2008 to introduce them to the e-portfolio system and to demonstrate how they could use the e-portfolio to help them to record and reflect on their development. Resources and structured activities were made available to students to help them to reflect on the experience of the programme; recording evidence of their career development, reflecting on career-specific content; self-assessing against
National Occupations Standards key competencies, contribution to a collaborative blog while on placement, set placement goals and develop a placement report.

**Personal starting points and goals: career input**

As part of the enhanced career content offered to the 2008-9 students, in Term 1 CCSD developed and delivered a workshop for students based on the Type Dynamics Indicator (Team Focus 2009). On completion of a short online questionnaire, the Type at Work profile offers an individual assessment of personality preferences as expressed in the work context. Its findings can be compared to the Myers-Briggs Type Indicator (MBTI) which is widely used in organizational and managerial training and development. The MBTI profile is based on four pairs of contrasting psychological differences, including Extraversion/Introversion; Sensing/iNtuition; Thinking/Feeling; and Judging/Perceiving. The Type Dynamics Indicator report identifies respondents' preferred style as one of 16 psychological 'types', including Inspector, Guide, Investigator, Analyser, Supporter and Harmoniser (Team Focus 2009).

The purpose of the Type Dynamics Indicator workshop for the City MA in Publishing students was to use innovative, 'hands on' methods to increase self awareness as to students’ personal characteristics and preferences and how these can relate to the world of work, and specifically to their group role preferences. The workshop culminated in a structured reflective activity which was recorded in the students’ e-portfolios.

The assessment criteria for the Term 2 e-portfolio Placement Report, as outlined below, offered credit for reference to the students’ individual Type at Work profile as one of the theoretical models they could apply to the analysis of their experiences on placement. One student provided this feedback on this activity:

> I had initially been skeptical about all this ‘career progression’ stuff. However, I think doing the ‘at work’ type test was really useful as it allowed me to consider the sort of worker that I really am. Whilst I've not had a formal interview for a publishing job yet, I understand that it would be very useful were I asked about my work preferences. Prior to doing all the career workshops I wouldn't have even known where to start and probably got quite flustered. If anything, it gives more of a sense of confidence before entering an interview situation. Which can only be a good thing.

Other career-related activities offered to the 2008-9 students included CV and interview workshops, with industry visitors as well as the active support of CCSD.

**Assessment**

The e-portfolio formed the basis of the 2008-9 Placement Report, a course module which accounted for 10 credits towards the MA. The students were asked to deliver their e-portfolios for assessment as personal reflective webfolios linked to a shared group blog, developed during the students’ five-week placements. The assessment criteria for this Placement Report element, built upon Term 1 reflective learning assignments, included:

- initial personal placement goals
- evidence of developments in your knowledge and skill during your placement, including at least one weekly blog post
- analysis of your achievements during your placement
- a feedback report from your placement mentor and your response to that report
- reflective content on your learning gains, including: your reflective PebblePad entries since September 2008
- a brief report on the London Book Fair in April 2009
- identification of lessons learned for the future, eg new personal or career goals, development of your CV, jobs applied for/achieved.

The aims of these assessment processes were consistent with Barrett’s (2005, p.16) criteria for ‘Assessment for Learning’ rather than ‘Assessment of Learning’. Some elements of the
assessment however clearly fall in the ‘of Learning’ category, especially as the e-portfolio was a compulsory, assessed element of the 2008-9 MA.

To quote Barrett again (2005, p. 15), this implementation was designed to encourage students to engage initially through ‘Extrinsic Motivation’ in the form of assessment and credit; and at the same time to encourage them to take control over the content of the shared placement blog, with informal and overseeing input only from the Programme Director, to encourage ‘Intrinsic Motivation’. Overall, this approach resulted in ‘Mixed Motivation’ to engage with the activity. Comments from focus groups and other feedback demonstrate the 2008-9 students’ awareness of this Mixed Motivation:

- While the collaborative blog felt like ‘forced reflection’, most would still have used it if it was not assessed, albeit not necessarily for such proscribed time periods. Most other features [of the e-portfolio] would not have been used if not assessed.
- Mostly used [the e-portfolio] for blog contributions during work placements. Would probably not have used it if not assessed.
- The blogging and reflection forced me to think about my place within the publishing industry. The 5 week placement became more than simply fulfilling a requirement for the MA. Rather, it enabled me to think critically about my career aspirations and where I fit in. I am still pondering.

Outcomes

The shared blog

The students’ contributions on the shared blog were not universally active or detailed, and many were initially quite flippant. The tone of the blog, facilitated by the Programme Director and to some degree moderated by the LDC, was however swiftly established as a relaxed space where joking was acceptable. Through the students’ five weeks of placement, their cumulative posts and comments, which became increasingly rich and interactive, amply fulfilled the hope that the blog would encourage the students to share and celebrate their achievements, experiences and successes on placement at the same time as using the blog to keep a diary towards their Placement Reports. Most also commented on others’ blogs – an assessment element which was introduced to encourage these future publishers to explore the effects of this private social network.

The Programme Director also uploaded photographs taken when visiting the students on their placements – as visual evidence of the breadth of experience gained across the group, in a wide variety of work settings.

As the delivery deadline approached, the character of the posts began increasingly to reflect the marks allocated to contributing to the blog. Some students attempted to rectify their lack of engagement up to that point; others took advantage of the subsequent offer to accrue credit by acting as ‘summariser’ of the themes posted on the blog; one posted at length on his personal struggles with the level of trust needed to post on a shared blog without causing offence to others.
The overall effect of these shared blog posts, in their descriptions, humour and honest comment, is arguably comparable to the effects of storytelling as described by McDrury and Alterio (2003), who define levels of complexity in Learning through Storytelling consistent with Moon’s (1999) Map of Learning:

<table>
<thead>
<tr>
<th>Map of Learning (Moon, 1999)</th>
<th>Learning through Storytelling</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noticing</td>
<td>Story finding</td>
</tr>
<tr>
<td>Making sense</td>
<td>Story telling</td>
</tr>
<tr>
<td>Making meaning</td>
<td>Story expanding</td>
</tr>
<tr>
<td>Working with meaning</td>
<td>Story processing</td>
</tr>
<tr>
<td>Transformative learning</td>
<td>Story reconstructing</td>
</tr>
</tbody>
</table>

Source: McDrury and Alterio 2003, p. 47.

The MA in Publishing students often experience difficulty in identifying the learning benefits of carrying out everyday business processes while on placement (eg answering the telephone, or photocopying) – issues which could be said to correspond to ‘Noticing’ and ‘Story finding’ in the table above. The Placement Report assessment aimed to encourage the most capable of them to explore the more advanced types of learning described above, by analysing their experiences in light of learning and group role theory (including the Type at Work profile, described above). The blog provided an effective environment as the basis of these formative learning gains.

One student, not a blog enthusiast at first, commented on the social as well as the potential learning benefits of the blog in a ‘summariser’ blog post on 2 April, during their first week back in class after their placements:

I actually like it! To be honest, I find the posting all a bit staged and artificial, but I guess it's going to be when we had to do at least once a week. The comments, however, are a great resource. Some of the exchanges are brilliant, and I could see how this will be helpful if you have questions that need answering or advice while on placement. Maybe next year it could be utilised more informally, MAK? In other words, people are asked to blog when something particular comes up? Isn't this medium meant to be informal?

I still think that this is a bizarre form of interaction. If you think about, in the week since we have back at uni, we didn't manage to find time to talk face-to-face about our various achievements. In the blogosphere we are busy chatting, but the classroom we are busy not chatting. Seems bizarre to me.

That's it. If I think anything else, I will blog...

The personal e-portfolios

The best of the e-portfolio Placement Report submissions, not yet marked at the time of writing, also promise to fulfil the aims of using PebblePad in this way: they employ the interactive medium elegantly and actively; link to a range of other media; and admirably fulfil the content areas and other marking criteria listed above, including reflection and analysis. Other students have however used the e-portfolio environment purely as a delivery platform for Word documents – a kind of PebblePad dropbox – and have not explored or exploited the medium. This programme will therefore seek to more fully integrate the use of the e-portfolio in the 2009-10 delivery; and explore the potential to allow credit for evidence of and reflection upon an optional, individual publishing project throughout the year in addition to the formal credit available for the Placement – ie using the e-portfolio throughout the year as a personal portfolio, with further associated teaching and induction. Student feedback has also supported this approach. When the students were asked in focus groups what advice they would give to new students on the programme about using an e-portfolio, their comments included:
It may be better if students are asked to engage with the system earlier in the course. If assessments regularly required use of PebblePad, students may be more confident with, and positive about, PebblePad.

**Conclusion**

This case study supports the findings in the literature (e.g. Tosh et al. 2005) that e-portfolios, for success, demand integration, support and immediate relevance to the students’ personal needs and motivations. In the 2008-9 academic year, the Programme Director introduced an assessed e-portfolio as the basis of the programme’s Placement Report. This paper has outlined the associated learning benefits, which will be demonstrated in our associated conference presentation. These benefits included a collaborative, informal blog; and individual students’ structured learning reflections, including links to evidence of their skill as well as knowledge gains. Encouraged by the assessment process, the 2008-9 students engaged with the e-portfolio tool in a structured, collaborative way. As outlined above, the Programme Director proposes to integrate the e-portfolio more fully into the 2009-10 delivery of the City MA in Publishing Studies.

**References**


Evaluation of the Implementation of an ePortfolio System – Processes Versus Platform?

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Introduction

This work-in-progress paper reports on our evaluation of the institution-wide phased implementation of an e-portfolio system at City University. It discusses the methodologies and results of the evaluation and discusses how successful the e-portfolio system and the University's current support model is in engaging students in the processes of:

• Information/evidence collection
• Organisation
• Reflection
• Planning
• Feedback
• Collaboration and
• Presentation. (Adapted from Hartnell-Young et al., 2007, JISC 2008)

Higher Education institutions are using e-portfolio platforms to support various requirements across diverse programmes. Inevitably, there are some inherent contradictions, for example between assessment of and for learning and between personal and institutional ownership.

This paper uses the results of the evaluation to address the extent to which the affordances of the e-portfolio platform have enabled the realisation of the range of processes demanded by both staff and students.

Background

City University is a medium-sized university that focuses on courses for business and the professions. The University has piloted the e-portfolio system, PebblePad, since 2005. In 2008-09 the University has moved to phased implementation of PebblePad and made e-portfolio accounts available to all year one Undergraduate and Postgraduate students. The e-portfolio has been used to support a number of different activities across a diverse range of programmes. In some cases the e-portfolio system has been integrated into programme curricula, in others an e-portfolio activity runs in parallel to the programme. In addition students may not be using the e-portfolio system as part of their formal course, but have an opportunity to engage in developing an e-portfolio supported through a self-directed online module entitled Improving my Success which supports Personal Development Planning (Improving my Success has been adapted from the My PDP module developed at University of Dundee.)

Methodology

Students were surveyed in March 2009 to evaluate how the e-portfolio platform PebblePad supports students in e-portfolio-based processes. An online survey tool (Bristol Online Survey) was used to gather the data. 72 students responded to the survey, however after careful inspection 7 responses were deemed invalid, as the respondents had not used PebblePad at all. Students were from all Schools apart from City Law School whose students do not currently use the e-portfolio. The student survey was comprised of 22 questions, the majority multiple choice, to get student views on the purpose of using an e-portfolio on their programme, their experience of using an e-portfolio to support different processes and how they would like the e-portfolio to be used on their programme.
In addition, three focus groups with 17 undergraduate and postgraduate students were carried out as a follow up to the survey. Each session lasted for approximately 35 minutes with one of the researchers acting as facilitator; two separate topics guides were utilized to accommodate the difference in the e-portfolio’s usage by the undergraduates and postgraduates. The focus groups format aimed to follow that of current research practices – the facilitator would guide the discussion and allow the students to discuss the issues amongst themselves, a scribe noted down any major themes that were raised, whilst each focus group was audio recorded for future analysis (see Litosseliti, 2003; Greenbaum, 2000; Bloor et al, 2001; Krueger & Casey, 2000).

The aims of both the online survey and the focus groups were to find out how effective our current support model is in scaffolding the student of using e-portfolios:

- Analyse the efficacy of the e-portfolio platform in supporting students in e-portfolio processes.
- Identify from the survey and focus group the processes that are well supported using the e-portfolio system and areas where further support is required.

Survey results and analysis

Graph 1: Graph of Tools and functions within PebblePad used to develop an e-portfolio

Reflection

“Reflection is the heart and soul of a portfolio.” (Barrett, 2007)

From our survey we have found that the most widespread activity that students engage in is in the use of the e-portfolio to keep a reflective diary using the blog tool as the diary and the thought record to structure their reflective entries. 57% of students who responded to the survey agreed that PebblePad was useful for recording thoughts and reflections. When asked how PebblePad should be used on their course the most popular choice was to enable students to critically reflect on their learning and development. From our own work with staff who are introducing e-portfolio activities into their programme it is clear that they favour reflection or planning activities. Survey data supports the view that keeping a reflective diary is one of the main activities (40 of the respondents indicated this as one of the main activities that they use PebblePad for).
Similarly the focus group showed that most students primarily used PebblePad for writing up their thoughts and reflections. Interestingly, although some students found posting to an assessed collaborative blog was a forced activity, one student used the phrase ‘forced reflection’, most of the interviewed students would still have used the blog tool even if it were not assessed.

“I find it a great tool to act as my ‘digital diary’. (Survey response)

“It gives me an easy-to-follow structure for writing my reflective logs and planning how I will develop my skills (based upon feedback from my clinical tutor).” (Survey response)

Planning

From our survey the action plan along with the experience is rated after the blog and thought as the third most used record in PebblePad. Planning is the second most popular activity that students used PebblePad for (17 respondents used it to plan for areas of development and seven used if for planning for projects and assignments).

“It creates a clear visual overall view on my objectives. I can focus on the skills I have developed, and also focus on my strengths and weaknesses. I think it’s good preparation for interviews too. I quite like the visual presentation of PebblePad, makes building your CV more fun rather than a chore.” (Survey response)

Feedback

42% of students agree or strongly agree that they found PebblePad useful for getting feedback on their development and learning. This highlights that staff need to be engaged in their students’ e-portfolio development and given them feedback on their progress.

Organisation

33% of students agreed or strongly agreed that PebblePad had helped them to organise their learning more effectively which may reflect a lack of a sense of personal ownership of the e-portfolio space by the two thirds of students who did not find it useful for organising their assets. Our survey also identified a number of tools which were given a high neutral rating (neither agree or disagree) by students. These include the ability, meeting and the presentational webfolio aspects of the e-portfolio. It is pertinent to note some student comments here:

“I find it difficult to find what I need to do: thought, blog, experience etc. I don't really know the difference and am not sure that they are useful. I use 'thought' for everything. Maybe it's because of inadequate training.” (Survey response)

Another student commented that the e-portfolio has “too many options.” (Survey response)

“It is easy to use, functional and provides a good forum for organising my thoughts.” (Survey response)

Collaboration and showcase

One of the claimed benefits of using an e-portfolio is the ease with which students can share with peers, tutors and others. It is clear from our survey data that a high percentage of students don’t find PebblePad useful for collaboration and showcasing achievements. However, in a focus group of Postgraduate students who had used a collaborative blog while on placement the majority of those interviewed liked using it to keep in contact with their peers while off-campus.

From our own work with programmes we know that the webfolio was not a widely used tool by students. Perhaps these survey results point to the fact that where there is support for an e-portfolio process its benefit can be easily perceived by students. Indeed a student in a focus group pointed out that

4 48% disagree or strongly disagree and 38% neutral

5 34% disagree or strongly disagree and 43% neither agree or disagree
PebblePad "has more potential than has been shown to students." (Focus Group Response)

Graph 2: Using PebblePad for class communication

Graph 3: Using PebblePad for showcase

E-Portfolio support

Staff who require students to use the e-portfolio as part of their programme can request an induction and support session from the Learning Development Centre. Most Schools have taken advantage of this support. In our survey students were asked if they received adequate technical support to enable them to use PebblePad; while 42% agreed that they did receive adequate support, 19% didn't think they got enough support and the 4% who answered other fell into two categories:

1. Didn’t know support was available and
2. Didn’t ask for support.

From the focus groups it became clear that although both undergraduate and postgraduate students received introductory support, the postgraduates voiced more of the benefits associated with it. This may be partly for the fact that they were being assessed and made more frequent attempts to get support, which was available for them whenever they needed it. However, both do agree that there needs to be more support in enabling students to appreciate the purpose behind an e-portfolio. These findings are similar to that of Willis et al (2006), who found a strong link between training and learning; so if students had support and training more in line with the learning and assignment point, there would have been more engagement.
Conclusions

One preliminary conclusion that may be drawn from our survey and focus group data is that as far as PebblePad is concerned, students are unlikely to explore and make use of the full range of tools that are available. Perhaps unsurprisingly, the tools which are most used are those where there is clear alignment with course learning outcomes and assessment; these include blogs, thoughts and action plans. Other key factors in shaping attitudes to the use of e-portfolio include the availability of support, both technical as well as academic.

It is clear from our data, that many students require considerable support, both technical (learning how to use the platform) and process (learning what the platform can be used for). Our findings indicate that because of the complexity of the e-portfolio platform used at City University, students require a lot of technical support and this is often at the expense of time which could be dedicated to engaging with the students on the underlying processes that the e-portfolio can support such as reflection, planning, organisation, feedback, evidencing and showcasing their achievements.

“By helping students understand why they should create an e-portfolio, and by scaffolding them through the process of how to create an e-portfolio our chances for a successful implementation is greater” (Ring et al, 2008: p 9).

References


Using e-portfolios to assist with professional portfolio development

Polly Lee City University

Introduction
This paper outlines how mp3 recordings have been used in conjunction with an e-portfolio system as a means of maintaining contact with students who are some distance from their university on professional placements.

Background
Many professional bodies require students to maintain a portfolio as part of their pre-registration professional development. Whilst some professional bodies have not yet fully made the transition to e-portfolios, students at higher education institutions (HEI) in the UK are nonetheless issued with e-portfolios as part of their academic course. Such students on these professional courses are required to spend time in industry/placement in order that the relevant professional competencies for their academic course and therefore professional awarding body are achieved.

Outline
Whilst on placement students do still feel part of their HEI and therefore appreciate contact with their HEI. This is particularly the case on health related courses where some professional courses stipulate that students must spend 50% of time in placement settings over the three year programme. Within nursing students are expected to undertake 50% of their 3 year programme (2,300 hours) as theory content and 50% (2300 hours) in practice related settings. Depending on the HEI the practice placements start between week 8 and 15 of the 1st year of the 3 year programme. Such students therefore arrive on placement particularly early in their courses, and even though they should be working their shifts with the same supervisor(s) they do need support from both the HEI and placement providers. Some of the placements (where the students may be summatively assessed in practice) are relatively short – only 4 – 6 weeks in length, and therefore the students need to demonstrate good time management skills in order to ensure that they plan their learning, have the opportunity to practice relevant skills, and then when necessary reflect on their learning as part of their practice assessment.

As healthcare provides 24/7 care, so students need placement experience that covers 24/7. This consequently means that HEI lecturers and practice placement managers (who may visit on different days of the week or sometimes at different times of the day) may not have consistent access to and therefore regular communication with students.

HEI lecturers and practice placement managers therefore need to be creative in ensuring that the students who may be working weekends or nights do not ‘miss out’ on formal visits undertaken by their HEI lecturer or practice placement manager, as often there may be queries with regard to the completion of the relevant assessment documentation and indeed both the HEI lecturers and practice placement managers may want to pass information to students.

Locally the documentation of professional competencies is still undertaken using a paper based format portfolio (record of achievement); however the adopted e-portfolio tool is being trialled as a way of communicating with and enabling students to maintain an ongoing record of their communication with their HEI.

Locally, an HEI lecturer and practice placement manager have worked together to ensure that students are receiving consistent messages. Rather than giving feed-back to the students (whilst it is recognised that this is important) the e-portfolio has been used to give feed-forward (advice) to students on their placements. This has involved recording a short audio (mp3) file and loading this through the HEI e-portfolio system so that all students have the benefit of receiving the same message. Although most students are seen regularly on placement visits, this does mean that all students are contactable. To date the short audio messages have concentrated feed-forward and this has included:
Week 1 – welcome to placement and orientation to a particular practice environment and having an initial meeting with their mentor/supervisor.

Subsequent weeks – feed-forward giving pointers for the coming week and this may include planning ‘activities’ to be completed. It has also reminded them to select which ‘activities’ should be completed on a particular part of their placement year, so that the students are making the best use of the variety of placements that they undertake.

Towards the end of a placement – planning for final meeting with supervisor and signing of documentation.

Although initially these mp3 files were released as a separate ‘asset’ on e-portfolio system, different cohorts then had a separate webfolio that could be used to store all the mp3 files, and most recently a blog has been used, thus encouraging students to collaborate using this system. This method of blogging is considered preferable to ‘pod casting’ for the students as with the latter system not all students have iPods and it saves already busy lecturers using an RSS system. Additionally, podcasting is at an early stage of usage at the author’s higher education institution, and it is understood therefore that the server has limited storage availability, and some pod-casts could be deleted. Conversely an e-portfolio has unlimited storage space enabling students to return to previous audio files at a future date.

**Student reactions**

Students were new to the e-portfolio system, but had it set up for them (and therefore e mailed on their HEI e mail account prior to the start of placement). Some students had ‘found the system’ from their e mail account prior to the meeting at the commencement of their 3rd year placements. One student at the introductory meeting suggested an additional use for the blog that the lecturer and practice placement manager had not previously considered.

Some students were fairly quick to access the e-portfolio and the initial postings were similar to the principles of Salmon’s model of e-moderating. Most students accessed the blog within the first two weeks of placement (it is currently not compulsory for students to access this blog).

Students found other uses for the blog as their placements progressed, although it was considered that the messages in some postings would have been more usefully directed at persons not partaking within the blog activities.

**Further uses of the system**

This system could be further developed for personal tutor/tutee meetings especially when either a full record is required or the student may have additional needs such dyslexia and an audio record may be preferable. Likewise, dissertation supervision meetings could be recorded so the student has an exact record of how a discussion may have developed.

**Reference**

Interactive and Collaborative Sense Making

Roy Williams, Simone Gumtau, Regina Karousou

Abstract

The HEA-funded research project, *Affordances for Learning*, explored the way students go about their learning, and how they construct their identities as practitioners and professionals, particularly in Foundation Degrees, where they are taught both on-campus on online. This paper will present key findings of the 2008 research, and demonstrate how interactive and collaborative sense-making works in practice.

Introduction

This paper will present an introduction to the research, the methodology, and the key findings. In broad terms, the research shows:

1. How a framework based on *Affordances* and *Communities of Practice* was used to develop a methodology (*Nested Narratives*) and an interactive interface which enables the student or employee to learn to tacitly reflect on and to critically evaluate their learning by *doing reflection*, not by instruction.

2. How the interactive interface extends the levels of reflection. It provides opportunities for many layers of individual, interactive and collaborative reflection and analysis, by providing direct access to the evidence: i.e. the student or employee’s description of their practice in their own ‘voice’, in their audio recordings, text and graphics. This is more than just evidence ‘based’ reflective practice.

3. A substantial part of learning is not just about declarative learning (facts) or procedural learning (algorithms, processes); it’s also about exploring and mastering the *capacity for effective action* within various communities: both formal, professional communities, and informal communities, which often intersect with formal communities. Equally, it provides a series of uniquely rich personal, interactive and collaborative reflections, on learning and practice, for the student, employee, and for the academic or workplace institution. These include:
   - Personal exploration and articulation of tacit knowledge and understanding.
   - Expanded sense making and reflexive learning through the use of multimedia
   - Interactive reflection in a range of settings with a range of people
   - Collaborative reflection with colleagues, tutors, line managers or researchers, with the potential addition of kinaesthetic media, such as *multi-touch* tables.

And it produces:
   - Unique facilities for strategic reflection and research at organisational level
   - Rich exemplars for other learners, employees and the profession
   - Ongoing personalised learning and continuous professional development.

The process includes the following: …

**Level 1: Tacit Knowledge**

The initial one-to-one story telling process provides an opportunity to explore, articulate and represent tacit knowledge and understandings, in the narrator’s own voice, as they make sense on their own terms of their personal learning and practice. This is level 1 reflection. This is a valuable exercise, not only because it provides a rich record of reflective practice, but also because it is a valuable learning experience in itself. The narrator often comments that they “learned something quite new”, as they “had never thought about the topic in that way before”.

83
Level 2: Expanding the Sense Making

The initial narrative and the derivative ‘nested narratives’ are each captured as nodes in the interactive interface, which looks like a dynamic mind-map (see figure 1). The narrator can reflect on each node, or story element, and add associated images or multimedia to each node.

![Figure 1: The Interactive Interface](image)

Each node has a direct link to play the recorded audio, display the text, and to open the related images or multimedia associated with that story element (see figure 2).

The narrator selects the nodes they want to add associated images to, using the links available on each node. This is level 2 reflection, and can be done on their own.

![Figure 2: The popup icons for adding Audio, Text, and Graphics](image)

Level 3: Interactive Reflection

The interactive nested narrative has now been constructed, in the narrators own voice, within their own agenda, and using their own associated images or multimedia. These interactive narratives provide for further interactive reflection, in conversations with workplace mentors, academic tutors, colleagues, family, friends, and other people in the community, all of which can be captured and recorded and included as another layer in the interface. This is level 3 reflection.
Level 4: Collaborative Reflection

The interactive stories also provide opportunities and resources for collaborative reflection, on more than one story from the same narrator or from a range of different narrators.

Key Findings

The full report on the narratives created in this research is available at: [http://learning-affordances.wikispaces.com/Project+Report](http://learning-affordances.wikispaces.com/Project+Report).

These narratives provide rich accounts of student experience, and of the way students make sense of their learning and of their emergent and shifting identities as ‘professional graduates’. These accounts are indicative of a number of issues that students increasingly have to deal with, as more and more students study and work at the same time, using online and on-site facilities. The results of the research, on learning, identity, reflective practice, transitions, and metaphor and multimodality can be summarised as follows:

Learning

Students need to explore, benchmark and preferably master information, skills, competencies, and affordances – i.e. the capacity for effective action within context, and the capacity to weigh up, select, and if necessary create new affordances for new contexts. These affordances are the basis for learning and for developing their identity as professionals.

- Several examples show how the process of learning, and of negotiating transitions into Higher Education (HE) includes not only learning new information, skills, and competencies, but it crucially also involves coming to terms with new affordances that may displace or even conflict with existing affordances.

  For example, ‘reading’ turns out to be very frustrating and confusing for one student, largely due to the fact that she knows how to ‘read’ so well as an A-level student, and continues to do this at University, only to find out that this kind of ‘reading’ is not the affordance she needs for HE at all.

Students also need to be able to negotiate and deploy affordances in specific contexts, within different communities. We have, for the purposes of this analysis, included only four types of communities: academic, business, social and professional.

  - Several examples, and one story in particular, illustrate the substantial differences between academic and professional communities and their discourses (i.e. the formalised sets of affordances that are required for membership of those communities).

    These examples illustrate how challenging it is to reconcile, let alone integrate, academic and professional discourses, in what is broadly called work-integrated-learning to become ‘professional graduates’, i.e. people who have developed high level capacity, or affordances, in both academic and professional work. These stories also illustrate how student experience and motivation can be seriously affected by confusion and conflicts between academic and professional discourses.

  - Several examples also illustrate how the process of acquiring professional affordances, and reconciling conflicting discourses in the process, can involve painful decisions and changes – at a professional and personal level, which means that affordances often incorporate affective traces and memories, positive or negative.

    However, in some cases what is learnt is a ‘negative’ affordance – something you learn to avoid, for which we probably need a new term, ‘dis-fordance’.

Identity

Students’ emerging identities as professionals are intimately linked to learning new affordances, and managing repertoires of affordances and their relationships to different contexts.

  - Most, if not all of the stories show that affordances are inherently ontological: learning a new affordance inevitably involves a shift in identity, and even learning to ‘be’ a HE student involves considerable shifts.
One of these key shifts is to develop the ability to consider an issue from different perspectives, which is generally taught under the heading of ‘critical thinking’. However, this is more than just a ‘technical skill’ or competence, as the diversity of viewpoints is normally accompanied by a measure of uncertainty, discomfort, or worse. Learning to consider and assess a diversity of viewpoints, and be comfortable with the lack of certainty that results is a major transition for HE students.

**Reflective Practice**

Sense making, and especially the personal, tacit, multimodal sense making that is the basis of this research, challenges ‘normal’ reflective practice, and attempts to add to it, and take it one or two steps further, to keep the substantial affordances of **liminal space** that are possible within HE: i.e. space to step back from the demands of day to day work, to disengage, reflect and explore different and even hypothetical perspectives.

There seems to be a tendency to over-professionalize Reflective Practice, and to restrict it to what we analyse below as **reflection tied in**: (i.e. tied into efficiency and effectiveness) without also making space for **reflection cut loose** (i.e. cut loose, creative, hypothetical thinking).

However, several stories illustrate the way students use the liminal spaces that they find in their courses, or create their own opportunities and liminal spaces, to go way beyond the curriculum.

**Transitions**

Learning new affordances and negotiating access to, and membership of, new communities and their discourses involves a number of specific transitions. These include:

- Learning to manage not only shifts in affordances, confidence and identity, but also the way these are interlinked, and interact with each other.
- Being aware of, and managing the inter-relationships between, current and projected identity, or ‘actual’ and ‘designated’ identity (Sfard & Prusak 2005).
- Using the opportunity to explore new affordances and discourses not only to cover what is in the curriculum, but possibly to go beyond the curriculum, to create new affordances.
- Negotiating the discord between being an expert in some fields (generally, at work) and a novice in others (e.g. academic work).
- The transition between teaching and learning methods outside and inside of HE, often includes confusingly similar affordances, such as: **reading as consumption of ideas** versus **reading as interrogating ideas**.
- Working through the confusion and uncertainty of ‘betwixt spaces’ (Palmer et al 2009), between different (and often conflicting) affordances, communities and discourses. This is part of the major transitions involved in becoming an HE student and a ‘graduate professional’, which is to learn to tolerate, and then to embrace a diversity of perspectives as a positive affordance, rather than a negative state of uncertainty: in fact to realise that uncertainty (or systematic scepticism) is a key element of academic discourse and method.

**Metaphors and Multi-modality**

Metaphors are much more than just interesting ‘figures of speech’. They can be powerful affordances in their own right, i.e. not just embellishments but rather, integral aspects of the way you explore and articulate tacit knowledge, about the intangibles of learning experience and emerging identity.

- Metaphors illustrate the embeddedness and synaesthesia of language and learning.
- Learning is seen as a journey of some kind, and this is a dominant metaphor in the narratives.
- There are particular types of metaphor, each of which contributes slightly differently to the process of exploring learning and identity: metaphors of orientation, subject/object relationships, embodiment, and specific types of figures of speech.
- Different types of metaphor illustrate the way students relate to what they are learning, the way they articulate the experience of learning itself, and whether this is encouraging and affirming,
or discouraging and unsettling, or even undermining of their confidence and their ‘will to learn’ (Barnett 2007).

- Metaphors can indicate the way students experience exclusion, and their attempts to overcome it: this is one of the major challenges that students, and particularly mature students, need to cope with as they enter HE.

The rich information embodied in metaphors links back to the Nested Narratives methodology, which shifts between, and integrates, the cognitive and technical (or ‘academic’) affordances, by its emphasis on the role that the students’ own voice (literally and metaphorically) plays in the articulation of their experience of learning and emergent identity, and in the researchers’ appreciation of the complexity of what they are doing – as students and as sense makers.

More information is available on the project wiki at: http://learning-affordances.wikispaces.com/, and a powerpoint presentation on some of the broader issues on different kinds of reflection (instrumental reflection and ontological reflection) is available at the powerpoint link at the bottom of the page at:

http://learning-affordances.wikispaces.com/Instrumental+and+Ontological+Reflection

Selected References


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MONDAY, 22/JUN/2009

94

S11A, S12A, S13A: ePortfolio workshop
Your Digital Self —Web 2.0 as Personal Learning Environment

S11B, S12B, S13B: Plugfest
Integration of Europass CV and LP how-to : 5 minutes for interoperability !
Eportfolio interoperability how to : from LinkedIn social network to Europass (exploiting hResume microformat)
State of art European Research project TAS3: Extending CV to ePortfolio : Exploring how new HR-XML v3 specifications could be use to add semantic and external references (Diploma Supplement) as well as ensuring privacy
Sync and swim: Ensuring student participation with e-portfolio learning processes through integration of organisational systems.
Interoperability for Qualification ePortfolios – the creation of an open standard

S12C: Key Competencies —Skills for Life
Integrating Big6 Information Literacy Skills in Project Based Learning: A Case Study in Higher Education
Competences for Networking
YES- Youth Employment Support of SME
Define your competencies - wording helps!

S12D: Key Competencies —Skills for Life
EduCoRe – Educational counselling during Rehabilitation: E-Learning as an educational opportunity for patients
Not Ready to Sit and Knit: A Look at Aging and Learning
The Youth Competence Centres of Antwerp: innovative practices for key competencies identification and recognition

Key1: Key Competencies Plenary
Blending New Generation Skills, Portfolio and Learning Content Management Systems for personalizing learning in Europe (and surviving global crisis and competition).
Managing one's identity is a key skill

S13C: Workshop
E-portfolios and the tutor
E-Guides: Lead by example

S13D: Learning Networks and Communities
Digital Activist Inclusion Network (DAIN) East Midlands
e-Innovation, eportfolios and blogs
"Kompetenzkatalog.de“ an ePortfolio for IT-Competence
eProfilPASS - A Vision of an ePortfolio for the ProfilPASS
S14A: Workshop
The Digital Village and informal learning

S14B: Working group meeting
ePortfolio challenges

TUESDAY 23 JUNE 2009

110

Key2: ePortfolio Plenary
Life narratives: learning from people’s portfolio existence
ePortfolio for eCPD
Inspiring Learning: a framework that can help you describe and evidence the impact of creativity
Portfolio A Modern Discourse!

S21A: Workshop
Developing teachers through personalised learning and e-portfolios
CPD in Action: Making e-portfolios mobile

S21B: Workshop
Planning a successful e-portfolio project: learning from JISC-funded activities

S21C: ePortfolio in schools and pre-schools
Harnessing tools designed to support teaching, to support learning
ePortfolios for Early Child Teacher Education Certification Program
ePortfolio for kids in social networks across generations, competencies and cultural backgrounds

S21D: Professional Development
Using e-portfolios to assist with professional portfolio development
Maintaining and recording CPD activity: Support of experienced and newly qualified therapy radiographers via integration of a VLE and PebblePad
Professional development - meet the tutors behind the portfolios
Use of an e-portfolio to support the recording, reflection and presentation of academic, career and personal development

S21E: Professional Development
E-portfolios for staff development
ePortfolios for the 21st century: a case study of the use of electronic portfolios in the academic and professional growth of pre-service cultural managers
Initial training as a key phase to succeed with the use of digital portfolio in education
Using portfolios to provide users with the tools to demonstrate their life-long learning, skills and development

S22A: Workshop
Multiple Intelligences, Multiple Languages, and Portfolios: A Window into The Learners’Mind and Abilities

S22B: Workshop
Transforming organisations through personalised learning
S22C: Skills Recognition
PortisHEad: Portfolios in successful HE admissions
ePortfolios as a vehicle for recording Recognition of Prior Learning at RMIT University
Supporting Skill Shortages and Learner Transitions: Utilising e-portfolios to support Recognition of Prior Learning assessment processes in the Australian Vocational Education and Training Sector
Sustainable ePortfolio implementation through Information, Advice and Guidance services in a UK region: Developments towards a learner-centred ecosystem

S22D: Learning and Teaching through ePortfolios
Easing people at work into self-directed learning: A new role for ePortfolios
Improving teaching and learning with electronic portfolios: The effectiveness and implementation of ePEARL
Using the Student Voice to Build and Embed an E-Portfolio
Deep Reflection and Constructive Alignment: The Challenge of Translating Theory into Practice

S22E: Employability
Using e-portfolio activities to work on professional identity in VET
An awarding body perspective: SQA's approach to e-portfolios
MyPDS™ a Personal Data Store for Employability Management
e-portfolio development at the Royal College of Nursing

S23A: Workshop
Assessment Renaissance: Writing Learning Statements and Rubrics that Yield Actionable Data

S23B: Workshop
Using REfLECT in the teacher education classroom: developing a blended learning strategy

S23C: ePortfolio implementation
E-Portfolios to support and enhance learning: Key factors of implementation
A case study of implementing a trial of a scalable enterprise ePortfolio system at RMIT University
Lessons from the front line - one ePortfolio; three years; 40,000 active users; a million forms; 25 partner organisations.
Learner-Centred Strategies for informing Institutional Take-up of ePortfolios

S23D: Reflective practice and CPD
Freefolio, the social e-portfolio platform
Blending systems and learning to advance practice: The use of ePortfolio in a level 7 Expert Practice module
Personalised systems supporting IPD and CPD within a professional framework
Interactive and Collaborative Reflective Practice

S23E: Skills development and assessment
An e-Portfolio to Support Work-Based Degrees: the UK Experience
Key skills for the labour market and input for portfolio
The C-Stick project: innovative practices for assessing key competencies
E-portfolio: a tool for assessment and empowerment in the skills recognition process

S24A: Workshop ePortfolios – The Cornerstone of Personalised Learning
ePortfolios – The Cornerstone of Personalised Learning

S24B: Parallel session
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
</table>
| S24C: Workshop | User control in an Employability Portfolio  
Creating sustainable National/institutional wide e-portfolio development | 162   |
| S24D: Workshop | Creating sustainable National/institutional wide e-portfolio development | 163   |
| S24D: Workshop | ePortfolio Best Practices for Teachers and Students: Launching a large scale ePortfolio program while encouraging, not stifling, student creativity and innovation by Cyri Jones | 164   |
| S31A: Workshop | Key3: ePortfolio Plenary  
Personalisation through technology-enhanced learning  
Lifelong ePortfolios: Creating your Digital Self  
E-portfolio values  
Ready or not, the Personal Learning Environment is coming with the ePortfolio Process as the Keystone. | 165   |
| S31B: Workshop | S31C: ePortfolios in higher education  
Evaluation of the implementation of an e-portfolio system – processes versus platform?  
Breaking out of the bondage: SAMSON (Shared Architecture for eMployer, Student and Organisational Networking)  
ePortfolio for the professional insertion of students  
Process and product assessment with e-portfolios in the first academic year at the university of teacher education | 168   |
| S31C: ePortfolios in higher education | The Personalisation of Learning Framework | 169   |
| S31D: Healthcare ePortfolio | Using video in an ePortfolio to enhance learning  
From University to Retirement: the ePortfolio continuum to support Scottish Dentists  
Dissonance in healthcare students’ professional and personal digital identities in social networking sites and the potential role for professional and educational bodies  
OCAP Online - lessons from innovation in UK Orthopaedics | 170   |
| S31E: Quality assurance and organisational learning | Can individual and organisational ePortfolios manage quality assurance?  
DigOport-II: the Dutch example of Institutional Portfolio 2006 - 2009  
Exploiting tacit knowledge through knowledge management technologies  
Using ePortfolios to Support Assessment of Qualification Coursework | 174   |
| S32A: Workshop | S32B: Workshop | 177   |
| S32B: Workshop | S32C: Workshop | 182   |
Constructing Professional Identity in Senior Capstone Seminars

**S32B: Workshop**
Role of the e-portfolio in the Assessment of Health and Social Care students in Work-Based Practice

**S32C: ePortfolio evidence assessment**
Comparative Pairs Assessment
Evidencing WBL Progress with Mahara
How should we mark digital files within a Student's ePortfolio?
Multimedia Support for the ePortfolio eDossier in Language Learning

**S32D: ePortfolio adoption**
Raising awareness of the Europass language passport and European language portfolio: the ELP-desk project
Lifelong learning supported by ePortfolio processes
Specialising, engaging, and sharing knowledge with members using social computing: The RIBA R&D experience
E-Portfolio adoption gathers real pace in the UK

**S32E: ePortfolio policies**
A Comprehensive ePortfolio Strategy for King Faisal University: Learning and Leading in Saudi Arabia
How to incorporate ePortfolios into the curriculum in a development country? The case of American University of Central Asia (Bishkek, Kyrgyzstan)
E-portfolio implementation in Flanders: building bridges between separate projects

**Posters**
FLUIDS_ID: e-portfolios and life stories - digital contents for social inclusion and employability in RL and SL
Raising awareness of the europass language passport and European language portfolio: the elp-desk project
Raising awareness of the Europass language passport and European language portfolio: the ELP-desk project
Using an ePortfolio to Review PostGraduate Medical Training in Scotland
Analysis of surveyors’ research skills by designing a self-assessment questionnaire.
Improving the quality of Continuous Training activities
Monday, 22/Jun/2009

S11A, S12A, S13A: ePortfolio workshop

Your Digital Self —Web 2.0 as Personal Learning Environment

Helen Barrett

Web 2.0 tools facilitate self-expression, reflection, online interaction and feedback. This hands-on workshop will focus on Web 2.0 tools that can be used to construct a PLE for a variety of purposes, and provide a broader look at using these tools within the context of ePortfolios and Digital Identity: Web Aggregators/AJAX Start Pages, Blogs & RSS Feeds, Social Networks, and Interactive Productivity Tools.

S11B, S12B, S13B: Plugfest

Chairs: Marc Van Coillie, EIfEL, France, Simon Grant, CETIS, UK

Integration of Europass CV and LP how-to : 5 minutes for interoperability!

This plugfest session will show how it is possible to easy integrate Europass CV and Language Portfolio Editor in your system.

The process will be described from where to find the Cedefop partnership form to concrete technical implementation.

Eportfolio interoperability how to : from LinkedIn social network to Europass (exploiting hResume microformat)

This how to will show how hResume microformat information embedded in LinkedIn user public page could be extracted to fill in an Europass CV (or a more complete ePortfolio). A concrete example will use the EIfEL CV Transcoding web service with the Cedefop Europass webservices (document generation and CV edition).

State of art European Research project TAS3: Extending CV to ePortfolio:
Exploring how new HR-XML v3 specifications could be use to add semantic and external references (Diploma Supplement) as well as ensuring privacy

This session will explain and show how a simple Europass CV could be extended to include reference to Europass Diploma Supplement or Certificate Supplement as well as relation between included information using the new forthcoming HR-XML v3 specifications.

This session will present also early result of TAS3 project and HR-EDU special Interest Group to secure the exchange of personal information between HR and EDU services and ensure privacy using industry standards.

Sync and swim: Ensuring student participation with e-portfolio learning processes through integration of organisational systems.

James Christopher Rone¹, Christopher Murrey¹, Nancy Davies¹, Gareth Frith¹, Pat Harkin¹, Helen Mistry¹, John Sanders¹, Dave Waller²
Background

This paper seeks to address the integration of e-portfolio systems in the student learning process from a technical interoperability angle. By applying standards for information definition e-portfolio systems can export and import relevant data to and from external system such as student record systems, VLEs and other e-portfolio systems in future stages of academic progression.

To achieve interaction with other systems, the information must be exported in an XML (Extensible Mark-up Language) format. This is basically similar to RSS feeds where a website will generate information such as blog entries in a format that all RSS readers can understand. The e-portfolio system would output results, tutor feedback, student reflections in a similar format that is universally recognised by other relevant systems.

If a common standard can be reached the benefit for the student learning process will be great, students will be able to take a record of their whole learning experience on to further levels of education and employment. The Leeds for life project at Leeds University seeks to identify key competences that students will cover and achieve throughout their studies, these can be used by future employers to examine key skills and by future education providers to identify skill deficits. Skill definitions must be agreed so that an information standard can be drawn up to enable the transfer of these skill records to take place.

Objectives

Using the case study of the Leeds school of medicine this report will outline the need for interoperability standards for e-portfolio systems and subsequent recording of key skills and the carrying of this information into the next stage of their training as a Doctor. The NHS system has its own e-portfolio making it vitally important that the Leeds system be able to export data directly to it, thus making a seamless transfer into the next level of education and training for the student.

The report will also cover the need to properly defined skill sets both in education, training and through to employment so that the standard for information export between e-portfolio systems can be set up. Again Leeds school of medicine will act as case study with the skills identified in the Tomorrows Doctors NHS skills specifications, those identified in Leeds for Life and the problems in putting them all in a standard to export the students results from one level of education to the next and into future employment.

Outcomes of report

- Outline the key technologies (XML, ATOM etc.) and how they apply to the standards being used by e-portfolio systems.
- Outline the benefits of seamless data transport between e-portfolio systems in education and the uses for future employment.
- Outline the problems inherent in defining skill sets and how they relate across disciplines and into employment. Solutions to these problems will be proposed and analysed.
- Recommendations for interoperability based on the Leeds school of medicine case study using Tomorrows Doctors and Leeds for Life as reference points.

Recommendations.

A wide variety of technologies and techniques exist for e-portfolios but the basic building blocks for any system is the information and the transfer of that information, this report analyses the use of standards to enable communication and understanding between all these technologies and techniques.

The benefits to the student will be outlined and examined; it is important for the capture and recording of their whole learning experience to be exportable and useable to other systems and any future developments in technology.
Interoperability for Qualification ePortfolios – the creation of an open standard

Matt Wingfield, Karim Derrick
TAG Developments, United Kingdom;

A major problem for Awarding Bodies has been the moderation of work collected in coursework management systems such as ePortfolios. Where ePortfolios/coursework management systems have been integrated into the assessment cycle moderators and assessors have needed to be trained in the increasingly wide variety of systems that the awarding bodies approve for the schools use. Awarding Body moderators then dip in and out of the variety of school/centre systems. The only benefit of this approach is that the schools and centres can choose the coursework management system that delivers the most appropriate service to the teachers and learners, in the context of the qualifications being taken.

The alternative has been for some awarding bodies, in some qualification contexts, to insist that schools and centres use a specific ePortfolio/coursework management system. Where this has happened it has been possible to provide a centralised awarding body focussed interface to facilitate the work flow of assessment moderation and its management. This has obvious and immediate benefits to the awarding body who need only train their moderators on one system. Schools and centres however are constrained to use one single ePortfolio/coursework management product.

Thus the problem: how to allow schools to use whatever ePortfolio/coursework management system they wish and then how to allow the awarding body a single interface on this data.

The proposed paper will discuss a new BSI standard for describing coursework based qualifications and a standard method for transmitting ePortfolio/coursework management files and data between school/centre systems and backend awarding bodies qualification moderation systems.

S12C: Key Competencies —Skills for Life

Integrating Big6 Information Literacy Skills in Project Based Learning: A Case Study in Higher Education

Şirin Karadeniz, Bahcesehir University, Faculty of Arts and Sciences, Department of Computer Education and Instructional Technologies;

Information literacy is a key competency for active citizenship and lifelong learning in the information society. Information literate citizens can live in harmony with the current digital information age through acquiring such competencies. They can recognize the need for information, formulate questions based on information needs, identify potential sources of information and develop successful search strategies. They are able to use technologies to search and locate information from a wide variety of sources, access required information effectively and efficiently, evaluate information critically and to use, organize and present information in meaningful ways through problem solving, decision making and critical thinking. They are further able to evaluate their information problem solving processes and products. Hence, information literacy is a set of skills which should be acquired by learners in formal or in informal learning processes.

This paper aims to share the experiences gained in developing information literacy skills through the integration of the Big6 Model to project based learning in higher education. Big6 is a systematic approach for information problem solving which was developed by Eisenberg & Berkowitz (1990). The Big6 Model has six skill areas: task definition, information seeking strategies, location and access, use of information, synthesis and evaluation. In this study, the Big6 Model was the baseline for the project based learning process. The study was carried out in the Operating Systems and Application course in the Department of Computer Education and Instructional
Technologies, with 27 student participants. The Big6 Research Framework was developed and used by students for planning and studying according to their project timeline, and further to evaluate their products and processes. It was also used by the instructor to track student work, to give the necessary feedback and to evaluate the students project processes.

Students planned the following issues in the Big6 Research Framework: project sub topics, meeting times, the general purpose and research questions of the project, the project timeline, tasks of the group members, possible sources and information accuracy techniques, ways to locate, access, record and use the required information, the presentation mode and the worksheet paper format. Students developed presentation materials and worksheets/reflection papers. Worksheets/reflection papers were used to stimulate practicing newly acquired knowledge, thinking and discussion and to reach a conclusion on project topics with the guidance of the project group members. Students also wrote a project report in accordance with the APA Style and reviewed and fulfilled the evaluation part of the Big6 Research Framework in order to evaluate their information problem solving processes, their presentations and their products. The Perceptions of Big6 Project Research survey was used to determine student perception of these processes. A Project Evaluation Form was developed and used by the instructor to evaluate the whole project process, the products which were founded on the Big6 Model and the project based learning. Student project successes were determined by the following criteria: filling and studying according to the Big6 Research Framework (20%), developing presentation materials according to design principles (15%), the presentation of information using presentation skills (25%), developing worksheets or reflection papers (10%) and writing a project report in accordance with the APA Style (30%).

The findings of this case study revealed that students had difficulties in planning and studying in accordance with the project timeline unless their progression in the project was supervised and graded. The students accessed the required information in accordance with their research questions, synthesized the main ideas from a variety of resources collaboratively and they developed presentation materials and reports effectively and efficiently. Students also emphasized the positive acquisitions gained by planning and studying facilitated by the Big6 Research Framework and project based learning.
**Competences for Networking**

**Guy Tilkin**, Alden Biesen, Belgium

The Art of Networking

Inter-organisational and personal social networks play an increasingly prominent role in the area of lifelong learning in Europe. The notion of network(ing) has been postulated as a guiding principle and a key competence of practitioners at all levels of hierarchy. Networks and networking are generally considered to have high potential for solving structural problems in education.

In contrast to this growing importance, actors in the field agree that many networks have been performing below the high expectations hoped for. One of the reasons for this is the organisational fragility of many network structures. Another factor seems to be that many network actors do not have a sufficiently clear picture of the concept of a network as a specific cooperation structure. A network differs from cooperation projects and other forms of partnerships in terms of structure and function.

As a consequence of these differences building and sustaining a network poses specific challenges to a network manager.

The presentation focuses on European networks in the framework of the EU funding programmes for lifelong learning. But much of its content is relevant also for other types of networks in education and training and for networking activities in related fields.

**YES- Youth Employment Support of SME**

**Katharina Toifl**, Franziska Steffen, Alexandra Bruckmoser, Beate Dall
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In many European countries integration into the labour market of early school leavers, young people who have failed to complete vocational education and training and other groups of youth with socio-economic and/or personal disadvantages is rather difficult. Most businesses, especially SME, are very reluctant to employ and/or train such young people or give them a second chance for vocational training, as those responsible for human resources are worried that these youngsters are too difficult to deal with and require too much attention and time of their supervisors. Especially in rural regions part of the barrier to cope with this challenge is based on intergenerational misunderstandings. At the same time many young people have got a highly occupational motivation (AMS info 84/2006) and many SME in specific industrial sectors suffer from a lack of skilled employees, e.g. in Austria in the sector of manufacture of wood and metal.

The demand to create apprenticeship training positions in order to meet the existing demand of young people is expressed in many political announcements, programmes and initiatives (e.g. AT: chamber of commerce Der Jugend eine Chance, [http://wko.at/sp/jugendchance/english-version.htm](http://wko.at/sp/jugendchance/english-version.htm); NL: YETF youth Unemployment Task Force including representatives of the labour unions and national employers' organisations [http://www.jeugdwerkloosheid.nl](http://www.jeugdwerkloosheid.nl)).

Experiences from previous partner work with young people in large scale job insertion programmes as well as other initiatives indicate that SME are more inclined to employ and/or train difficult young people if they receive comprehensive and intensive coaching and training support. There are already many initiatives which target young people, but there is a clear lack of support and training offered to the other side, the potential employers. To meet this need the YES training has been developed.

The main aim of YES is to respond to the clear need in Europe in general and the project partner countries in particular to strengthen staff manager’s interaction skills with difficult youth, who will make up a considerable proportion of the future skilled work force. Thereby SME are to be convinced to employ and/or train young persons that are members of the above described target group.

YES provides a training and support system for SME employers, responsible for human resources managers, in-company trainers and supervisors in order to decrease their reluctance to employ
members of the described target group. The YES training offer includes five specific blended learning modules covering communicational aspects of apprenticeship training, motivation, pedagogical and didactical skills, conflict prevention and management, intergenerational learning. These blended learning modules consist of face to face meetings where SME employers meet to learn together and from each other. The YES concept is arranged for meetings of SME employers within specific economic sectors, as it is expected, that the face to face sessions are even more interesting and efficient, if participants are sharing similar experiences and problems. The content of the face to face meetings is also available as online content on a virtual support platform, where participants of the YES training have the chance to look information up, to prepare for meetings, to check their state of knowledge in online exercises and to exchange experiences and thoughts in chats and a forum.

Furthermore the YES training is accompanied by a coaching offer to identify barriers, matching of needs, to support during first employment/training phase and to mediate in conflicts that may arise during the apprenticeship.

The paper reflects on experiences the project consortium made within the pilot test of the YES training conducted in 6 European countries and presents the conclusions for SME training. Furthermore it draws a picture on effects the YES training had on concrete SME employers and young people concerned as "difficult" regarding employability.

Define your competencies - wording helps!

Angelika Buehler, Career Center UdK Berlin, Germany;

Define your competencies - wording helps! Professional competencies for artists seem to be easy to grasp: look at their performance. Look at their performance or listen to their performance? Enjoy their performance? Enjoy their product? See the video? Enjoy the graphs, handle the object, feel the material, look at the colours.....See their CV? Listen to the different artists talking about their work? Is there a difference between the different disciplines? How are the key competencies for artists defined? Are artists in the focus of any debate about competencies? Why not? If knowledge, skills and competencies are different concepts in the EQF or the NQF and "performance" is the scale to describe the difference, what can other groups learn from the definition of the key competencies of artists? A case study at the Career Center of the UDK Berlin shows how artists profit from a concept of meta competences, which was developed within the reference system (Reference Systems: scientific discussion, vocational experts, artists, cultural and creative industries) of EQF with the tool of an e-portfolio. Above all, new is to consider, what types of competences are necessary for what kind of future tasks and how they are related to the artists performance. As a concept for valorisation of an artists performance it is innovative and perfectly usable. New for the target group artists is, that the competences are theoretically founded and reflected, assessed and certificated, methodically developed and managed.

S12D: Key Competencies —Skills for Life

EduCoRe – Educational counselling during Rehabilitation: E-Learning as an educational opportunity for patients

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The acquisition of key competences for employability and economic integration take place inter alia in life long learning activities. In addition to formal learning environments such as schools, universities, or different kinds of training and education institutions, other settings such as medical institutions can also be suitable for the pursuit of life long learning.

Support for this proposition was gathered in two projects: the Austrian project ECDL for children and young people suffering from cancer and the Grundtvig project eHospital (2005-2008; www.ehospital-project.net). Since 2002, die Berater® have been providing computer-based
training to prepare young patients suffering from cancer for the European Computer Driving Licence (ECDL). So far, 248 participants completed this training opportunity. It was received very positively by patients, parents, medical, and psychological hospital staff alike. The idea was born to build on this experience within the context of a European project, and to transfer this knowledge acquired by experience to other age groups (adults), diverse patients groups and disciplines, as well as to other countries and health systems. The EU-funded project eHospital was aware that in many European countries hospital schools for school-age children are in place, but there are generally no learning provisions for adult patients. The project therefore sought to investigate the potential of e-learning opportunities for hospital patients. In the course of eHospital, seven pilot e-learning courses for diverse target groups in hospitals were developed and tested in six countries. One of these courses dealt with job-orientation for young patients after brain surgery, another provided IT skills for patients with spinal cord injuries. During these courses, a target group with specific educational needs was detected, and their educational needs were discussed with the stakeholders in the health system: Patients who suffer from physical ailments following illnesses or accidents that threaten their employability and participation in society.

Depending on the seriousness of the accident injuries or illness, following their hospital discharge, these patients spend several weeks or months in medical rehabilitation centres. There they receive long-term medical and psychological treatment which aims at curing or at least ameliorating their physical impairments. From the physical point of view, most of the affected persons have a chance to re-enter the labour market and resume a "normal" life after their rehabilitation period.

However, it has to be taken into account that rehabilitation does not only have a medical aspect, but that rehabilitation patients often need to undergo considerable re-orientation with regard to their career choices, or (further) education. Many need to change occupation and/or have to identify appropriate lifelong learning opportunities which foster career changes. Older patients, who make up a large proportion of rehabilitation patients, can use their stay in the rehabilitation centre to consider learning activities for their personal development. These diverse needs pose a challenge to the concept of lifelong counselling and lifelong learning policies, as patients in rehabilitation centres need tailor-made educational and career counselling.

EduCoRe will provide educational and vocational counselling services and training to support patients of rehabilitation centres in the following areas:

· to make thorough career decisions;
· to identify their unique educational needs in order to improve their employability;
· to foster personal and social competences in order to put their professional and educational decisions into practice.

Thus, following their medical rehabilitation, patients will hereby be able to reintegrate more easily into the labour market and to actively participate in society once again.

This contribution reflects the experiences made during the first year of the EduCoRe project, as well as those of the pioneer projects.

Not Ready to Sit and Knit: A Look at Aging and Learning

Lynn Zimmerman

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Generally, when one thinks of an aging population, one thinks of the problems they face: health and healthcare issues, decreased involvement in community and social life, lack of access to resources. Old age is also traditionally seen as a time of slowing down, of taking a less active role in society, a time to relax, and enjoying ones grandchildren. The problems that the elderly face and the expectations for their lifestyle are a reality.

However, an alternative reality is developing among many aging citizens. Even though they may be retired from active work life, many are not ready to just sit and knit as one Polish woman told me. Many have access to disposable income; many are in good health; many are well-educated; many...
are still mentally active. They are not ready to take on the traditional role of the elderly who sit by the fireside.

Uhlenberg (1992) points out that not only is the population of older people growing worldwide, many of them are well educated and have the belief that education is a lifelong process. Traditionally education has been seen as the province of young people in order to prepare them for work, because old age is a time of leisure with no expectation of social responsibility. Uhlenberg (1992) points out that since those reaching old age are increasingly well-educated, healthy, and economically secure, one might expect that they would increasingly make productive contributions to the society. But this does not appear to be happening (p. 463). He suggests that one reason for this, besides the attitude about retirement as leisure, is that we tend to divide the life roles of education, work, and leisure by age. He suggests that the roles should be spread out throughout the life course.

Duay & Bryan (2006) cite research on successful aging that shows that there are a number of interrelated characteristics which contribute to successful aging, such as keeping physically and mentally active, being involved in social activities and interacting with others, maintaining independence, being open to change, and having fun whenever possible (Duay & Bryan, 2006, p. 424). Participants in their study make a connection between successful aging and education in several ways.

Duay & Bryan (2006) concluded that interacting with others is an important aspect of what it means to be successfully aged (p. 430). This conclusion is supported by many of the participants in their study who said that learning is a shared experience in which the contributions of multiple parties create a more meaningful outcome for everyone involved (p. 430). Learning is seen by many older students as mutual sharing in which everyone participates. They want to share their ideas with others, and they want to find out what others think (p. 437). Participants also reported that learning helps maintain mental alertness. One participant said, I think it is a matter of structuring your intellectual stimulation. It doesn't just happen watching TV or reading a book. You have to learn. You have to do things (Duay & Bryan, 2006, p. 435).

However, in many countries and societies the elderly are marginalized and are not offered opportunities outside of traditional roles. Therefore, some groups of older citizens have taken on the task of creating their own opportunities.

This presentation will first address some of the research that has been done on education and the elderly and on successful aging. It will then look at several groups, and at several initiatives that have been undertaken in various European countries by and for senior citizens to give them creative, cultural, socially responsive, physically active, educational, opportunities and outlets. It will then focus on the work of one group, Akademia Pelni Zycie, in Krakow, Poland, a grassroots organization that was created by and for seniors.

The Youth Competence Centres of Antwerp: innovative practices for key competencies identification and recognition

Patrick Manghelinckx

JES vzw, Belgium;

Background or context

JES is a plural non-profit organisation. Its mission is to create equal opportunities for young people to actively participate in society. JES is based in three Belgian cities: Brussels, Antwerp and Ghent. Its main activities include training and guidance, training for youth work volunteers, outreach work, support for youth clubs and youth work initiatives. These activities focus on young people, living in large cities, between 6 and 30 years old, of whom a lot are low-skilled and with migrant background.

In 2008 three youth centres were recognised as Youth Competence Centre (YCC) by the City of Antwerp. The JES division in Antwerp was one of them. The objectives of a Youth Competence Centre were defined as follows by the steering-committee: The Antwerp Youth Competence Centres are accessible centres for young people that provide integrated activities regarding leisure
time, competencies (identification, development and recognition) and work. These three axes are all profoundly developed and the interaction between these axes is the foundation of the YCC. The YCCs are explicit learning and development spaces that empower young people with a view to personal development and increased social orientation and participation. The lifestyle and needs of young people are central in the activities of the YCCs.

The priority target group of the YCCs are 16 to 25 aged young people in a vulnerable situation (young people in a weak socio-cultural or socio-economic position).

**Objectives**

In 2008-2009 JES was one of the first youth centres to put the Youth Competence Centre idea into practice, experiment and further develop the concept.

In our presentation, we want to share our experiences, point out the main challenges and successes and present some ideas for further development of the Youth Competence Centre concept.

**Summary of results**

JES Antwerp provides a wide range of activities regarding leisure time: on the one hand we support local youth work by letting the youth centre and sports infrastructure and by supporting local dance and fight sport clubs. On the other hand, we provide training for youth work volunteers, youth work activities focussing on the local neighbourhood and cultural youth work activities.

Thanks to the recognition as Youth Competence Centre, the City of Antwerp provided the necessary funding to hire a RAC-counsellor (RAC = Recognition of acquired competences), whose mission was to put into practice the objectives of the YCC.

The most important questions and challenges we addressed during the experiments were:
- What is RAC-guidance?
- How to integrate RAC guidance in leisure time activities without formalising informal time?
- How and when to start RAC-guidance?
- What is the role of the RAC-counsellor?

After one year of experiment, 52 young people who take part in our leisure time activities participated in a RAC-guidance during one or more different projects. 35 other young people who visit our youth centre got counselling on specific questions concerning school or work.

Our preliminaries were:
- The force and talents of young people are our starting points (positive approach)
- Young people participate voluntary in RAC-guidance
- Young people are themselves instigator, director and manager of the RAC-guidance

Starting from these preliminaries and throughout our experiments, we came to the following definition and model of RAC-guidance: RAC-guidance is guidance that consciously stimulates young people, through participation in activities that fit with their interests and lifestyle, to experiment and shift their limits (experiential learning) and thus increase awareness on their own competencies (identification of competencies) and further develop them.

Once young people show interest in participating actively rather than just consume activities, we think it is useful to start RAC-guidance. Youth workers then refer these young people to the RAC-counsellor.

The role of the RAC-counsellor is on the one hand observation, active coaching and support for the construction of a portfolio for the young person and on the other hand support and training of the referring youth worker to identify competencies, give feedback.

**Conclusions and recommendations**

After one year of YCC, we developed a model and several practical experiences for RAC-guidance in leisure time activities.
However, several challenges need to be addressed in future YCC development:
- More profoundly develop the work-axe
- Facilitate interaction between the different axes (leisure time work)
- Network with other organisations is order to widen the range of activities
- Create possibilities for APEL (Accreditation of prior experiential learning)

Key1: Key Competencies Plenary

**Blending New Generation Skills, Portfolio and Learning Content Management Systems for personalizing learning in Europe (and surviving global crisis and competition).**

*Fabrizio Cardinali*

The presentation details how you can add new generation Digital Repositories and Learning Content Management Systems to your existing streamline eLearning platforms, such as Blackboard, Moodle and Sakai, to achieve wider Reusability Interoperability Accessibility and Durability of your learning materials, whilst empowering new generation learning experiences based upon Mobile, Virtual and Rich Media learning contents.

**Managing one’s identity is a key skill**

*Serge Ravet*

In 2007 the European Commission defined a European Reference Framework for KEY COMPETENCES FOR LIFELONG LEARNING.

The Reference Framework sets out eight key competences:
1) Communication in the mother tongue;
2) Communication in foreign languages;
3) Mathematical competence and basic competences in science and technology;
4) Digital competence;
5) Learning to learn;
6) Social and civic competences;
7) Sense of initiative and entrepreneurship;
8) Cultural awareness and expression.

What we would like to explore in this address is that managing one’s identity is another way to express a number of these competencies, in a more organic manner, but also more challenging to the current education and training system. We will also explore the implications on the architecture of the information system we need to develop in the future, the Internet of Subjects, the Internet of empowered people mastering multiple literacies.

**S13C: Workshop**

**E-portfolios and the tutor**

*Alan Clarke*

NIACE, United Kingdom;

The use of e-portfolios provides many opportunities for creating rich environments to develop learners skills and knowledge. However, in order to bring about the successful application of e-portfolios requires tutors and trainers to be aware of the changes in their practice that need to be
brought about. This workshop attempts to consider some of the major changes. The key foci for the workshop will be:

1. Formative assessment
2. Summative assessment
3. Ownership of evidence
4. Feedback as evidence
5. Selection of evidence
6. Presentation of evidence
7. Freedom versus structure

The workshop will be participatory with delegates asked to contribute to the discussion through working in small groups. The overall conclusions will be incorporated into a final summary and sent to all participants after the event.

**E-Guides: Lead by example**

**Angela Sanders**

NIACE, United Kingdom;

This workshop will briefly detail the history of the E-Guides training programme and illustrate the key components of a change programme aimed at practitioners in adult and community learning, work-based learning providers and community voluntary organisations.

The workshop will examine the impact, (impact to be understood as change, alteration or effect), that may have occurred as a direct or associated result of the E-Guides training.

In a recent (2009) impact survey respondents were asked about the spread of e-learning across curriculum areas within their organisation. 84% felt it had increased since August 2007 (prior to their attendance on the E-Guides training programme) and 80% of respondents felt that attendance on the E-Guides training programme had an impact on any increase.

Key questions to consider will be:

- What difference has the E-Guides training programme made to teaching and learning?
- What role does an e-portfolio system have in developing learning?
- How did organisations change their practice in the use of technology for teaching and learning?
- What are the significant factors of a successful training programme?

Angela Sander, who will be presenting this workshop, developed the E-Guides training programme in 2004 and has overseen the development and delivery to over 2,500 practitioners in England.

**S13D: Learning Networks and Communities**

**Digital Activist Inclusion Network (DAIN) East Midlands**

**Andria Birch**, WEA, United Kingdom;

An innovation and transnational project part funded by the European Social Fund (ESF) April 2009 to May 2012

**Workshop aim:**

To share information on DAIN project activities and tool development and provide an opportunity for input and feedback on proposals.
Project aim: An East Midlands project to develop, test and deliver approaches to challenge the digital divide and help widen participation in employment and learning.

The term digital divide at its most basic refers to the gap between people with effective access to digital and information technology and those without.

Project outcomes:

- The DAIN project (Digital Activist Inclusion Network) will develop a regional network to enable free sharing of information, good practice and resources where none currently exists.
- The project will recruit and train of at least 100 Digital Activists (volunteers) as experienced ICT learners and members of the target community to champion the benefits of engagement with digital technology.
- Innovative examples of good practice in the engagement methods of digitally excluded individuals and resources to support engagement will be identified by a team of Digital Activists via study trips to transnational partner organisations.
- A diverse suite of tools will be developed to support digital engagement with the communities of place, interest and identity targeted within the project.
- The team of Digital Activists will be supported to engage over 3000 digitally excluded individuals in activities to promote e-inclusion.*
- A community learning environment and virtual conferences will be developed to enable the 2 way sharing of information between Digital Activists, individual community members and regional and transnational partners.
- Digitally excluded individuals will be supported by Digital Activists to access community based ICT courses as a progression route within the project to develop their ICT skills as appropriate. 175 community based ICT courses per year will run across the region as part of the DAIN project.
- An action research model of design and delivery will record and evaluate the project methodology, methods and outcomes. It will compare and contrast the impact of the work of Digital Activists both on the digital divide and on learner recruitment, retention, and progression statistics for DAIN project ICT courses. This will be done from day one to enable project reflection, development and changes as needed.
- In the last year of the project all the above will culminate in extensive dissemination activities at local, regional, national and international levels.

The DAIN project partnership is a strong third sector partnership of regional and national charities working from grass roots to regional strategic and national levels. All partners are working either directly with socially excluded individuals (WEA) or supporting grass roots organisations to work with socially excluded individuals (NIACE and CEFET).

All 3 partner organisations have experience of working at both operational and strategic levels with the public and statutory sector at local, regional and national levels. All 3 organisations also have worked with a diverse range of transnational partners in previous projects and activity. The DAIN project will work with several transnational partners including the Institut fur Lern-Innovation (FIM Neues Lernen) [Institute for Innovation in e-learning] in Germany. ILI/FIM will be the lead transnational partner around two-way sharing of good practice and dissemination of DAIN project findings.

The impact of the Digital Divide extends far beyond the obvious use of ICT into to all areas of life where ICT is embedded and basic ICT literacy is assumed.

The model of working with community champions, or what we are calling Digital Activists is the backbone of the DAIN project and will ensure that the target community remain central in design and delivery of this project both within the East Midlands and as part of all transnational project activity.
The DAIN project will be developed in reference to other Transnational ESF Digital Divide projects around the country. The workshop will share information on planned project activity and developments with workshop participants, particularly in reference to outcomes 3 and 4 above.

**e-Innovation, eportfolios and blogs**

**Duncan Gillespie, Robert Brown**, Dumfries and Galloway College, United Kingdom;

Dumfries and Galloway College is at the heart of one of the most exciting developments in Further and Higher Education in Scotland, delivering a wide curriculum from Access to degree level on a new state of the art campus. [https://www.dgintranet.com/dumgal/](https://www.dgintranet.com/dumgal/).

The College has a commitment to widening participation and FE/HE partnerships, learner progression, retention and achievement and the significant development of eLearning. Alongside these aims, the College is keen to develop Employability, Personal Development Planning (PDP) and Citizenship skills with all our learners. A major factor in the enhancement of these skills includes the development of an e-portfolio and student support system which breaks down barriers to the learning process and allows the student to continue using their e-portfolio through their journey of lifelong learning and employment.

The initial impetus behind the development of this system came from the ISLE project which involved 10 institutions with diverse missions, student types, staff experience, programmes, curricular structures, strategies and funding models - and geographical locations across the length and breadth of Scotland. The projects focus was on PDP, Employability and Citizenship. Dumfries and Galloway College also wanted to embed additional aims within the project:

- To help learners acquire skills which will have a long-lasting and positive impact on their learning
- To improve learner retention, progression and achievement rates
- To support lifelong learning and wider participation by meeting the diverse and individual needs of learners in an efficient and effective manner
- To provide student learning with sustainability.

E-portfolios have moved into the main stream of the Colleges curriculum and in January 2009 there were 1167 e-portfolios active in the college.

Although e-portfolio blogs could be considered a simple solution it allows the student to quickly master the system, thus enabling them to start to build their e-portfolio at an early stage and to take their work with them when they leave the College for employment or another academic institution.

Students have responded positively and confirmed their sense of engagement through course meetings and other College surveys.

Learners frequently upload digital images, podcasts and videos as developmental work. Users can also link to items they have created and hosted elsewhere for example, on social networking sites - as staff point out to them the benefits this could offer.

Structure is important and using the WordPress e-portfolio system a structure for PDP was identified to include key essentials, such as: work experience, my course, my goals, personal statement, my CV, my learning style and my qualifications. These were provided as templates for users to complete and update. Learners are engaged in using the e-portfolio facility through their tutorial activities, or as part of a taught unit such as Employability Studies or within core skills classes.

The College has disseminated its work in the area of e-portfolios and support blogs in a variety of venues. Much interest was generated following an e-ducation 2.0 presentation on the Colleges work at the e-Portfolio Conference Providing the Evidence held at Queen Margaret University - [http://www.rsc-ne-scotland.ac.uk/portfolio.php#conf](http://www.rsc-ne-scotland.ac.uk/portfolio.php#conf). Since this conference the College has presented their work - e-Portfolios as a Tool to Support Personal Development Planning - at a Colleges Open Learning Exchange Group (COLEG) conference in April 2008 at Heriot Watt University, Edinburgh - [http://](http://)
www.coleg.org.uk/coleg/161.html and subsequently awarded the College an Innovative Practice Award - and at a Guidance event held at the Scottish Further Education Unit (SFEU) in Stirling. SFEU print a sector magazine called Broadcast where an editorial on one of our presentations has been published. Individual colleges have also received personal presentations and another college has taken the system to use themselves.

HMie recognised the Colleges work awarding a Sector Leading Innovative Practice for embedding employability skills using e-portfolios with students in the Construction sector.

Over sixty individual programmes have their own ‘Support blog’ which can be accessed from anywhere. Published class lesson plans provide the student with prior knowledge of the focus of the class. This facility has improved learner engagement with the programme materials and improved opportunities for reflection and independence in learning.

A student’s e-portfolio is an individual snapshot of learning, achievement and distance travelled. Pedagogic approaches are changing and new models of learning and teaching are emerging around the use of e-portfolios. For example, classes are more likely to be comprised of individualised activities under the control and direction of the user, with tutors providing guidance and support, alongside peer support activity found in the blogs.

"Kompetenzkatalog.de" an ePortfolio for IT-Competence

Thomas Schmidt, Daniel Schötz
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Introductory note: Knowing how to use different types of media is one of the key skills viewed by the European Parliament and Council as being essential for personal development, social participation and career success. Acquiring media skills is a life-long process which often occurs in an informal learning environment without ever being put to the test in the exam room.

Goals: This skills catalogue compiled by HELLIWOOD media&education provides insights into the complex world of media skills. Its modular structure means that it can be adapted to different application scenarios and target groups.

eProfilPASS - A Vision of an ePortfolio for the ProfilPASS

Thomas Schmidt, Daniel Schötz
Helliwood media & education, Germany; schmidt@helliwood.de, schoetz@helliwood.de

The ProfilPASS is a tool for the determination, documentation and balancing of individual abilities and competencies. It targets to initiate the processes of reflection of different acquired competencies and to support the composition of one's own educational biography.

The enhancements of the ProfilPASS to an ePortfolio eProfilPASS primarily is aimed on the acquisition of new target groups and on the assistance of the ProfilPASS users with additional support and communication options. In January 2010, the eProfilPASS will be launched within a broad user test.

S14A: Workshop

The Digital Village and informal learning

Mary Moss¹, Steve Thompson²
¹NIACE, United Kingdom; ²University of Teeside;

In this workshop we propose to consider ways in which taking part in the creation of digital media encourages and develops skill in using ICT as well as promoting active engagement in community activities. It will consider some of the key characteristics of informal adult learning in relation to active learning for active citizenship.
We will present some examples of local projects focusing on an exciting development known as the Digital Village. We will invite participants in the workshop to contribute other examples and experience and to discuss the following questions:

- Does creating content contribute to building communities of confident, curious, critical and creative people? [1]
- What are the principles of active learning that enable key competences to be developed?


S14B: Working group meeting

ePortfolio challenges

Serge Ravet, EIfEL

For the 7th ePortfolio conference, and in order to prepare 2010, EIfEL has decided to launch a number of challenges to the ePortfolio community and beyond. The objective of these challenges is to move beyond the current state of ePortfolio development, in particular in the field of interoperability as interoperability is not just a technical issue, but a mean to enable new practices and allow the emergence of a lifelong and life wide ePortfolio.

The main objective of these challenges is to create an environment where every one would be able to choose their own technologies and service providers to build their ePortfolios and to facilitate the emergence of MultiPortfolio organisations (one organisation can interact with many different ePortfolios) and MultiOrganisation portfolio (have one ePortfolio to interact with many different institutions).

The challenges are the following:

1. Universal ePortfolio Repository—a unified view of all my assets
2. Universal ePortfolio Browser—adapt ePortfolio views to the readers
3. Universal ePortfolio semantic editor—make sense of what I write, connect, etc.
4. Universal Competency Identifier—share competency definitions
5. Open Service Architecture—choose the services to exploit/value my assets
6. ePortfolio based performance support system—make the ePortfolio part of my work
7. ePortfolio discovery mechanism—find people, competencies, resources
8. ePortfolio automation—automatic generation and update of CV
9. ePortfolio social—share assets, knowledge, processes across communities
10. ePortfolio trust—sticky policies on the use of personal data

1. Universal ePortfolio Repository

Today, the digital assets of a person can be hosted in many different systems managed by many different organisations. How can we provide a unified view of all the assets belonging to a person, so she/he can easily create ePortfolios out of them? One possible solution is a virtual disk, where the different services are represented as directories and the assets as files within those directories. There would be no need to upload assets in a particular system in order to create an ePortfolio, but simply make reference to the original location of the asset in the virtual disk.

The first stage of the repository could be a simple inventory of assets. Rights management to seamlessly move and share assets, would come as a second step, using identity and access...
management (IAM) technologies, such as federation of services and trust technologies — currently
developed in the TAS³ project.

This should facilitate the move towards MultiPortfolio organisations and MultiOrganisation
ePortfolios [...] The objective of the meeting is to plan the work for the year to come to address those challenges.
Key2: ePortfolio Plenary

Life narratives: learning from people's portfolio existence

Martin Owen, Smalti, United Kingdom;

Martin Owen is currently working on www.icould.com - which provides the opportunity to get ideas and inspiration about what's out there in the working world, through hundreds of real people, in real jobs, sharing their career stories. It is an innovative process of combining life narrative and personal development.

He is also developing unique playful, tangible devices for early learning with his own company Smalti. He is also working as an independent researcher in technology enhanced learning with particular emphasis on games, mobility and augmented reality. He was the initial Director of Learning and Head of Concept Development at Futurelab. Previously he was an academic researcher and teacher trainer at University of Wales, Bangor. He has also been a school teacher.

ePortfolio for eCPD

Lee Davies, ifL

With more than 180,000 members (as at the end of January 2009), the Institute for Learning (IfL) is the professional body for teachers, trainers and assessors across further education (FE), including adult and community learning, emergency and public services, FE colleges, the armed services, the voluntary sector and work-based learning.

With Becta, LSIS and other representatives from the whole FE sector, IfL has developed REFLECT, an online personal learning space for its members to support the delivery of the Programme, and to help practitioners to plan their 30 hours or pro rata annual continuing professional development, as required by the Institute for Learning.

Inspiring Learning: a framework that can help you describe and evidence the impact of creativity

Natasha Innocent, MLA

This presentation will introduce the Inspiring Learning framework developed by the Museums, Libraries and Archives Council (MLA) to support museums, libraries and archives to identify and evidence their contribution to people's learning and development. The framework is now particularly significant as the education sector recognises the importance of the wider benefits of learning on not only attainment but also on cohesive communities, positive mental health and active citizens. This improvement framework has been used by a wide range of organisations in the UK including the Tate, the BBC and English Heritage. It includes 5 generic learning outcomes that provide a consistent approach to capture how and what people learn in non-formal learning environments and the recently developed generic social outcome methodology that seeks to capture evidence of how our sector contributes to wider community benefits that lead to the development of happy, confident communities that live together in harmony and are supportive to all. There has been considerable interest from government and others in the generic social outcomes.

Portfolio A Modern Discourse!

Niels Henrik Helms
Portfolio A Modern Discourse! By Niels Henrik Helms, Director, Knowledge Lab DK, University of Southern Denmark. There are many challenges in education but if we should address the core challenge we could return to some of the discussions of the 19th century. How do people get educated, how do they become a sovereign autonomous subject through structured activities i.e. education? And how do we cope with this old and at the same time changed challenge of education: That we should become articulated individuals in order to become members of the society or as others has formulated it: Become like the others or get a future!

The portfolio and especially the e-portfolio could be seen as a technology (in a broader understanding of the expression) mediating these challenges. Thus, the portfolio is in accordance with a modern competence-view, in which the individual is not evaluated on abilities that are defined in advance, a graded validation based on a defined set of standards. Instead, the person in question has to tell about what is special, or even unique, about himself/herself. This is the logic of a knowledge-society, which has become generally accepted. Human resources are crucial in a modern organization within a knowledge-society. Earlier, the organization was able to handle a complex environment by creating complex systems. Now it has to develop the internal complexity organically in a hyper-complex society, in which the special talents and resources of the individual together with other individuals have to make the difference. Please note the formulation: the individual together with other individuals. This means, that the individual has to possess special competences, which can interact with special competences of other individuals. In the portfolio the individual tells about himself in order to create structural connections to other people, of course as a kind of self-observation, which makes observation of the surrounding world possible.

Portfolio is an opportunity for the knowledge-society to make an optic to observe the individuals competences, attempting to fulfill both the need for a calibrated optic and for different images of competences. Or we could and will formulate it in a different way. The different discourses of the modern society where we on one hand has the rational self control where we have organised our society and the construction of its members according to a formula which secure efficiency and effectiveness and on the other hand has another discourse a question about articulated expressions, emotions and with a formula of individual development. These two discourses are now brought together in a modern society where you should be effective and emotional, where you should produce utility and emotional experiences not as contrasting rationalities but as different optics and sense making strategies. Maybe people will claim, and with good reason, that we have always had portfolios. The point is that it is not any longer the tool of the few, the special individuals doing something special the artist showing his or hers (more rarely) works. We should all be special; we should all demonstrate how we differ.

The post-industrial society, which we generally call knowledge society, is characterized by a tremendous degree of complexity, or by contingency as Niklas Luhmann calls it. The meaning of contingency is that principally, everything could have been handled differently, that we could have chosen differently, that the way we live and work is not given but has been constructed and discussed, and that in this process we have to add meaning and legitimacy. Therefore, we have to be able to communicate this meaning at all times, answer for it, argue for it and also document that exactly this or that construction is the optimal one. This gives rich opportunity for development and individual and organizational self-realization. But as it is not only a possibility, but also a requirement, this can also release frustration, uncertainty and maybe even stress. And meaning should and could be made through both measurable utility and emotional expression we are constructing our selves and we show them to the world. This could lead us towards some points of reflection: The portfolio as a shield towards reflection! The portfolio as mediating communities instead of individual capabilities! Performance, Emotions Or sense making through collaboration? Education as difference portfolios as mediators of difference.

S21A: Workshop

Developing teachers through personalised learning and e-portfolios

Lee Davies¹, Jean Kelly¹, Sue Rhodes²
The Institute for Learning (IfL) is the professional body for teachers, trainers, tutors and assessors working in the incredibly diverse further education and skills sector in England. With 185,000 members the IfL has rapidly become one of the largest professional bodies in the UK. Its mission is to raise the standing of teaching practitioners through the conferral of professional status (Qualified Teacher Learning and Skills, QTLS), to offer members a platform for their individual and collective voice to inform policy and decision making and to bring a range of benefits and services to enhance professional practice.

Knowsley Community College has an ongoing commitment to Staff Development, evidenced by the year on year increase in attendance at staff development events and activities. With the implementation of the teaching professionalism reforms in 2007 it was decided to produce an internal programme available to all staff across the college. This covered various topics for targeted audiences, sessions for example on issues from observation reports Questioning Techniques, Differentiation in the Classroom Delivering a Grade 1 Lesson to your Learners Behaviour Management. It incorporated self identified needs from staff members themselves or curriculum sections as well as some mandatory events such as Safeguarding Learners, Health and Safety.

Members of the IfL are required to demonstrate that they remain in good standing through continuing professional development (CPD), reporting annually on the minimum of 30 hours of learning that has enhanced their practice. The IfL wanted to provide members with access to leading edge online learning and communities of practice, launching its personal learning space and e-portfolio, REfLECT, (based on Pebble Learning’s popular PebblePad system) in April 2008. All members have access to REfLECT as a benefit of membership, though its use remains voluntary in recognition of the fact that there is no single approach to professional learning. In eleven months the uptake of REfLECT has grown to 27,000 members, making it one of the largest professional e-portfolio programmes in the world.

This workshop, facilitated by Sue Rhodes, will examine the impact of REfLECT when used as part of a whole organisation approach to supporting the professional development of teachers. The roll out of REfLECT at Knowsley Community College has not been without complications sometimes to do with the technology and at other times related to this being part of a technological revolution, requiring considerable skills and commitment from participants. In leading this session, Sue will take a candid look at a major change programme at Knowsley Community College and provide an inside view on harnessing personal learning spaces and e-portfolios for professional development.

**CPD in Action: Making e-portfolios mobile**

Lee Davies\(^1\), Michelle Jennings\(^1\), Shane Sutherland\(^2\)

\(^1\)Institute for Learning, United Kingdom; \(^2\)Pebble Learning, United Kingdom;

**CPD in Action**

The Institute for Learning (IfL) is the professional body for teachers, trainers, tutors and assessors working in the incredibly diverse further education and skills sector in England. With 185,000 members the IfL has rapidly become one of the largest professional bodies in the UK. Its mission is to raise the standing of teaching practitioners through the conferral of professional status (Qualified Teacher Learning and Skills, QTLS), to offer members a platform for their individual and collective voice to inform policy and decision making and to bring a range of benefits and services to enhance professional practice.

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eleven months the uptake of REfLECT has grown to 27,000 members, making it one of the largest professional e-portfolio programmes in the world.

The further education and skills teaching community includes some of the foremost experts and exponents of the use of technology to support learning. The sector has benefited from significant state investment in e-learning pedagogy and there is a real hunger from teaching practitioners to meet the increasingly sophisticated needs of learners in the digital age. Teachers in further education and skills are active people with learning environments including workplaces, workshops, community venues, virtual classrooms, alongside the traditional classroom. Teachers are not tied to desks and staffrooms, they learn through their practice making their need to record their reflections an immediate one.

The IfL has recognised the importance of mobile devices in accessing and updating members REfLECT accounts and the enhanced learning experience provided by this real time engagement with their e-portfolios. Working with Pebble Learning, the IfL has developed a range of mobile device interfaces with REfLECT that allow members to manage their learning on the move from texting thoughts and reflections directly to their accounts through to the management of learning assets via a fully accessible PDA version of REfLECT.

In leading these developments the IfL has been informed by the pioneering work of the Mobile Learning Network (MoLeNET), a unique collaborative approach to encouraging, supporting, expanding and promoting mobile learning, primarily in further education in England. REfLECT mobile rises to the challenge of making the planning, recording and reflection on professional learning easily achieved through handheld devices and other wireless or mobile technologies. This presentation and workshop will give delegates the opportunity to explore the potential of harnessing personal digital technologies in the context of e-portfolios and individual learning spaces. The session will include a brief overview of the context within which REfLECT mobile has been developed and some of the early challenges faced in bringing a large scale e-learning programme to the hands of professionals through mobile devices.

Michelle Jennings is the IfL's CPD Manager for E-learning and Development. A teacher educator, Michelle previously worked for the Learning and Skills Network on a range of high profile e-learning initiatives and is a powerful advocate of the use of technology to support learning. Michelle is a highly regarded speaker on e-learning and teaching professionalism and has extensive experience of digital pedagogies in teacher education and development.

Lee Davies is the IfL's Deputy Chief Executive. A qualified teacher, Lee has been pivotal in the reforms to teaching professionalism in England, championing the IfL’s work on professional identity and its role in promoting CPD. Lee readily admits to having no technological skills but is a passionate visionary for online personal learning spaces, virtual communities of practice and the concept of a digital professional self.

Shane Sutherland is the founder of Pebble Learning. Formerly Principal Lecturer in Education at the University of Wolverhampton, Shane and colleagues created Pebble Pad from sound pedagogic principles to support initial teacher training. The Personal Learning System is now being used in learning contexts as diverse as schools, colleges, universities and professional bodies; by learners, teachers and assessors.

**S21B: Workshop**

**Planning a successful e-portfolio project: learning from JISC-funded activities**

Lisa Gray

JISC, United Kingdom; l.gray@jisc.ac.uk

By the end of the session participants will:

- Have had an opportunity to discuss and increase their understanding of e-portfolios and the
range of learning contexts in which they can be used

- Have shared experiences and explored further the factors relating to successful e-portfolio project implementations
- Have been introduced to new JISC resources available to support their use of e-portfolio tools and systems

Description of content:

The session will start with providing participants with a short opportunity to discuss their views and attitudes to e-portfolios, processes and purposes in small groups. This will be followed by a presentation which will share models and thinking around e-portfolios, and examples of the role they can play in enhancing and supporting learning and teaching, drawing on a range of JISC funded work, as well as other examples from throughout the educational sector. The final discussion activity will provide an opportunity for participants to engage in discussion around key factors for successful implementation that have arisen from JISC projects in this area.

Workshop leaders

This workshop will be led by Lisa Gray, e-Learning Programme Manager at JISC, and Gordon Joyes, e-Portfolio Consultant.

S21C: ePortfolio in schools and pre-schools

A Case Study on Eportfolios at İstanbul Enka Primary School: Putting the Focus Back on the Student

Burcu Orenturk Aybat

Enka Schools, Turkey;

Background and Context

The term electronic portfolio is being used more and more in K-12 schools these days. Is it an evaluation tool for schools? Or is it a mirror for students who are expected to reflect on their learning? Or is it a digital journal for us to use to write our resume or draw our career path as a teacher. Whatever the definition, the value given to e-portfolios triggers a series of never-ending questions in the mind of each person in a school environment. Each person questions different aspects of the e-portfolio. Who cares then about creativity and innovation? Nobody? That is debatable. Ken Robinson says in his book "Out of minds, learning to be creative" that most creative actions take place not in institutionalized but newly created business environments. The important point here is that creativity is not an add on. Creativity is related with the culture of that environment. The school itself needs to have a philosophy which encourages their members to act creatively.

Enka Schools is fully authorized to offer the Primary Years Programme (PYP) of the International Baccalaureate (IB), which is recognized to be a leader in the field of international education, encouraging students to be active learners, well-rounded individuals and engaged world citizens. The philosophy of the PYP makes it possible to apply three steps in establishing a more creative environment in the school - defining the creative actions of members, encouraging them and employment.

Objectives

Portfolio has been used at Enka Schools since the school was founded. Two years ago, we started an e-portfolio project as an innovative step in the school. The project involves 200 Grade 4-5 students and 8 homeroom teachers. The aim of the project is to establish a process where e-portfolio is used both as an evaluation tool in assessment and as a means of reflection for students involvement in their learning. It also aims to create a new understanding of the existing portfolio system in the school.
In the 2007-2008 school year, the pilot study was conducted with 12 Grade 5 students. Upon receiving positive results, this encouraged teachers to be volunteer members of the e-portfolio committee. At the end of the school year the committee launched the project and trained the teachers before the next school year started. In the first semester of the 2008-2009 school year, Grades 4-5 students created their e-portfolios using a variety of presentation tools such as Power Point, Photo Story, MovieMaker and web 2.0 technologies such as Google Sites, within a 13-week orientation program. 30-minute-student-led parent conferences took place throughout two days and each child presented their e-portfolio to their parents. Data were collected from students, parents and teachers via student and parent surveys, interviews and teacher meetings to evaluate the effectiveness of the process.

Summary of Results

• Students are actively involved in e-portfolio presentations, and use communication skills through a variety of media, and support their e-portfolio with multimedia elements such as sound, video and pictures. They work enthusiastically, using their creativity and own voice, and improve the use of technology skills.

• There should be a project manager and a committee to follow the process, revise the mission of the project according to recent changes in the field, evaluate the effectiveness of the process, and encourage the participants.

• Gradually the transition from portfolio to an eportfolio system is recommended so that both students and teachers can develop the necessary skills.

• There should be more research and application on reflection techniques, and the project manager/committee should work with teachers to create an environment to share successful stories.

• The teacher has the key role in the process. Implementation varies according to teachers perception.

• Technology should be seen as the tool not the aim in the process

• Web 2.0 technologies which are simple can be used to provide teacher-student-parent interaction.

Conclusions and Recommendation

The contribution of e-portfolios to a school system and to students personal development makes it worth all the effort. However, all participants will definitely face a variety of obstacles. All participants should work collaboratively in order to define these obstacles and find solutions. Before transitioning to an e-portfolios system, pilot studies should be conducted and a gradual transition is recommended. Students seem to be more ready to start the project than teachers. However self-confident teachers who are given encouragement are the people who contribute to the process the most.

Harnessing tools designed to support teaching, to support learning

John Pallister, UKAN-SKILLS Project, Teesside University, United Kingdom;

Many of the recent demands or initiatives that have presented themselves to schools have required a change in the way teachers organise their teaching; they have required a shift in emphasis away from traditional teaching towards independent or personalised learning. The much heralded shift from teaching to learning is happening very slowly meaning that intended benefits for the learner that the initiatives are designed to realise, are not being delivering as rapidly as hoped or needed.

Ultimately, we want the learner to be at the centre of the learning process, operating in, and manage their own Personal Learning Environment. To be able to do this, they would need to develop the functional and personal learning and thinking skills that would enable to survive and thrive, independently, in this environment. Once in this new environment, the learner would need to be challenged, or self motivated, so that they reflect on what they need/want to do, or what they
have done or learnt. They would then plan what they need to do; do it, and then reflect on their learning and progress. Easy to talk about, but a significant challenge to deliver the shift.

This work developed out of the Teesside University, UKAN project http://lis.tees.ac.uk/ukan. There are many tools available to support teaching and support the teacher as they plan and deliver teaching. It occurred to us that if these tools could be employed to support individualised learning, it would support and perhaps accelerate the required shift. This project will investigate the potential of Web-based curriculum mapping tools to support personalised learning.

Web-based curriculum mapping is a process that focuses on what is taught, how it is taught, when it is taught and how it will be assessed. Teachers start by translating an existing planned curriculum into a standardised digital format. The format requires the curriculum to be broken down into topics or units that are then defined in terms of content, skills, assessment methods, the resources required and the teaching strategies that will be used. The topics or units are allocated learning/delivery time and are organised on a timeline.

The immediately obvious outcome from the mapping process is the curriculum map itself, however the actual process of constructing the map has the potential to engage and empower the teachers involved. This would be a very valuable by-product from a curriculum development process that in turn can feed the process. Supercharged curriculum development! It might prove useful in the current environment as teachers review what they teach and more importantly how they organise and provide learning opportunities.

A Web-based mapping package with search and export facilities would allow the learner to select courses, modules or activities that would help them to meet their personal learning needs. By selecting programmes and materials that are visible and available to them in the curriculum maps, they will use the curriculum maps to support their personal learning. This would go some way to satisfy the requirement for learners to be actively engaged with, and help to shape, the curriculum they experience.


This process, by enabling the learner to search for and select appropriate learning activities, might also encourage them to plan their learning and provide opportunities for them to take more control over their learning. By providing learners with links to the resources that would enable them to complete the units or activities as well as to activities that would enable them to demonstrate their understanding or mastery, the Curriculum Map could support anywhere, anytime, personalised learning.

By being able to see the map, learners would be better able to see the big picture and that in turn could result in greater learner engagement. Having a map available that shows them what their available, planned learning diet is, and has the potential to support the assessment for learning process and in turn improved achievement. If we encourage learners to use maps showing their planned curriculum it might help them to understand what the Functional and Personal Learning skills are. The conscious competence model suggests that this would, in turn, help them to realise that they need to do something to develop their competence.

http://edorigami.wikispaces.com/Conscious+Competence+model

This paper will investigate and explore some of practicalities of using Curriculum Mapping tools to support personalised learning

ePortfolios for Early Child Teacher Education Certification Program

Eileen Elizabeth Brennan
Mercy College Dobbs Ferry New York, United States of America;

Objective:
This descriptive study observes the diffusion of ePortfolios into a State Early Child Teacher Education Certification Program. Initial efforts to align NAEYC Standards with the CEC Standards,
and to interactively create appropriate artefacts that successfully address the NAEYC Rubrics are observed. Teacher-candidate participation in the ePortfolio process is seen in artefacts that best demonstrate knowledge and skills in Inclusion and Collaboration.

The mission of the New York City Task Force on Quality Inclusive Schooling NYCTFQIS is to support preparation of teachers for inclusive urban classrooms collaboration among Institutes for Higher Education, schools, parents/families. This author participated with over 15 other Institutes of Higher Education, in drafting this Mission Statement of the Task Force. An expanded concept of Collaboration emerged from four meetings of the IHE’s and parent organizations.

Task Force Mission Statement recognizes the impact disability on the classroom and family and values the links created between: the willingness of school personnel who undertake inclusive practices and the commitment of these learning communities to host teacher candidates in inclusive settings. The study asks: How can engagement in the ePortfolio process embedded in an inclusive, early childhood teacher certification program encourage teacher-candidates intrinsic motivation and engagement in inclusive and collaborative schooling?

Standards-driven ePortfolios document three core variables: (i) faculty-student progressive interaction, (ii) a spectrum of collaborations created by the learner with school-based professional, families and communities, (iii) successful inclusion of all students in schooling. The NAEYC Rubrics assessment of each of these variables developmentally, sequencing from Not present, to Emerging, onto Advanced. Of the three variables, interaction between student and faculty in the ePortfolio process appears to be critical, meta dynamic.

Research posits that the process of incorporating the ePortfolio within a School of Education sequences through four distinct collaborative steps:

1. Collecting of items for the Portfolio
2. Selecting items that best demonstrate emerging/acquired/mastered knowledge and skills
3. Reflecting on chosen items to demonstrate learning and higher order thinking derived from the learning experience
4. Linking learning experiences to a spectrum of certification courses, to multiple cultural and linguistic insights, family connections, or community collaborations.

Progressive faculty-student interactions provide the learner with an ever-increasing sense of control. Learners tend to experience course content and required field experiences as extrinsic. As a learner participates in choosing options within the curriculum/ePortfolio, the learner-control increases and this leads to more intrinsic motivation.

For the purpose of this study, Participation in the ePortfolio process focuses on artifacts documenting the course-specific, state mandated field experiences. The analysis of field-based artifacts interactively created in the three graduate courses core to Early Childhood Teacher Certification Program demonstrates teacher-candidate engagement in inclusion and collaborative practices.

EPortfolios, interactively structured by faculty guides and student input, and aligned with NAEYC Standards and CEC Standards, and completed in inclusive settings, elicit teacher-candidate commitment to learning experiences that are collaborative and inclusive. This study documents the faculty committed to inclusive learning and teacher-candidate increased engagement in and commitment to, standards-base, course specific knowledge and skills relevant to inclusive, collaborative schooling.

ePortfolio for kids in social networks across generations, competencies and cultural backgrounds

Wolfgang Helmeth, Eva Helmeth

EDEJU - International Institute for the Promotion of the Development of Youth, Germany;

Context
The classical education system is not capable to awake and promote individual competencies of children and the youth. Instead, the academic socialisation aims to create an ideal type with a specific character, abilities and soft skills. Hereby, the system discriminate against children who do not fit into this frame and intend to homogenise the variety of individuals although our society would rather profit from versatile talented people of all sorts.

Existing intentions to improve the educational system often reach their limits, due to the rather rigid structure of the classical system. Such ostensible unparalleled system is not only sustained by its administration, but also by the broad society. Therefore, the educational concept of EDEJU (Promotion of the Development of the Youth) targets the entire society across cultures and competencies to create a social learning network with the help of ICT (Information and Communication Technology).

Objectives: EDEJU aims to realise an alternative method of self-development, which begins in early childhood and leads to a life-long process of the individual development of personality embedded in an autonomous social learning network. The educational concept of EDEJU, namely INSEL-Netz (Intercultural Self-learning Network) offers an alternative to the abovementioned classical system: Based on the uneducated child with its natural ambition to develop its competencies, INSEL-Netz intends to create an optimal environment, which reacts according to the child’s emerging talents just in time. The concept involves parents, early child teachers, educators as well as the society with its various institutions (nurseries, schools, public administrations, political entities, economies etc.). By creating a social learning network via ICT across societies and national borders, the concept aims to develop a worldwide network appropriate for children within a child-friendly society. The pilot projects Cleverle in the Ivory Coast, Denzlinger Cleverele in Germany, and the international project Cyber-Cleverle are testing aspects of the concept successfully. Kids (here referred to as cleverle) develop their various competencies through self-organised projects and share their experience online by means of an ePortfolio.

Hereby the programme EDEJU-Atlas intends to categorise, organise and connect activities of cleverle, so that a self-learning network may arise.

Summary of results: The application of the EDEJU-concept INSEL-Netz in the form of Cleverle-projects exhibits successful results, which is foremost supported by highly satisfied children and parents. Participating children can not only develop their individual talents within the stimulating environment of the projects, but more so they share their acquired knowledge and expertise with children across ages and borders through their self-developed ePortfolio. Thereby social self-learning networks arise in which for example Anika (8 years old) from Germany produces an animated cartoon in cooperation with Gungun (6 years old) from India.

Collaborators and children of the pilot projects in the Ivory Coast make also use of EDEJUs webspace to present their educational activities via ePortfolio. The already existing network among them is hence expanded to Cleverle from other countries.

The EDEJU-Atlas is still in a probational phase, however, the programme is already accessible online. As an interactive programme, users are welcome to further develop it and to suggest improvements according to their needs.

Conclusions and recommendations: After decades of developing the educational concept INSEL-Netz and its application through pilot projects, emerging tendencies towards the EDEJU philosophy can be observed. These are to be promoted in order to create a critical mass, which in turn would propagate a child-friendly self-learning network by the means of ICT. As an active participant of Cleverle-projects, each person not only develops its own talents, but also contributes to a dynamic knowledge exchanging and collaborative society. Furthermore, the INSEL-Netz concept invites interested people to realise Cleverle-projects within their own societies, which would then be linked to already existing projects via the EDEJU-Atlas. This would enable new cleverle to present their competencies and collaborate with other cleverle around the world.

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**S21D: Professional Development**

**Using e-portfolios to assist with professional portfolio development**

Polly Lee
Introduction

This paper outlines how audio recordings have been used in conjunction with an e-portfolio system as a means of reaching students who are some distance from their university on professional placements.

Background

Many professional bodies require students to maintain a portfolio as part of their pre-registration professional development. Whilst some professional bodies may not have made the transition to e-portfolios, students at higher education institutions (HEI) in the UK are nonetheless issued with e-portfolios as part of their academic course. Such students on these professional courses are required to spend time in industry/placement in order that the relevant professional competencies for their academic course and therefore professional awarding body are achieved.

Outline

Whilst on placement students do still feel part of their HEI and therefore appreciate contact with their HEI. This is particularly the case on health related courses where some professional courses stipulate that students must spend 50% of time in placement settings over the three year course. Such students therefore arrive on placement particularly early in their courses, and even though they should be working their shifts with the same supervisor(s) they do need support from both the HEI and placement providers.

As healthcare provides 24/7 care, so students need placement experience that covers 24/7. This consequently means that HEI lecturers and practice placement managers (who may visit on different days of the week or sometimes at different times of the day) may not have consistent access to and therefore regular communication with students.

HEI lecturers and practice placement managers therefore need to be creative in ensuring that the students who may be working weekends or nights do not miss out on formal visits undertaken by their HEI lecturer or practice placement manager, as often there may be queries with regard to the completion of the documentation and indeed both the HEI lecturers and practice placement managers may want to pass information to students.

Locally the documentation of professional competencies is still undertaken using a paper based format portfolio; however the adopted e-portfolio tool is used as a way of communicating with and enabling students to maintain an ongoing record of their communication with their HEI.

Locally, an HEI lecturer and practice placement manager have worked together to ensure that students are receiving consistent messages. This has involved recording a short audio (mp3) file and loading this through the HEI e-portfolio system so that all students have the benefit of receiving the same message. Although most students are seen regularly on placement visits, this does mean that all students are contactable. To date the short audio messages have concentrated on reminding students about what parts of the professional paper based portfolio should be completed when, for example having an initial meeting with their supervisor/mentor. It has also reminded them to select the which activities should be completed on a particular part of their placement year, so that the students are making the best use of the variety of placements that they undertake. Although initially these mp3 files were released as a separate asset on e-portfolio system, more recently different cohorts now each have a separate webfolio that can used to store all the mp3 files, and students have recently been encouraged to collaborate using this system.

This method is considered preferable to pod casting for the students as with the latter system not all students have iPods and it saves already busy lecturers using an RSS system.

Further uses of the system

This system could be further developed for personal tutor/tutee meetings especially when either a full record is required or the student may have additional needs such dyslexia and an audio record may be preferable. Likewise, dissertation supervision meetings could be recorded so the student has an exact record of how a discussion may have developed.
Maintaining and recording CPD activity: Support of experienced and newly qualified therapy radiographers via integration of a VLE and PebblePad

Jo Doughty, Sheffield Hallam University, United Kingdom;

There is a mandatory requirement for Allied Health Professional regulated by the Health Professional Council (HPC) to maintain and record their CPD activity. To remain on the register and therefore to practice clinically registrants must offer evidence of CPD activity for audit upon request (HPC, 2006). As a profession therapy radiographers (Radiotherapy) will be audited in 2010 and staff will need to offer on request 2 years worth of evidence demonstrating achievement of the CPD standards.

In Radiotherapy departments, time to undertake the recording of CPD activity is often unplanned and is affected by staffing levels, clinical workload and unplanned disruptions such as equipment breakdowns. At Sheffield Hallam University (SHU) the Radiotherapy course team recognised the difficulties accounted in the practice setting and set about creating a system to support our clinical colleagues.

We initially offered an e learning platform CPD VLE via Blackboard in 2006 and the site offers a range of learning materials to support staff in reflecting on their previous knowledge and practice. The site is not prescriptive in the way that topics can be accessed which supports the development of staff autonomy; encouraging clinical colleagues to assess their current levels of knowledge and to pro-actively address any areas for development. There are sections on the site that support new skill development in staff that are very experienced but did not cover portfolio production or reflective practice as part of their initial training.

During 2007 we added an e-portfolio, PebblePad to the package giving the staff a vehicle to record and reflect on their CPD activity. Both Blackboard and PebblePAD allow staff access to their e learning materials and their ePortfolio wherever they have internet access ensuring they can be responsive to any CPD time they are given.

Clinical colleagues have responded positively to the fact that they have complete control over the content of their ePortfolio and that they can share evidence with their colleagues within their own profession or outside it. This can be used as a positive tool to enhance a sense of professional identity and create a positive learning environment in departments. In support workshops it has been encouraging to see newly qualified staff familiar with paper portfolio production embracing PebblePaD and sharing their enthusiasm with their more experienced colleagues.

During the presentation I aim to showcase some examples illustrating how we use PebblePaD to support and facilitate CPD. For example, we use PebblePaD to support clinical staff in developing their submissions and applications to the College of Radiographers live accredited Practice Educator register. We have also commissioned a sample HPC profile in PebblePaD and trialled its submission via a gateway, following discussions with the HPC. In this way PebblePaD can be used as a vehicle for submission of a profile of evidence for the HPC CPD audit.

As the 2010 audit draws closer we have seen increased activity from our clinical colleagues and we continue to share ideas on how the ePortfolio can be utilised.

Reference:
Continuing Professional Development and your Registration, Health Professional Council (HPC), 2006

Professional development - meet the tutors behind the portfolios

Geoff Rebbeck, Thanet College, United Kingdom;

Case Study - using personal learning space for staff

Last year Thanet College reported to Conference on their proposals and initial actions in having teaching staff use a personal learning space to take responsibility for recording their own learning and development. Since then the project has been extended to include all staff and at time of writing we have 80% of the college staff of 460 using portfolios. In this presentation bid, we plan to
have 4 members of staff present themselves as reflective practitioners and explain their own portfolio journey, showing examples of activities captured, how sharing and critical friendships have been used, how work has been presented and how the journey of learning is planned as a result of the path from the past. PowerPoint will not be used. Each presenter will use only their portfolio on a screen to illustrate their own explanation. Each presenter will talk of their own learning, and not as a teacher supporting another learner.

This year we have extended the numbers of portfolio users from 150 to 330. We have included all staff, not only the teaching body. We have closed central systems for Observation and Evaluation of training and provided an alternative through e-portfolios for Annual appraisal and mapping professional standards. We have encouraged the further formation of critical friendships and co-mentoring relationships. We now have a large body of staff from different parts of the college able to speak from personal experience about their professional development journey and the building of a digital identity form presentation to different audiences. Our work is supported by a short video published to UTube.

We now want to share our experiences and conclusions from actual use.

We recognise a challenge in teaching many staff how to use a new tool that offers both process and conceptual hurdles to clear. Beyond that is the capacity for staff to use an e-portfolio as a natural response to experiences in their working day of which formal CPD recording is a part. Many wrongly understand CPD activity to be a record of formal activity that is overtly CPD rather than using reflection on daily incidents as having CPD value.

The nature of e-portfolios is that the owner always starts a thread of writing to and for themselves, and then chooses to share their thoughts with specific others. Discourses may follow with the intention of enriching the experience. From these discourses, flow spontaneous critical friendships and opportunities to co-mentor. Perhaps the most important outcome is to note that the way e-portfolios are used and the assets added are as unique and peculiar as the author.

We have seen tutors form support groups around previously established groups. Examples are student teachers, people who share staff rooms, tutors that work on the same courses, learning support practitioners, and specialist groups such as Improvement Facilitators, Tutorial representatives. In all cases the produce of collaborative working provides shared resources against which each individual member can privately, (or perhaps publically?), reflect. We had not spotted this phenomenon of a shared collaborative asset against which private reflection can occur.

4 staff from College will present themselves as reflective practitioners, describing their own experiences on all the issues listed above. They will show digital identity formation in practice.

An extended paper describing our journey and conclusions will be published in support of this bid.

**Use of an e-portfolio to support the recording, reflection and presentation of academic, career and personal development**

**Mary Ann Kernan, Marie Williams, Rae Karimjee, Olivia Fox**

City University, United Kingdom;

**Introduction**

This case-study paper will discuss how an e-portfolio has been integrated into the MA in Publishing Studies programme to support students in recording, reflecting on and presenting their professional, academic and personal development.

This paper will draw on the collaborative working model established between the Programme Director and City University’s Learning Development Centre (LDC) and the Centre for Career and Skills Development (CCSD).

**Background**

The MA in Publishing Studies at City University is a one-year MA with 20 weeks of teaching, a five-week compulsory placement, and a dissertation element. The programme recruits from a wide
base including overseas and mature students. Some students are straight from a first degree whereas the mature students are either career changers or publishers seeking to develop their career prospects or move sector.

The job market in the publishing sector is traditionally very difficult to enter; having gained some experience, individuals with skills can often move between companies and sectors. The Programme Directors career aim for the programme is to equip the students to identify their career focus and have the knowledge and skills to apply for appropriate roles.

This presentation will focus on our innovations within the MA in Publishing Studies to development the students awareness and confidence towards their job hunt, and to support them in applying the knowledge gained in the formal teaching in their placements and, subsequently, their work.

**Objectives**

First introduced in 2006-7, the e-portfolio was more fully integrated into the 2008-9 programme delivery and assessment to encourage the students to reflect on their learning and development throughout the programme. Students received a hands-on technical induction in September 2008 to introduce them to the e-portfolio system PebblePaD and to demonstrate how they could use the e-portfolio to help them to record and reflect on their development. Students were encouraged to keep a personal reflective blog and were given the opportunity to share their reflective blog with a learning partner in order to receive feedback and enter into discussion on their development.

The aims of this element of this assignment for the MA in Publishing Studies were to encourage students to:

- Reflect on their own learning processes and outcomes
- Develop awareness of what they learn, how they learn it, and what difference it makes to their skills as well as their knowledge.

Also in September 2008, CCSD developed and delivered a workshop for students based on the Type Dynamics Indicator. The Type Dynamics Indicator gives an assessment of developed personality preferences, and its profiles can be compared to the Myers-Briggs Type Indicator (MBTI) which is widely used in organizational and managerial contexts. Based on Jung's model of psychological types, the questionnaire is a starting point for personal insight, valuable for both personal and group development. After completing the online questionnaire, students received a detailed report outlining their results.

The purpose of the Type Dynamics Indicator workshop was to use innovative, hands on methods to increase self awareness as to students personal characteristics and preferences and how these can relate to the world of work, and specifically to their group role preferences.

The workshop was tailored for MA Publishing students and gave them the opportunity to link their type to roles within publishing. Through a creative group activity, students were able to gain self awareness and further develop key skills such as team work, leadership, problem solving and communication.

The students were encouraged to build upon what they learned about themselves in this workshop in three assessed reflective learning submissions related to their term 1 group projects as well as to their Placement Reports in term 2. Students were also encouraged to reflect on their development in terms of the National Occupations Standards key competencies outlined for different roles in the publishing industry.

In term 2, students spend five weeks on placement; and have been required to post to and comment on a collaborative blog in their e-portfolio. The Placement Report element of this MA will be submitted as reflective PebblePaD webfolios of the students learning since September.

**Conclusion**

To assess the outcomes of this element of the Programme, students will be invited to attend a focus group in term 3 to give their opinions and feedback on the effectiveness of the career-specific content and e-portfolio in supporting their confidence, career development and the focus of
the job-hunt. The results of this evaluation will inform the future use of the e-portfolio on this programme.
E-portfolios for staff development

Neil Currant, Ruth Whitfield
University of Bradford, United Kingdom;

The University offers a range of accredited courses for the continuing professional and personal development of staff. In 2008, the University moved from a paper based system to using an e-portfolio for the evidencing and submission of work for the ITQ National Vocational Qualification (NVQ), which demonstrates staff competence in the use of IT in the workplace.

The objectives were: To make the process of evidencing competencies easier for learners, To make the validation and assessment of the evidence more flexible and easier for assessors. To give the learners an additional IT experience to enhance their development.

The e-portfolio system is a flexible one that is mainly used for student personal development planning. It is not specifically designed as a NVQ assessment tool nor is it one of the approved integrated e-portfolio/recording systems, however with a small amount of work we were able to adapt it for this use to the satisfaction of the external verifier. This paper describes the processes that were required to make sure that the required procedures expected by the qualifications body were followed and how we made use of the e-portfolio to give the expected benefits to both learners and assessors. The paper also describes the outcomes for the learners and assessors in using the e-portfolio for this purpose.

A paper based system for NVQs had been in place at the University since 1997 which, after several revisions of the evidencing and recording procedures, provided a robust and reliable quality assurance method. The first task, therefore, was to design the e-portfolio processes to reflect previous practice and maintain quality assurance to ease the anxiety of assessors who were used to operating in a particular way. It became apparent that using an e-portfolio required a different way of working and challenged a range of assumptions about the previous procedures. Prevalent amongst these was that material in electronic format was somehow different to paper; i.e. less secure, less valid, less permanent. By moving to an electronic format, the taken for granted assumptions and beliefs about how the assessors operated were brought to the surface and this opened a debate. The initial fears and anxieties expressed by assessors in making the change from paper to electronic were not realised. Assessing electronically presented different challenges but did not make the process anymore difficult. In fact, for some assessors the hyperlinked, non-linear structure of an e-portfolio and the ability to access from any computer without the need for moving large paper folders made it easier and made more sense to them.

For the learners, the e-portfolio was able to provide a structure that aided the transition to the ITQ culture of competence based assessment. Learners, who had no previous experience of NVQ qualifications, were able to grasp the tasks required of them more quickly than in the paper based system. This resulted in an increased rate of successful completion of the modules which make up the qualification. From the very start, modules were taking less time to complete due to the structure provided by the e-portfolio tool and the elements that had been designed into it to help the learners. These results were taken from in depth interviews with seven assessors and seven learners during the course of the qualification as well as documentation of the procedures and issues raised as they occurred throughout the running of the qualification.

This work has highlighted the benefits of using an e-portfolio for accredited staff development courses. It has shown how centres can move from paper to electronic systems and has highlighted some of the concerns and issues associated with this.

ePortfolios for the 21st century: a case study of the use of electronic portfolios in the academic and professional growth of pre-service cultural managers

Lori L. Hager, University of Oregon, United States of America;
This paper presents a case study of a four-year eportfolio initiative at the University of Oregon. The eportfolio project began in the Arts and Administration Program with 10 students, and now eportfolio thinking is sweeping the campus, catalyzing interest in reforming student learning and instruction, and the ways that technology is integrated across learning and working environments.

Portfolios have long been used as teaching and learning tools, and in professional development in Schools of Education and Fine Arts Colleges. With the emergence of new technologies, eportfolios are revolutionizing how students across disciplines manage information and learning, and prepare for professional careers. Electronic portfolios (eportfolios) serve three primary purposes: to promote student-centered learning and reflection, professional preparation and resume development, and for institutional accountability. The ability to represent work in all the mediums allow students a repository of research, evaluation and feedback from teachers, and an opportunity to self-reflect and represent how they construct meaning from their academic learning and professional experiences.

Universities that employ eportfolios integrate them into coursework and student learning: With eportfolios the pedagogy shifts from a course-driven focus to a student-centered approach placing emphasis for learning firmly on the student (Tosh 3). Students document and legitimize their learning choices through a record in their eportfolio by:

- Creating a system of tracking student work over time, in a single course, with students and faculty reflecting on it.
- Aggregating many students' work in a particular course to see how the students as a whole are progressing toward learning goals.
- Assessing many courses in similar ways that are all part of one major and thus, by extension, assessing the entire program of study.
- Encourage continuity of student work from semester to semester in linked courses (Batson 2005).

With the emergence of web 2.0 tools and a vibrant open source community, the UO eportfolio project is embracing instructional technologies that employ lifelong digital communication tools in support of student learning and assessment. With a focus on the development of 21st century workforce tools including innovation and creativity, collaboration, and communication, faculty and instructional support staff create dynamic mediated learning environments that incorporate reflection, analysis, and presentation across degree programs, and that transect the borders between classroom learning and professional growth.

This case study presents the challenges of implementing a creative interdisciplinary ePortfolio program at a Research Institution. The goals of the project include: the development of a comprehensive learning environment that serves as a hub for the generation of 21st century knowledge in a dynamic learning community of faculty, students, and professionals; and, centers the integration of demonstrations of excellence in academic objectives, participatory learning experiences, and professional development.

The ePortfolio project is a member of the Intern/National Coalition on Electronic Portfolio Research. The project was included in the Eiffel ePortfolio conference in Maastricht, the Netherlands in 2007. It is supported through a grant from the Vice Provost for Academic Affairs.

**Initial training as a key phase to succeed with the use of digital portfolio in education**

Yoilán Fimia¹, Frederik Questier²

¹Central University "Marta Abreu" of Las Villas, Cuba; ²Vrije Universiteit Brussel;

Much has been written and spoken about the use of digital portfolio in education. By analyzing some of the published studies on this topic, it appears that most of them are trying to formalize theories on the subject or to provide elements that help the decision-making on the most feasible tools to be used to manage portfolios (e.g. H. Barrett, 2001). Other investigations are dedicated to how to use portfolios in education covering various pedagogical approaches: constructivism,
behaviourism, and so on. These kinds of studies have great importance since there is still confusion about what exactly a portfolio is; the technology supports many different purposes (T. Batson, 2009).

There is less information written about the initial training phase of the student receiving the new tool as a way to work. At this early novice portfolio users are confronted with several doubts and questions like:

- What is a digital portfolio?
- What must be put into the portfolio?
- Who is the audience for the portfolio?
- What are the benefits of using a portfolio?
- The answers to these questions lead to the formulation of new questions:
  - What is good evidence?
  - How long will that evidence or artefact have to stay in the portfolio?
  - What is a good reflection?
  - What does it mean to be more metacognitive?
  - How a high-quality portfolio self-assessment can be done?
  - How can I communicate my progress?

The answers to these questions and others that are generated from the analysis show that the use of digital portfolios needs to break old patterns developed by traditional education. Students have a major role in this change. In many cases students don’t see the need or benefits of these changes, introducing a degree of inertia. So the work in the initial phase should concentrate on motivation for changing old patterns.

The main objective of this paper is to show a methodology of how to structure the training of students for effective use of portfolios for their own goals and aims of the potential audiences.

The paper reports about the Faculty of Information and Education Science at the Central University "Marta Abreu" of Las Villas (UCLV) from Cuba. This institution is using portfolios since the academic year 2007-2008 in the Information Sciences degree program. As a result a more formative assessment has been obtained, but also contributions to other factors such as: the personal responsibility for the study, and the development of organizational skills for learning, technology skills, information management skills, communication skills, etc.

**Using portfolios to provide users with the tools to demonstrate their life-long learning, skills and development**

*Gavin James Henrick, Liam Ryan*

Enovation Solutions, Republic of Ireland

**Introduction**

In this paper we will examine the Open Source Virtual Learning Environment Moodle and the Open Source e-Portfolio Mahara. Although both systems are used in an online environment for learning and development, they have fundamentally different uses and goals. Moodle is an institution-centric application, with all control centralised as part of the administration. Mahara gifts the control to the end user responding to Web2.0 elements, which brings the need for different kind of features and functionality.

We take a look at some past projects which involved connecting these systems to enhance the usability of the online learning and development environment. The most recent project with RCSI ILHM (Institute of Leadership and Healthcare Management) built upon earlier integration work. These enhancements helps elicit a life-long learning and development outcome from students effort within Moodle.
We examine the current features & developments and the upcoming functionality in future releases and how these will improve the use and connectiveness of these learning systems.

**What is Mnet**

Moodle Networking (MNET) was introduced in Moodle 1.8. This enables admins to link the Moodle site with other Moodle sites, or Moodles, with the goal of sharing resources and users. Initially this was set up to provide single sign on for users between the two Moodles. As the Mahara team has also been heavily involved in Moodle, this was then enabled on Mahara.

**First project Presented at moodlemoot Oct 2007**

Enovation were contracted to provide the ability for students to extract their moodle assignments into an e-portfolio. We set about evaluating the various modules available at the time, and were referred to Mahara which was in its relative infancy as a product at the time.

Its innovative approach to user interface design and controls were the main reasons it was presented to the client based on their requirements. Once adopted for the project we had to implement a suite of changes.

Although MNET was available in Moodle 1.8.x, it was an early release, and not very stable, so we could only use its single sign on features, which we used to auto-create the users on Mahara once the user had logged into Moodle. A file transfer bridge between the two applications using web services was developed, so that users could select assignments, forum submission, quiz entries and export them as files to their portfolio in Mahara.

As this was early in Mahara development, it was missing a way in which users could mass download their collected artefacts. Enovation implemented a feature to zip all the files and provide a link to download. This maintained the folder structure within the file area of Mahara.

This was finalised and live in Jan 2008

**The Future.**

In the past 12 months Moodle and Mahara have continued their individual roadmaps and further developed their integrated functionality. Moodle 2.0 is currently under development, and is expected to be released at the end of 2009. Some of the significant changes to Moodle include the repository and portfolio APIs, which enable tighter, cleaner integration with 3rd party applications such as Alfresco, Gogledocs, Facebook, Youtube, Myspace, Picasa and Mahara.

These APIs will allow users to select items from these repositories to include as their work within Moodle and also enable them to save their Moodle work back out to the repositories. Mahara is the first e-Portfolio which is integrated in this fashion, although it is expected that others will be added later. Mahara has gone through many changes in the last year. There has been a steady progression of features and functionality enhancements including extending Views management, development of an import API (to work with Moodle 2.0) and moving groups to the next level with files and views associated to them.

The latest alpha implements the long awaited LEAP2A import and export. This is the latest version of the interoperability standard which has been tested with other e-portfolios including PebblePad. To enable users take an off-line copy of the views themselves, a HTML export is being added. Ultimately this will also allow for submitting a view as an assignment within a VLE.

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**S22A: Workshop**

**Multiple Intelligences, Multiple Languages, and Portfolios: A Window into The Learners’Mind and Abilities**

_Evangeline Harris Stefanakis_, Boston University;
How do you best assess and teach all students, including those who are culturally and linguistically diverse, or may have special needs? What does a Multiple Intelligences approach to seeing the assets in learner using portfolios to assess the complexity of language abilities look like?

This session will address the question of how to best assess and teach all students, including those who are bilingual and have special education needs using teachers' classroom assessments and portfolios. First, it briefly summarizes what research says about how to best assess students with diverse language and learning needs (Stefanakis, 1999). Then it describes case studies of how best practice teachers assess the language and literacy skills of students using portfolios; for observing, documenting and keeping track of student learning. Finally, it presents a sociocultural framework for teachers classroom assessment that responds to the complex social, political, cultural and linguistic factors related to language and learning.

The power of portfolios, as a way to sit beside the learner (Stefanakis, 1997) will be simulated by sharing digital portfolios from best practice teachers from primary and secondary schools. Overall, this session will describe the work of expert teachers who apply MI to link curriculum and assessment. It will present CD images to demonstrate the power of portfolios as a tool for observing, documenting and keeping track of student progress. It will engage participants in the process of looking at students language learning and student work samples to better identify assets for learning and teaching.

References:


The Institute for Learning (IfL) is the professional body for teachers, trainers, tutors and assessors working in the incredibly diverse further education and skills sector in England. With 185,000 members the IfL has rapidly become one of the largest professional bodies in the UK. Its mission is to raise the standing of teaching practitioners through the conferral of professional status (Qualified Teacher Learning and Skills, QTLS), to offer members a platform for their individual and collective voice to inform policy and decision making and to bring a range of benefits and services to enhance professional practice.

Members of the IfL are required to demonstrate that they remain in good standing through continuing professional development (CPD), reporting annually on the minimum of 30 hours of learning that has enhanced their practice. The IfL wanted to provide members with access to leading edge online learning and communities of practice, launching its personal learning space and e-portfolio, REfLECT, (based on Pebble Learning’s popular PebblePad system) in April 2008. All members have access to REfLECT as a benefit of membership, though its use remains voluntary in recognition of the fact that there is no single approach to professional learning. In eleven months the uptake of REfLECT has grown to 27,000 members, making it one of the largest professional e-portfolio programmes in the world.

A key aspect of the IfL’s vision is the transformation of professional learning in further education and skills, moving progressively from the historic done to models of staff development towards whole organisation approaches where the needs of the individual professional mesh seamlessly with the needs of the organisation. The IfL advocates a practitioner centred model where professionals reflect on their historic practice, plan learning interventions, measure the impact of this learning on their current and future practice and share experiences through communities of practice.

These represent a dramatic change of approach and requires employers colleges and learning providers to re-examine their organisational structures and systems if they are to fully embrace the concept of professionalism over managerialism. For some this is a step beyond their current thinking and a number find it difficult to accept that liberating staff to develop will lead to enhanced organisational performance. For the majority this is a welcome change, but organisations are slow to change and it will take time for cultures to change. For a number of organisations with visionary leaders at all levels the time is right to change and they have forged new and dynamic ways of working very different from further education of the last 20 years.

Thanet College is one such organisation. At the same time that the IfL started to explore the potential of PebblePad, colleagues at Thanet College were already experimenting with ways of transforming the organisation through personal learning spaces and e-portfolios. In an inspiration example of change being lead from grass roots, staff at Thanet College have embraced the technology and redefined the colleges approach to teaching and learning. The college stands as a beacon of exemplary practice and has a growing reputation for the use of technology to support learning.

This presentation and workshop brings a number movers and shakers from Thanet College to ePortfolio 2009. Not technologists, not senior executives, but the very people who have made change possible 4 members of staff who have identified the power of the technology to transform their learning and that of their students. This session offers delegates the opportunity to hear from learning professionals at the heart of Thanet College’s success, professionals who have transformed teacher education, quality assurance and teaching and learning through their innovative adaptation of PebblePad/REfLECT.
This paper reports on the PortisHEad project (JISC, 2008) which built on the work of the UK's Joint Information Systems Committee (JISC) funded e-Portfolio for Lifelong Learning Reference Model Project (eP4LL, 2006): itself part of the wider eFramework initiative supported by JISC, DEST, SURF et al (eFramework, 2008).

The project sought to address the Schwartz (2004) report recommendations:

'to produce a more integrated service for applicants and specifically to facilitate Transfer of information from applicants Structuring the personal statement and reference, in particular through the insertion of course-specific prompts Providing feedback to applicants'

Applicants to Higher Education (HE) in the UK apply through an application service called UCAS. Typically applicants will apply to multiple institutions but can only submit a single application form within which they are allowed to present a generic 500-word personal statement. The process does not allow applicants the opportunity to provide extended or differentiated profiles or to augment their applications using external resources.

The PortisHEad project developed tools to support applications to UK Higher Education through learner-owned e-portfolios; including the ability to target unique e-portfolios to different institutions. The original demonstration tool helped address the recommendations of the Schwartz report for fairer admissions to HE. However, despite good learner feedback and a strong sectored imperative, the tool was not implemented by UCAS, the application service.

The original aims of the project were predicated on the willingness and capability of UCAS to extend their core systems to allow individual e-portfolio users to engage with them to manage complex application processes. Unfortunately limited resources and development lead-in times extending over more than 2 years prevented meaningful engagement from UCAS resulting in the project failing to deliver the reusable web services it hoped to develop which would have allowed remote systems to:

- Conduct course searches;
- Submit application data;
- Aggregate student entry profiles; and
- Present targeted e-portfolios as part of the wider application.

A positive consequence of the withdrawal of UCAS from the project was the re-conceptualisation of the application issue leading to the development of a generic application toolkit which allows any e-portfolio user to auto-complete educational or employment-related application-type forms using learner-owned data from their e-portfolio. The toolkit is consistent with the thin e-portfolio model propounded by the JISC-funded e-Portfolio Reference Model project. It uses an open standard web-service which is easily implementable by form-owners and access to data is managed by the learners and remains secure.

The toolkit is easy to deploy and has already generated significant interest not only from admissions tutors but also for its utility to teachers and staff developers. This paper points to how learner-controlled technologies, and learner-owned data, can be meaningfully utilized to engage with intra- and extra-institutional systems using open standards and web services. It also illustrates that technological difficulties are less critical than organizational ones.

The method the project eventually developed is consistent with the view of the e-portfolio system as a personal learning system where learner-owned data is able to be repurposed and reused multiple times for myriad purposes: and consistent with the thin e-portfolio model. Using the open standard HR-XML means that the method could feasibly be deployed by HR systems and...
Management Information Systems as well as e-portfolios. From the perspective of the form owner the toolkit is easily deployed and does not require any rewriting of the target form.

This new readily available functionality has the potential for significant impact on the transmission of data between systems, because it is relatively simple for developers to implement, easy to use for learners and does not require complex security measures, because the learner controls access to the personal information. Within an institution where e-portfolios are widely used it ought to be possible for all internal application-type forms to include the ability for users to auto-fill common data fields directly from their personal e-portfolio information. From the perspective of PortisHEad as an admissions demonstrator project, we believe that the toolkit will be a suitable vehicle for universities, colleges, UCAS and others to deploy in support of their student relationship management systems in the future, particularly for enquiry management, application, admissions and enrolment functions.

ePortfolios as a vehicle for recording Recognition of Prior Learning at RMIT University

Meaghan Botterill, Mark Mossuto, Callie Harvey, Laura Di Pietro

RMIT University

The Vocational Education and Training (VET) sector in Australia provides skills and knowledge for work through a nationally recognised training and accreditation system that operates across all states and territories. The national training system, known as the National Skills Framework, comprises of three key elements: training packages, the Australian Qualifications Framework (AQF) and the Australian Quality Training Framework (AQTF). Training packages are sets of nationally endorsed standards (units of competency) and qualifications (groups of units of competency) that are used to assess peoples skills in specific industries, industry sectors and / or enterprises. The AQF is a framework for the fifteen nationally recognised qualifications, eight of which are competency based in the VET sector. Finally, the AQTF is the national set of standards and quality indicators used to ensure high quality training and assessment services provided by Registered Training Organisations (RTO) (DEEWR, 2008).

Training packages consist of core and elective units of competency each of which is sub-divided into elements and performance criteria. The performance criteria outline the specific skills and knowledge sets that need to be demonstrated in order to be assessed as competent in a unit. These are based upon a generic set of key competencies (Mayer, 1992) contextualised for a specific industry and more recently have also incorporated employability skills (Allen Consulting Group, 2006).

An underpinning premise of Competency Based Training (CBT) is that learning occurs in both formal and informal contexts. Under the AQF, each qualification must provide a Recognition of Prior Learning (RPL) pathway as an alternative, or non-institutional, access point for a source of credit. RPL is a process whereby an individuals non-formal and informal learning experiences can be assessed against nationally accredited competency standards, and in turn used for entry into, or partial or total credit towards, nationally accredited qualifications (AQF, 2004). While there are various ways to assess RPL, for example on the job observation, reflective journals, photographs etc, these are generally presented as a paper-based portfolio of evidence. This portfolio of evidence is then submitted as part of an assessment process which also includes an interview with an RPL assessor and a Subject Matter Expert.

This case study reports on a work-in-progress trial of PebblePad, an ePortfolio platform, as a vehicle for recording RPL in Certificate IV in Financial Services (Accounting) in the Business TAFE School at RMIT University. PebblePaD is being trialled as a potential enterprise based system in areas of strategic importance, including its potential to provide a systematically structured and transparent online RPL process. Recent changes to government regulations stipulate that all financial services practitioners must have a minimum qualification of a Certificate IV in Financial Services which will also allow for professional recognition / accreditation with the Association of Accounting Technicians (AAT). This will affect many people who are already working in the area, who will need to complete the qualification. RMIT has been selected as the provider of choice to
run the training and RPL process on behalf of AAT across Australia, and will commence the rollout of training in Victoria in July 2009.

While it is a requirement that all VET programs offer an RPL process, the process is a complex and time consuming one for both staff and students. This case study is evaluating PebblePad, in particular the capability of its Profile Builder function, as a means to provide an electronic and streamlined procedure to improve and simplify the RPL process university-wide. In addition, the University is also evaluating the effectiveness of an ePortfolio to replace the traditional paper-based portfolio so as to appropriately utilise Information and Communication Technologies (ICT) to further support learner engagement. It believed that the fully online approach to RPL will also offer students greater flexibility and access to vocational education and training, particularly for those students who are not physically located close to the RMIT Melbourne campus.

References


Supporting Skill Shortages and Learner Transitions: Utilising e-portfolios to support Recognition of Prior Learning assessment processes in the Australian Vocational Education and Training Sector

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Introduction:

In 2006, the Council of Australian Governments (COAG) recognised that skills shortages were a very real and growing threat to the economic productivity of Australia, and agreed that all workers will have their existing skills recognised quickly and simply so that wherever possible their training time is reduced.

The Australian Vocational Education and Training (VET) sector, a nationally accredited training system made up of public and private registered training organisations (RTOs), supports the needs of a skilled workforce.

Alongside traditional assessment methods, RTOs are required to undertake skills recognition or recognition of prior learning (RPL) assessments. However, due to quality assurance concerns, historically RTOs have not embraced RPL as a method of assessing an individual's competence, with only 4% of all assessments completed during 2002-2006 were done by RPL assessment.

In order to support COAGs skills shortage agenda, the Commonwealth Government of Australia funded the States and Territories to implement strategies to increase the number of RPL assessments across VET. Through this initiative, it was acknowledged that although there is no one size fits all strategy for RPL assessment across VET, there was a need for individuals to be able to provide evidence for RPL claims in a meaningful and consistent way.

Through recent research undertaken by the Australian Flexible Learning Framework (Framework) 5, it has been identified that e-portfolios can effectively facilitate an individuals RPL claims whilst supporting quality assurance requirements of RTOs.

Recognition of Prior Learning Assessment, Accreditation and Quality Assurance the Australian Context:
RPL was introduced into VET through the Australian Qualifications Framework (AQF) more than a decade ago, and involves determining what credit or formal education certification will be given through an assessment process of an individual's previously unrecognised skills and knowledge, regardless of how or where these were acquired.6

VET quality accreditation processes are governed by the Australian Quality Training Framework 2007 (AQTF07), and are managed through an external auditing process of individual RTO’s by their respective State/Territory governing body.7

At present, RPL assessment processes vary across the sector, and are largely manual and paper-based. To encourage an increased uptake of RPL assessments and support a more streamlined and client-friendly approach to RPL, a good practice RPL model8 was developed.

**E-portfolios which support Australian VET RPL assessment and quality assurance processes:**

Although current engagement with e-portfolios in the VET sector, and in particular, for RPL, is limited, recent research9 undertaken by the Australian Flexible Learning Framework (Framework) demonstrates that e-portfolios are supporting all components of the good practice RPL model whilst satisfying AQTF07 auditing requirements.

This research identified that e-portfolios are supporting RPL assessment quality assurance requirements by streamlining evidence identification and validation whilst enabling assessors to effectively make professional judgements about the authenticity of this evidence. It was also identified that e-portfolios offer improved ways of capturing and managing evidence, encourage the audio recording of client/assessor interviews (versus hand written notes) and more effectively capture live workplace evidence, whilst providing the RTO with a means of demonstrating their AQTF07 requirements for quality assessment practices.

During the consultation process, many RTO’s indicated that they are exploring e-portfolios to facilitate RPL assessments. Some RTO’s indicated that they will be trialling the use of an e-portfolio to replace their existing heavy paper-based RPL processes.

**Concluding remarks**

Currently there is a growing interest in the use of e-portfolios to support the RPL assessment process whilst supporting an RTO’s quality assurance requirements. However, for e-portfolios to be more widely adopted in the Australian VET sector, additional research and resources are required and further work is being undertaken by the Framework10 in 2009.

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Sustainable ePortfolio implementation through Information, Advice and Guidance services in a UK region: Developments towards a learner-centred ecosystem

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1Nottingham University, United Kingdom; 2Connexions Nottinghamshire

Theme

Working closely with the University of Nottingham Centre for International ePortfolio Development (CiPD), a regional careers guidance organisation, Connexions, firms up both the brokerage and a compelling purpose for deploying ePortfolios and achieves a full-scale, sustainable implementation, which suggests an even wider future for ePortfolios.

Background

In the UK in 2007, there was substantial political momentum behind the promotion of a new educational pathway into higher education for learners aged 14-19 focusing on vocational subjects new Diplomas, due to be introduced in autumn 2008. Vocational diplomas included multi-locational learning college-based and work-based, even cross-institutional learning, a situation crying out for the use of ePortfolios. The task facing careers guidance professionals, planning how to support young learners to take the decision to opt for the new, unProven qualifications, looked like a major challenge. Coupled with the government drive to upskill the adult workforce at the same time, there was an urgent need to open up high quality careers Information, Advice and Guidance (IAG) to much larger numbers of people than before. Could ePortfolio technology help?

Two streams fed into the Nottingham work. The regional careers guidance service, Connexions Nottinghamshire, took over Passportfolio, an institution-free ePortfolio developed by the local government education authority and piloted successfully with 4000+ young people in 27 local schools and colleges. Connexions made the Passportfolio central to their provision of IAG. At the same time, the CiPD won JISC funding for the JOSEPH project, to combine a web services approach to ePortfolio technology with on-line IAG processes and resources, to support decision-making for young learners contemplating starting the new Diploma in Engineering.

Objectives for the CiPD team

To work with the Connexions careers professionals to determine

• what generic processes a learner needs to create a high quality action plan
• What additional web services would deliver information specific to Engineering courses and careers to support IAG dialogues and learners decision-making processes.

To build the JOSEPH tool http://joseph.passportfolio.com/ to co-ordinate the above processes and web services and allow interoperability with Passportfolio.

To implement a pilot project with potential regional roll-out, as well as potential roll-out to occupational areas beyond Engineering.

Results
The successful JOSEPH tool is now incorporated as part of the new Passportfolio, a comprehensive progression planning package formed by linking the ePortfolio closely to a range of other services. Managed by Connexions Nottinghamshire, Passportfolio is now embedded as a free resource, open to all 11-25 year olds in the local area.

The JOSEPH project has been able to demonstrate the synergies between IAG processes and learner-controlled ePortfolios, and has generated significant interest in the UK by providing a practical solution to a genuine problem while supporting current government policy to explore how e-services can support IAG.

Conclusions

The success of Connexions large-scale, sustainable ePortfolio implementation is down to the adoption of ePortfolios by a regional organisation which perceived them to be a powerful support to their core business, offered brokerage with a whole education system and presented a compelling focus for learner engagement the optimal choice of course, of career pathway, of life.

Connexions partnership with the ClePD has provided the only national demonstration so far bringing together ePortfolio use and IAG, blazing a trail which is beginning to be followed much more widely. Of key interest to the ePortfolio community is the way in which the ePortfolio concept has evolved in this new context and the larger landscape which it is opening out for ePortfolios for the future.

The dynamic use of the ePortfolio pulling in specialised data and services from external sources to complement and optimise face-to-face IAG models what is potentially a whole ecosystem, with the individual ePortfolio-owner at the centre. The JOSEPH architecture can support not just Engineering but all the sectors targeted by the UK governments programme of new diplomas. With input from a different set of professionals, a different set of services could be delivered to the ePortfolio user at the centre of the ecosystem to accomplish a different compelling purpose and so on, many times over. Our work suggests that it is through the situating of ePortfolios within just such a wider ecosystem that its future lies an exciting and transforming future.

S22D: Learning and Teaching through ePortfolios

Easing people at work into self-directed learning: A new role for ePortfolios

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Background

Plumbers, electricians, and other members of the Building Services Engineering sector in the UK, have experienced learning largely as being taught. Being taught, for the majority, stops when fitness to practice is achieved.

For the sector's economy, particularly in our region where the situation is exacerbated by an overall low pay / low skills equilibrium, this has led to a shortage of sector members qualified beyond skilled trade level. Both regional development agency and regional employment skills and productivity partnership state HE progression as a key theme in their strategic documents.

Objectives

The first challenge in a sector used to being taught is to encourage people at work, and currently without a teacher, to identify as learners.

A cluster of case studies from building services engineering, with a common theme of promoting self-directed learning to people at work, illustrates three scenarios where we have created innovative ePortfolios, and are using these to achieve the necessary culture change.
Case study 1; members of the existing workforce who left learning before gaining a qualification in their trade: our first ePortfolio is an aspiration-raising tool to encourage experienced, but as yet unqualified plumbers to come forward and gain their NVQ level 2 qualification in plumbing under the Train to Gain scheme.

Case study 2; members of the existing workforce who obtained a level 3 qualification in the past and are now working at this level, but have not yet made a commitment to enrol on a Foundation Degree. Our second ePortfolio encourages learners to own the process of identifying mutually beneficial work-based Foundation Degree projects in collaboration with their employer.

Case study 3; apprentices in the sector: ePortfolio to encourage their early identification as independent learners at work in the sector. Our third ePortfolio provides a mapping tool to help apprentices recognise and own the relationship between learning outcomes at college and at work, and create a win-win situation for themselves and their employer where the learning of one is enhanced by performing a task that benefits the other.

Summary of results

ePortfolio 1 had two highly successful usability tests with members of its target audience in the second half of 2008. Its live version has been promoted to the regions 650 plumbing businesses since 2 March 2009. As of today 12 March, 34 businesses have agreed to use the tool, out of which 21 have also agreed to provide feedback. This feedback, along with first trends in subsequent Train to Gain enrolment, is going to be available at the conference.

ePortfolio 2 was designed in the context of a progression route of taster events for its target audience. It is currently being coded; its live version is going to be introduced at the final taster event at the end of May. The first taster event took place on 9 February, and was highly successful with representatives of over 20 businesses attending. Comments from the target audience on the live version of this ePortfolio are going to be available at the conference.

ePortfolio 3 is in the early stages of design and development. Once coded, it is likely to become the most widely used of the three, as it is designed to catch its target audience in a situation where they are already expecting to learn (or, as they might say before their exposure to the tool, expecting to be taught!). A design specification, and potentially also a presentation version, is going to be available at the conference.

Conclusions and recommendations

Case study 3 is the one most obviously transferable to other sectors: self-directed learning has been a proven enhancement (and in some cases transformation) of apprenticeships in a variety of sectors, and is likely to spread. An ePortfolio is a contemporary way of facilitating this.

At second glance, it becomes clear that the same statement can be made for the other two: lifelong learning, particularly at and through work, has become an economic necessity. For those who engage with it, it has also become a source of enjoyment and satisfaction. The more potential learners we introduce to self-directed learning and the more employers we involve in a mutually beneficial process of learning at and through work the more likely we become to equip ourselves for a future driven by curiosity and innovation.

Improving teaching and learning with electronic portfolios: The effectiveness and implementation of ePEARL

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This article explores two key questions about the use of electronic portfolios (EPs) in classrooms. First, can an EP that is both a multimedia container for student work and a tool to support key learning processes have a positive impact on the literacy practices and self-regulated learning skills of students? Second, what can we learn about whether, why, and how teachers implement EPs in their classrooms?
This article presents the findings of a yearlong study conducted in three Canadian provinces during the 2007-2008 school year initially involving 32 teachers and 388 students. Using a non-equivalent pre-test/post-test design, we found that grade 4-6 students who were in classrooms where the teacher provided regular and appropriate use of the EP tool ePEARL (i.e., medium-high implementation condition, n = 7 classrooms and 121 students), compared to control students (n= 7 classrooms and 175 students) who did not use ePEARL, showed significant improvements (p< .05) in their writing skills on a standardized literacy measure (i.e., the constructed response subtest of the Canadian Achievement Test -4th ed.) and certain metacognitive skills measured via student self-report.

Using a mixed-methods approach, data were also collected to understand how teachers used EPs in their classrooms, to what extent they integrated the EP into their practice, and the factors influencing their use. The results of this study indicate that teaching with ePEARL has positive impacts on students literacy and self-regulated learning skills when the tool is used regularly and integrated into classroom instruction.

Using the Student Voice to Build and Embed an E-Portfolio
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Background or Context
This short paper will present the results of a student survey on the use of the e-portfolio My Progress File currently used on the undergraduate medical degree (MBChB) at the University of Leeds and will outline how these results will be utilised to implement a new e-portfolio tool to support student learning from September 2009. The paper will also outline how the issues raised from the survey are being tackled as we move towards implementation.

Building on lessons learnt from the development and launch of the current system the new e-portfolio will take a core role within undergraduate medical education. After a successful pilot year the subsequent low levels of engagement with My Progress File indicated that a review of the processes and policies at School level are required to ensure that not only that any e-portfolio is used by students but that they also understand why they are using a portfolio tool and can successfully utilise the functions offered by an electronic environment.

To lay the foundations of the new tool a survey was issued to all students from years 2 to 5 to find out more about the student view of portfolio usage and construction.

The results of the survey will impact directly on organisational policy at school level, technological systems integration, curriculum design, staff development and student support services. Successful piloting of the tool will be built on at faculty level.

Objectives
To investigate the factors impacting on student use of My Progress File to inform the wider development of a new e-portfolio tool across the School of Medicine.

Summary of results
The results of the survey indicate there are two issues relevant to student usage

The educational process of compiling a portfolio

• Students did not know what the e-portfolio was for
• Learners felt that the tool was primarily a place to keep private records about their progress, assess their own strengths and weaknesses and help them to prepare for future job applications
• Priorities and time constraints impacted heavily on the process of portfolio construction. There was no assessed element to the e-portfolio and students could therefore not see any relevance in its construction
• Reflection after tests and non-academic achievements were the most useful parts of the e-portfolio
• From the new e-portfolio students want better links to curriculum outcomes, feedback from tutors and a record of their grades
• Learners want private spaces to record thoughts and to create formal artefacts from informal notes

The location and relationship of the e-portfolio with other institutional tools and systems
• Students could not find the e-portfolio and were confused about the purpose of the various online tools available to them, i.e. VLE, Student portal, Blogging tools
• There is a need for more streamlined and clearly functionalised technological support

Conclusions and recommendations
A new model of e-portfolio implementation is required to ensure the educational benefits of portfolio construction are embedded into the undergraduate medical degree course.

Our learners are calling for a greater integration of technology systems to enable them to be able to link their learning to curriculum outcomes and tutor feedback. A peripheral model of e-portfolio has to be replaced with a system that is central to the curriculum and visible amongst the technological tools on offer.

The core definition of the e-portfolio as an area for students to record and collect evidence of achievements and progression must remain but this must be linked explicitly to other areas of the course in one single central learning space.

This centrality must bring with it changes in policy, a greater emphasis on staff development and the fostering of portfolio learning to support the journey of the student into post-graduate medical training and future medical practice.

Deep Reflection and Constructive Alignment: The Challenge of Translating Theory into Practice

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This paper explores the challenge of translating educational theory into transformation practice within a higher education context. Two early works in progress are described of efforts to embed Mahara within and across different undergraduate programmes at Massey University. Massey was the lead developer of Mahara, an open source ePortfolio system, collaboratively developed with the Auckland University of Technology, the Open Polytechnic of New Zealand, and Victoria University of Wellington funded by the New Zealand Tertiary Education Commission (TEC).

The first work in progress describes how ePortfolios are being conceptualized within the area of teacher education. It reports how a robust conceptual framework built around the pillars of learning to be, learning to do, learning to know, learning to live together along with an additional pillar of learning to change and transform has been developed to scaffold deep reflection and constructive pedagogical alignment. This initiative involves a new four-year initial teacher education degree for primary teachers and includes a cohort of students taught entirely by distance. The intention is to anchor critical reflection and professional growth around a set of core questions for example:

What does it mean to be a teacher in a diverse but inclusive society?
What do students need to do to become literate citizens in a socially just democracy?
What do students need to know in an uncertain world needing to address future sustainability?
What does it mean to live in Aotearoa/New Zealand in today’s globalized world?
How can teachers help to change the education system to make it fair and socially just for all?
In this context the real value of the ePortfolios is not so much about the artefacts students collect over the course of their study, but rather the reflections, connections and changes to thinking and behaviour that such higher order questions promote.

The second work in progress is a large undergraduate business studies degree. It reports how the first year of the Bachelor of Business Studies (BBS) has been redesigned with a new graduate profile to reflect the requirements of today’s global business environment. Coupled with the adoption of Moodle the ePortfolio experience is intended to help overcome the problem of a series of disconnected courses where students fail to see the links between key concepts, theories and principles. In this sense, the use of Mahara is designed to weave together some of the historically fragmented parts of the foundation programme.

In both cases there is a tight strategic fit between the use of ePortfolios and the goals and intended outcomes of the respective programmes. Although in theory we have the tools to operationalise our intentions, it remains to be seen whether this can be achieved in practice. Put simply, will it work?

In the backdrop of this question, the paper discusses the concept of readiness, the importance of a champion with sound understanding of ePortfolios and the difficulty of innovating in an intense research culture. It also warns of the dangers of ePortfolios being tainted by institutional driven conceptions of learning rather than a broader understanding of life-long learning. In sum, the basic premise is that deep and critically reflective learning, augmented by institutional use of ePortfolios, must be rooted within a sound, systemic and institutional-wide digital culture.
Using e-portfolios activities to work on professional identity in VET

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SIVET - Swiss Federal Institute for Vocational Education and Training, Switzerland;

Considering Swiss Vocational Education and Training (VET) system and its effectiveness, two key points can rise as very relevant to work on: on one hand, the need to better articulate the relationship among the three training places (workplace, school, intercompany courses); on the other hand, the need to develop those core competences identified in legal texts as crucial to be a professional in the actual society. Examples of such competences are: to be autonomous, to be able to find the right resources to solve a problem, to be able to anticipate and evaluate different hypothetical solutions, to articulate theory and practice through abstraction processes, to reflect on ones practices,

Starting from the discussion of the research projects carried out in the framework of the Technologies for Vocational Training Leading House, funded by OPET (Federal Office for Professional Education and Technology), and in particular of the Dual-T project, both these key points are considered.

In other terms, we have to face questions like the following: can technology foster the collaboration between the actors of vocational training across contexts? Can technology be helpful to capture the complexity of professional situations (e.g. with pictures or small videos) in order to make them useful to structure learning activities? Can technology allow apprentices to develop any of the above mentioned professional competences by introducing writing activities or simulations? Can technology improve VET efficiency and effectiveness by promoting reflective activities?

We develop here some hypotheses regarding to these questions. The Dual-T project uses a Design-Based Research as methodological approach (Brown, 1992; Collins, 1992; DBRC, 2003) and the integrated learning approach as pedagogical framework. In this latter, technologies are designed to support learning activities, which on their turn 1. foresee multiple modes of social interactions and 2. produce reusable emerging objects, integrating across-contexts experiences.

In vocational education, while apprentices receive similar trainings at school, there is a huge variation in the training they get on the job, depending on the companies in which they work. Each apprentice encounters only a fraction of the professional experience spectrum he or she could eventually encounter. The aim of this paper is to present a part of the Dual-T project, whose main aim is to develop computer-supported learning design to help articulating the school and the workplace training. In particular, we report here some experiences and studies investigating how computer-supported collaborative writing activities can promote experience sharing and reflective activities to foster professional identity development.

We worked with four classes of commercial employees, designing different activities on writing-to-learn with a computer. The operational perspective was: to study 1. the feasibility of such activities in the school context, 2. the feasibility of their integration in an e-portfolio, and 3. the utility of having one personal and one separated shared section in this e-portfolio. In addition to this perspective, which will lead us to design a more structured intervention on the whole curriculum of commercial employees, we activated some research looks, analyzing with a both quantitative and qualitative approach dimensions like 1. the effect of comments and revisions respectively in blog and wiki activities on the quality of texts, and 2. the perceived effectiveness on learning of such activities.

We present here the first results of these analysis, and the perspectives of the project for the next future.

An awarding body perspective: SQA's approach to e-portfolios

Linn van der Zanden, SQA
The Scottish Qualifications Authority (SQA) is an executive non-departmental public body (NDPB) sponsored by the Scottish Government Schools Directorate. It is the national body in Scotland responsible for the development, accreditation, assessment and certification of qualifications other than degrees.

SQA believes e-portfolios have the potential to greatly enhance the learning and assessment experience; offer substantial operational benefits for institutions, and more flexible quality assurance. We have a policy in place to encourage learners and institutions to use e-portfolios for our qualifications. We also seek to minimise potential barriers, for example, in order to address the uncertainty about the acceptability of evidence collected through an e-portfolio, we are currently working with External Verifiers to pilot the use of e-verification.

There is a growing range of e-portfolio systems, from commercially produced products to home-built e-portfolios, and we are considering how best to support our customers in relation to these different approaches. We have a large suite of qualifications which all have different elements and requirements, so to clarify our approach we have commissioned a set of business models for specific e-portfolio developments and for our general approach to e-portfolios.

SQA is already exploring e-portfolios in several areas including PC Passport, SVQs, the new Baccalaureates and to support the Oil and Gas Industry, but this presentation will focus on its deployment in the Skills for Work qualifications suite: a national qualification for the age group 14-16 designed to encourage school pupils to develop the knowledge and skills they will need to gain rewarding employment by giving them personal experience of working in a particular vocational setting. In this area, the commercial product PebblePaD has been customised as SQA Deskspace.

The SQA Deskspace e-portfolio was first made available on a very small scale for a limited number of courses in the academic year 07/08 and following a successful bid for European Social Fund investment, SQA was able to significantly expand the project. Since then Deskspace has been deployed in all 15 Skills for Work courses with additional subject specific materials embedded in the e-portfolio. Deskspace is currently being used to deliver these courses by almost 30 institutions. Initial feedback has been very positive from learners, teachers and senior staff alike, however SQA is now exploring the associated issues around increasing uptake and usage levels and supporting the scalability and sustainability of the implementation. This includes looking at ways to build capacity in institutions and addressing barriers such as lack of IT support, as well as piloting the benefits of regional e-portfolio deployments in remote areas and coordinating regional networking. This also includes exploring questions such as

- How can we support the vision of how building an e-portfolio would differ from building a paper portfolio and inform thinking about what constitutes acceptable evidence when using a variety of methods to record evidence e.g. video, audio?
- How can we support the lack of confidence in institutions to move away from a tried and tested portfolio methodology based on paper?
- How can we build in sustainability for when external funding ends to give institutions confidence that the product will be available for the next academic year?

MyPDS™ a Personal Data Store for Employability Management

Luk Vervenne¹, John Power²

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Functional specification of the MyPDS personal data store

Synergetics, with the help of Risaris and EIfEL, developed a TAS³ Personal Data Store (MyPDS exchange server). MyPDS is architected in such a way that data objects can be easily imported and this via multiple methods. The data objects are stored in an MYSQL database in a way that transformations to different standards as well as proprietary formats and web services can be facilitated. Access to the personal data is performed solely through the Risaris SOA Gateway,
which is capable of creating logical views on the personal data. These are turned into web services which can be read by the GUI framework.

The SOA Gateway will exist in the above in two roles if we assume that Employability SP3 and Employability SP4 are existing legacy data stores that are made available using the SOA Gateway. The picture above shows how, as part of the MyPDS, the SOAG interfaces. The MyPDS application will benefit further adding Permis and possible other TAS³ components for trusted access to legacy data sources.

In the next months, Synergetics and Risaris will modify the import/export routines of the employabilityPortfolio and adapt its logic so it can be used within the TAS³ workflow. The current GUI will also need to be TAS³ enabled in order to be a TAS³ enabled MyPDS. All of this is needed to protect the data on the ePortfolio exchange server so that only authorised people can update or access specific data. The picture below shows the conceptual model for integrating the SOAG part of My PDS with aggregation and transformation services.

e-portfolio development at the Royal College of Nursing

Liz Kerry, Rosie Brown, Royal College of Nursing, United Kingdom;

The Royal College of Nursing (RCN) is a UK-wide trade union and professional body which supports over 395,000 nurses and health care support workers (HCSW). The RCN recognises that continuing professional development (CPD) is a cornerstone of employability and professional identity. It has a mission to provide members with learning and development opportunities, expertise and resources that enable them to enhance their practice through lifelong learning.

One of the learning and development resources available to the membership is the Learning Zone. This online platform is a collection of bite-sized learning content which highlights current best practice knowledge and skills, and combines with an e-Portfolio tool for members to record their learning and development and collect evidence of their skills and knowledge. There are currently several drivers for the use of e-Portfolios in the nursing profession.

One driver comes from the Nursing and Midwifery Council, the regulating body for the registered nursing workforce in the UK. To maintain their registration, nurses are required to complete PREP: Post Registration Education and Practice. Nurses must undertake a minimum of 35 hours of CPD in each 3-year registration period, which is recorded in a Personal Professional Profile. The RCN supports its members in meeting this requirement through the provision of the e-Portfolio tool in the Learning Zone.

Another driver for the use of e-Portfolios comes from the National Health Services (NHS). All NHS employees have a role profile which is linked to the Knowledge and Skills Framework (KSF). This framework defines and describes the knowledge and skills staff are required to apply in their work in order to deliver quality services. The KSF is divided into several core dimensions, with levels of understanding identified for each category. A nurse or HCSWs job description would be linked to show what level of understanding for each applicable KSF dimension is appropriate for their role. The learning content available in the Learning Zone identifies which KSF dimension it can be mapped to, but the learner defines which level of the KSF dimension they have achieved based on their own reflections about their learning, thus promoting autonomy and choice when capturing evidence of CPD.

Applying for nursing jobs and seeking promotional opportunities is becoming more competitive and creates a third driver for the use of an e-Portfolio. The RCNs e-Portfolio tool offers the additional function of being able to create multiple role profiles. This is particularly useful for nurses and HCSW who are working in a short-term secondment position and wish to record the knowledge and skills and capture evidence of this separately from their substantiated role. A role profile can also be created for an aspirational career post. For example, a staff nurse who has a career goal of becoming a charge nurse can upload the job description for this post and capture evidence of their knowledge and skills against their current practice, demonstrating readiness for career progression.

The RCNs e-Portfolio provides for members to input personal details and information that is compiled into a CV. In addition to the CPD evidence recorded from the learning they have
completed within the Learning Zone, members are also able to upload and attach a variety of files (in a number of formats) such as training certificates and professional awards, PowerPoint presentations and any other evidence they may wish to include in their e-Portfolio. This information can be compiled into tailored reports for job applications, performance appraisals, professional regulation audits or any other purpose.

The applications for the RCN’s e-Portfolio are many and varied. The features and functionality continues to evolve and new innovations planned include the ability of an e-Portfolios owner to authorise access for an invited mentor to provide guidance and support as they development their e-Portfolio. There will also be potential in the future for an e-Portfolio owner to provide restricted and specified access to external parties for the purpose of validating evidence (e.g., current registration with NMC) and applying for APL or APEL. At its heart, the RCN’s e-Portfolio aims to support its members as lifelong learners and ensure their employability and professional identity.
Assessment Renaissance: Writing Learning Statements and Rubrics that Yield Actionable Data

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Abstract:
This workshop is ideal for Instructors, Program Chairs, Deans, and individuals who work with Institutional Accreditation. It balances a facilitator led presentation of assessment best practices with a collaborative, group-based case study that allows participants to immediately apply concepts and skills. Participants will discuss strategies to implement an institution-wide assessment plan. We will explore the building blocks of solid, rubric-ready learning outcomes that cover all cognitive levels in Blooms Taxonomy. We will also introduce rubric elements and how to write criteria and performance level indicators that increase the validity and reliability of data generated by evaluations. The session concludes with a discussion of technology enhanced solutions to manage outcomes for improvement of curriculum and instruction.

Attendee Learning Outcomes:

• Advocate for an outcome-based campus assessment plan
• Articulate elements of a quality Student Learning Outcome (SLO)
• Write observable and measurable SLOs using appropriate action verbs from Blooms Taxonomy
• Identify exemplar SLOs and rewrite poorly written ones
• Create rubrics that yield assessment data with a high degree of inter-rater reliability
• Evaluate technology solutions that support outcome management

This workshop is facilitated using a consultative approach where we engage participants throughout the session to find out how institutions are currently implementing learning outcomes, rubrics, and technology on campus. Planned interactive elements include an activity where participants collaborate to identify action verbs and their most adequate placement on the Blooms Taxonomy triangle. We will also lead participants through a case study where attendees write, refine and discuss learning outcomes.

About the Authors:
Brian's academic leadership and consulting experience provides him with unique insight into the application of campus-wide learning outcome management. He leads this workshop with Stephanie Pfeifer who specializes in portfolio assessment based on her experience in both K-12 and higher education. Stephanie and Brian leverage their expertise gleaned from implementing assessment solutions with a diverse set of institutions as they guide participants through this engaging workshop.

Stephanie's vibrant, disarming personality energizes participants whether it be in a consulting engagement or leading a professional development workshop. She focuses on guiding institutions in the development of portfolio assessment programs on campus with an eye toward meeting accreditation compliance requirements via a program of continuous improvement in the curriculum and instruction cycle. Stephanie is currently a Faculty Member at the eCollege eTeaching Institute and an Academic Trainer and Consultant with eCollege. She has over 10 years experience as an elementary teacher in both public and private schools. Stephanie obtained B.S. and M.A. degrees in Education from Miami University of Ohio.

Brian has fifteen years of experience in K-12 and higher education focusing on the design and management of fully online and blended learning environments along with technology enhanced solutions for managing student learning outcomes. He spent seven years at Jones International
University where he served as Director of International Education. He also managed JIU's relationship with the UNDP's Virtual Development Academy from 2003-05 which included participants from 70+ countries.
S23B: Workshop

Using REfLECT in the teacher education classroom: developing a blended learning strategy

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The Institute for Learning (IfL) is the professional body for teachers, trainers, tutors and assessors working in the incredibly diverse further education and skills sector in England. With 185,000 members the IfL has rapidly become one of the largest professional bodies in the UK. Its mission is to raise the standing of teaching practitioners through the conferral of professional status (Qualified Teacher Learning and Skills, QTLS), to offer members a platform for their individual and collective voice to inform policy and decision making and to bring a range of benefits and services to enhance professional practice.

Members of the IfL are required to demonstrate that they remain in good standing through continuing professional development (CPD), reporting annually on the minimum of 30 hours of learning that has enhanced their practice. The IfL wanted to provide members with access to leading edge online learning and communities of practice, launching its personal learning space and e-portfolio, REfLECT, (based on Pebble Learning’s popular PebblePad system) in April 2008. All members have access to REfLECT as a benefit of membership, though its use remains voluntary in recognition of the fact that there is no single approach to professional learning. In eleven months the uptake of REfLECT has grown to 27,000 members, making it one of the largest professional e-portfolio programmes in the world.

A key aspect of the IfLs vision is the transformation of teacher education in further education and skills embedding leading edge technology in the delivery and assessment of the initial teacher training (ITT) curriculum. Working with the regional Centres for Excellence in Teacher Training (CETTs) in England, IfL is promoting the importance of integrating online personalised learning and e-portfolio methodologies into teacher education. In utilising REfLECT in the early stages of a teachers development we help to form digitally confident professionals who are able to harness technology in their approach to teaching and learning and in their own continuing professional development.

This workshop session will draw heavily on the experience of teacher educators based in Wolverhampton College delivering the Post-graduate Certificate in Education (PGCE) and Certificate in Education (Cert Ed) accredited by Wolverhampton University. The presenters will showcase the use of REfLECT as a personal learning space and virtual learning environment (VLE). Delegates will have the opportunity to use the experience of practitioners to explore the planning, development and use of REfLECT in initial teacher training.

Working with predominantly vocational staff with often limited knowledge of e-learning strategies, from September 2008 teacher education courses have been successfully delivered following a blended learning model with REfLECT at its heart. The session will share the progress made and the challenges that were encountered on the way and discuss ways in which other teacher education providers and learning professionals might want to use REfLECT to enhance the learning experience.

This is a fantastic opportunity to use the experience of one of England’s leading teacher education programmes to spark discourse across the teacher education community and other professions where technology has an important role to play in the early development of practitioners and their subsequent continuing professional development. With teacher education in further education and skills in England having undergone a revolution since Equipping our Teachers for the Future in November 2004, there has been a significant investment from the state in the professional identity of teachers and a raft of innovative measures in initial teacher training and supporting professional practice. A key aspect of this workshop is the partnership approach to teacher training between the Institute for Learning, Centres for Excellence in Teacher Training and higher education institutions and awarding bodies providing qualifications.
E-Portfolios to support and enhance learning: Key factors of implementation

Margaret Lamont, Victoria University Wellington, New Zealand;

Background

The primary purpose of the e-portfolio in the teacher education programmes at Victoria University of Wellington College of Education (VUWCoE) is to support and promote student-centred learning and professional growth which is mediated by critical dialogue. As a learning portfolio it is constructivist in nature, allowing learners to take ownership of, and regulate their learning by articulating and reviewing their professional growth. This involves interpreting professional standards, linking theory and practice, and providing the relevant evidence of learning against the standards. Many current implementations of e-portfolios lack theoretical underpinning and fail to acknowledge the complex contextual influencing factors. This paper presents some key factors which underpin an emerging conceptual framework of implementation of an e-portfolio in undergraduate and post graduate teacher education programmes at VUWCoE. It foregrounds the current research project which is being undertaken to investigate the effectiveness of the e-portfolio in supporting and enhancing learning.

Key factors

Equity

Equity of access to software applications, support and technology for students and mentors is necessary in order that students are not disadvantaged. For example, considerations of ease of access to software has seen the initiative grow from a digital portfolio, based on a Microsoft Word web format, to a fully fledged e-portfolio using the open source Web 2.0 application Mahara (http://myportfolio.ac.nz). Clear step-by-step documentation and a contact for additional support allow for independent learning and reduce the need for time consuming and resource heavy technical familiarisation classes. Ease of access to the internet and digital technologies such as scanners and cameras has to be ensured. The issue of equity of quality and consistency of mentor feedback and support must also be a key consideration. This is being addressed at VUWCoE by embedding moderation and staff development processes within the framework.

Supporting Learning

The process of critically reflecting on learning and practice can be very challenging, particularly for student teachers. Students are supported in workshops which focus on the skills of reflection and self regulation. They are also provided with a structured model for reflection and feedback. The incorporation of peer feedback in the framework facilitates critical dialogue within a safe learning community of peers and mentors. Mentor professional learning within the context of an e-portfolio is also a key consideration. Faculty mentors are supported in the role and are encouraged to adopt an e-portfolio within the context of their own learning. Mentors also support each other in the role by pairing up as critical friends.

Shared Vision of Purpose

The purpose of the e-portfolio within VUWCoE teacher education programmes is primarily one of learning, although aspects of assessment and presentation are embedded. This purpose is clearly stated and shared with students and faculty at all levels including mentors, course coordinators, programme directors and senior management. This process helps to ensure that authentic, consistent and relevant assessment strategies are adopted as appropriate: a combination of formative, summative, peer and self assessment at different stages within the programme, and with clearly identified assessment criteria.

As the ownership of the e-portfolio lies entirely with the student and not the organisation, the students are able to maintain the e-portfolio as a professional learning tool throughout their teaching career. This fits well with the current New Zealand Teachers Council (NZTC) requirement that provisionally registered teachers maintain a professional portfolio as evidence of their learning.
in order to progress to full teacher registration. Key aspects of learning have been identified and are embedded within course learning outcomes, programme graduate profiles, the university’s generic graduate attributes, NZTC Graduating Standards for Teachers, and the draft NZTC Professional Standards for Fully Registered Teachers.

Conclusion

Careful attention to each of the key factors and their place within an overarching conceptual implementation framework, positions the e-portfolio as a valuable tool for lifelong sustainable assessment for teachers throughout their teacher education programmes and their career.

This presentation will outline the challenges in addressing these key factors while scaling up the implementation from one four-year undergraduate conjoint degree programme to include three one-year graduate diploma programmes for Early Childhood, Primary and Secondary student teachers. It will also foreground a conceptual framework of e-portfolio implementation which will be further developed as findings from the current research are analysed and interpreted.

A case study of implementing a trial of a scalable enterprise ePortfolio system at RMIT University

Meaghan Botterill¹, Garry Allan¹, Margaret Faulkner²

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In Australia, there has been a marked increase in the use of ePortfolios within the university sector over the past several years. It is acknowledged that ePortfolios can assist in producing skilled professionals and reflective learners who are able to demonstrate career readiness, along with graduate capabilities and employability skills (AeP, 2008). At RMIT University, ePortfolios are being strategically positioned as a vehicle to enable the ongoing compilation of learning achievements and experiences that can be used for authentic, evidenced-based assessment and demonstration of career readiness (RMIT, 2008, para 1). While some disciplines have used traditional paper-based portfolios for assessment and accreditation purposes, the practices are not consistent within or across universities. In the broader domain of flexible and / or online learning, ePortfolios are seen to allow for greater integration of ubiquitous Information and Communication Technologies (ICT) to further support learner engagement. However, while students have little choice but to adapt to new technologies, especially if they are positioned as integral to assessment, introducing new technologies into both organisational systems and learning and teaching practices, is both a complex and challenging process.

This case study reports on work-to-date around the introduction and implementation of a potential enterprise-wide ePortfolio system at RMIT, a large multi campus, dual sector university in Australia. Following a review of ePortfolio systems at RMIT in 2007, it was decided to initiate a trial of an ePortfolio system, PebblePad in 2008 which has consequently been extended to 2010 (Botterill, Allan & Brooks, 2008). This trial is currently being conducted across 36 courses in both the Technical and Further Education (TAFE) and Higher Education sectors. Areas of strategic importance that have been targeted for the trial include: professional accreditation (Engineering), Work Integrated Learning (WIL), Dual Hub (RMIT International University Vietnam) and Recognition of Prior Learning (Business TAFE School). These areas are strategically important as they have wide spread applicability across diverse areas of RMIT. The implementation process has also been enhanced and complimented by inter-university collaborations between the University of South Australia and RMIT.

Using Geoff Scotts (2003) key themes and lessons learnt in effective change management in Higher Education as a framework, this case study will explore the issues, challenges and achievements to date around introducing and supporting a scalable trial of PebblePad at RMIT. It will also map current progress in the introduction of ePortfolios against the recommendations and organisational maturity model presented in the Australian ePortfolio Report, (AeP, 2008). Both frameworks highlight the need for strong organisational leadership, while acknowledging the complexities of instigating major change initiatives that encompass cultural shifts. These need to be managed carefully. A failure at an organisational level to properly support, integrate or implement a major change initiative can cause widespread mistrust and passive resistance by both
staff and students. Thus while there are processes and systems being developed to support a stable integration of ePortfolios into existing institutional systems, it is also important to build an informed community of practice across all areas of the university. Together these can lead to a managed, successful and sustainable implementation of ePortfolios within a university.

References

Lessons from the front line - one ePortfolio: three years: 40,000 active users: a million forms: 25 partner organisations.
Karen L Beggs, Alex Haig, NHS Education for Scotland, United Kingdom;
Since 2005 the NHS Education for Scotland (NES) ePortfolio has grown from a regional pilot with 400 junior doctors to a system that is used by trainees in 7 countries in a range of healthcare professions and in partnership with over 25 organisations. Over a million forms have been submitted, including more than 60,000 personal development plans. The rapid expansion of the project has brought with it a number of challenges, not least of which relate to the management of change within the large and diverse NHS workforce. Discussion will focus on lessons learned from moving from small-scale pilots to full implementation, working with external organisations, managing competing priorities, commercialisation, data governance and technological change.

Learner-Centred Strategies for informing Institutional Take-up of ePortfolios
Kirstie Coolin, Phil Harley
University of Nottingham, United Kingdom;

Background
The UKs Lifelong Learning Networks (LLNs), are sub-regional partnerships between post-16 and HE institutions with the remit of increasing vocational learners’ progression into Higher Education. The University of Nottingham's Centre for International ePortfolio Development is delivering the technology/ePortfolio strand for the Nottinghamshire and Derbyshire LLN. A major work strand being to trial ePortfolios with 1000 users on vocational learning programmes, work-based learners and those on Higher Education progression routes.

Providing clear learning pathways to up-skill those in the region is key strategy for our Regional Development Agency. Tools and services need to be flexible to facilitate lifelong learning journeys and associated transitions.

Charting new territory, we are developing ePortfolio experience with learning providers in the region, across a variety of sectors and applications. A core objective is to equip institutions to take fully-informed decisions about their choices of ePortfolio-related technology. Previously, there had been little ePortfolio use within the regional Further Education sector, other than with assessment-based portfolios.
Unique to this LLN, sponsorship from two institution-free ePortfolio companies has enabled prompt trials to occur, free of institutional constraints, demonstrating a genuinely portable, lifelong learning tool. Developing an innovative methodology for winning institutional buy-in, we have worked directly with teachers not specifically involved in eLearning, ensuring a learner-centred approach to the pedagogical application of ePortfolio tools. Who better to advocate the tangible benefits of these new technologies to their institutions and prompt reviews of institutional policy and provision?

**Objectives**

To overcome perceptions of ePortfolios as daunting monolithic systems. Applying creative solutions to disaggregate ePortfolio functions has enabled us to target a range of immediate learner needs and processes. When technology is less conceptual, provision becomes more palatable and flexible, readily picked up and used in a variety of ways. Course leader's reasons for engaging in pilots are varied, affecting their choice of portfolio and ideas on how to use it, which altered and expanded as they saw how they could use the experience to initiate change to organisational policy.

Drawing on a maturity model approach, the long-term challenge is to:

- Capture valuable experiences of early adopters
- Embed innovative practice
- Develop a community of users
- Explore tensions between institutional whole-system approach and institution-free models
- Recommend sustainability strategies to decision makers/outside agencies

**Summary of results**

Work is now in the evaluation and research stage, focusing on which ePortfolio processes are most helpful to vocational learners, and how well the institution-free ePortfolio meets the needs of individuals learning concurrently in more than one institution/location.

Trials have taken place within 9 regional partner institutions, engaging 800 users by June 2009.

Regarding sustaining ePortfolio initiatives, interim results demonstrate the value of:

- Using methods from other interoperability work - building upon existing services/practices as an effective means to engagement and embedding
- Concentrating initially on immediate learning needs
- Incrementally introducing new functions/ processes
- Involving technical/eLearning teams
- Providing appropriate resource funding and face-to-face support

Further results show how the trials are altering wider practices e.g:

- Re-evaluation of curriculum and delivery
- Inclusion of external assessors in new practice

Evaluations confirm that the most successful pilots are in institutions with a valued central eLearning team, capable of supporting the flexible approach to new technology made available by the institution-free model.

**Conclusions**

There are dichotomies between the flexibility of small-scale innovation and the requirements of institutional roll-out, and across the array of purposes for ePortfolios discovered amongst increasingly diverse cohorts of (potential) learners.

Amalgamating ePortfolios rigidly into existing institutional systems can be reductive. Scope for personalisation may be sacrificed in favour of administrative concerns.
This is a particular issue for people not yet enrolled with an institution who are evaluating their skills/experience as they consider engaging with higher levels of learning. An institution-free ePortfolio provides an important progressional service, turning them from potential learners into actual students.

Whilst a flexible ePortfolio system supports a wide range of learning processes, reinforcing the 'one size does not fit all' mantra, for institutions there is a challenge in reconciling flexibility with the practicalities of managing systems within a limited budget, including the costs of roll-out and adoption.

By approaching institutional take-up through individual course leaders, we have shown that teachers whose primary focus is the learner, rather than eLearning, choose technology for reasons that best benefit the learning community, both inside and outside the institution. They are proving to be valuable mediators between students and the institution and key advocates for embedding ePortfolio learning in the fabric of the regions emergent lifel

S23D: Reflective practice and CPD

Freefolio, the social e-portfolio platform

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1. Introduction

Freefolio is an ICT supported e-Portfolio and social knowledge management system in which learners report and reflect on their personal development. It allows learners to interact with peers, coaches and teachers within their own institution or in other institutions on the basis of their own competence development plan. This system includes:

There are four key technical elements to the system:

(1) Personal achievement log for each a users to be able to construct a personal space in which to: record learning; reflect on activities and future plans. Users have rights over whom (if anyone) to share their work with.

(2) A social networking platform providing aggregation of public posts and group functionality. The platform can be configured as open to the web or closed to a particular community, institution or group of users.

(4) Knowledge and Information section to electronically store resources identified as useful by the individual and/or organisation. This section should function as a repository of key documents and web resources which can be discussable.

The system is designed to

• enable learners to record and reflect on personal achievements;
• Support and promote feedback by peers and teachers / trainers;
• Provide information and access to knowledge resources

2. Platforms and systems

Freefolio was originally developed as an e-Portfolio for on-line careers coaches against a specification provided by the contracting organisation. Initial work involved considering the specification against the functionality of existing platforms and systems. We considered five different systems:

• the ELGG social networking system
• the OSPI open Portfolio platform
• the Mahara social e-Portfolio system
• the Edu Drupal e-Portfolio platform
• the Wordpress weblog platform

This provided us with a contradiction. The e-Portfolio systems provided limited functionality in terms of social networking and knowledge development and sharing. On the other hand the social networking platforms provide little facility for structuring portfolio inputs and for a more structured construction of knowledge artefacts.

Our final decision was to build a system based on the Wordpress Multi User system. Wordpress describes itself as a state-of-the-art semantic personal publishing platform with a focus on aesthetics, web standards, and usability. It has a large user base, is stable and reliable, has been widely praised for ease of use and is flexible and scalable. Furthermore there is a large and active development community, contributing to the development of plug-ins for customisation and added functionality.

This has allowed us to rapidly develop the platform, through customising and integrating plug in functionality. The platform integrates the use of WordPress MultiUser version with Media Wiki and BBpress through a single login.

The platform we have developed is called Freefolio

3. Further development

Freefolio has continued to be developed through a series of projects and initiatives. These include:

• Use as an e-portfolio for careers advice and guidance with 14-18 year old school students
• Use as a social networking platform by the European Network for Trainers
• A Design Study undertaken for the EU Mature-IP Research programme

Development has been iterative with regular meetings with users to provide feedback for further development.

Whilst Wordpress provides a powerful and extendable platform a number of issues have arisen in the development process.

a) Usability issues related to the Wordpress navigation systems especially at the backend of the application.

b) The desire by users to be able to personalise the appearance of their e-Portfolio.

c) Issues related to updating to new versions of Wordpress.

d) Issues in providing access to a stable release whilst continuing to develop new versions of the system

e) The lack of functionality for producing reports and presentations of work.

Despite this, we remain convinced of the utility of Freefolio as an open source e-Portfolio system. However, given different pedagogic approaches to e-Portfolios, Freefolio might better be regarded as the basis for developing a Personal learning Environment, through the integration of widgets in the platform. As such, we feel it better suited for Continuing Professional Development or for use with apprenticeship and work based programmes, than for use as a school e-Portfolio system. We will be further exploring this approach through the Mature-IP project in the coming months.
Blending systems and learning to advance practice: The use of ePortfolio in a level 7 Expert Practice module

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A blended approach to learning, teaching and assessment is adopted for this module encompassing e learning (DL) and work based learning. There are distinct synergies between these two elements of the 'blend' in that both share the characteristic of encouraging students to increasingly take responsibility for their own learning (learner autonomy) through working in partnership with others (academic and clinical peers, from Oncologists through to mentors and by utilising clinical supervision).

The module also demonstrates a blended systems approach, integrating 2 e learning platforms, Blackboard and PebblePad. This combines the content management of Blackboard with the PebblePaD personal learning space, owned by the students where the locus of control resides with them in terms of what they wish to share with tutors, peers and colleagues. PebblePad is also the vehicle for assessment submission and feedback.

The DL philosophy which underpins delivery of this module (and PG Radiotherapy & Oncology courses in general) utilises a constructivist approach to learning as the primary vehicle for delivery, based upon Salmon's (2004) 5 stage model for on-line learning:

- Access and motivation
- Online socialisation
- Information exchange
- Knowledge construction
- Development.

Constructivism, in contrast to transmission models of cognitive development, emphasises active (rather than passive) learning based on reflection and the construction of knowledge drawing on personal experience and prior knowledge. This is further enhanced when knowledge is socially constructed as in a peer/group/module cohort setting.

Active learning is fostered through a series of structured formative activities, which are formatively assessed tasks. This approach has evolved and is derived from the work of Gilly Salmon. E-tivities provide ‘a framework for active and interactive online learning’ (Salmon, 2004). These take one of two forms, e-tivities or p-tivities. E-tivities are undertaken and posted on Blackboard. P-tivities are shared using the PebblePad e portfolio platform.

P-tivities are therefore a variant of this approach, offering a similar framework in a different online environment. (p denoting their location in PebblePad). These formative tasks are supported by e-moderators (who guide the student through opportunities to develop learning and make meaning of information provided and feedback and comment from peers studying the module.

There are clear synergies between this approach and Assessment for Learning principles where assessment must be an essential and integrated part of the learning process. All assessment (formative and summative) can be categorised as assessment for learning, but in addition, summative assessments constitute assessments for grading also.

Within this presentation we aim to show how blending systems and learning can be effectively integrated within a level 7 module and my co-presenter will offer a student perspective on the effectiveness of this approach the impact upon his learning experience and professional development.

Reference

1. Salmon, G E-moderating: The key to teaching and learning online 2004 (2nd edition)
Personalised systems supporting IPD and CPD within a professional framework

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Rationale

The concept behind this JISC funded project is to integrate systems including ePortfolio-type technologies that support personalised IPD/CPD, applicable to professional frameworks. The project will result in the creation of an exemplar system and identify key features in the flexible pathways to qualifications within the Engineering Council UK engineering professional framework that facilitate the successful development of Personalised systems supporting IPD and CPD within a professional framework (CPD-Eng). This has the potential to be applied to frameworks relevant to other professional bodies and institutions.

CPD-Eng will stimulate and inform change in the provision of lifelong learning and workforce development in the engineering sector initially within the University and its partners through enhanced capacity, increased knowledge and improved skills in the use of technology to support these functions.

To support these activities, the CPD-Eng project will further develop a personalised system that builds on the work completed in the JISC funded Identity supporting personalised progression spaces (ISPPS) project. A portal system has been established alongside an Identity Management (IDM) system that allows self-service management of the learners identity. CPD-Eng will develop a robust and scalable approach to interoperability, access and identity management that is both easy to use and seamless, allowing the learner to control their personal e-portfolio-type technologies and share the content within them with whom they choose.

By taking personalised ownership of career decisions and focusing the learners professional development, CPD-Eng will assist the learner to:

- be better able to recognise opportunity
- be more aware of the trends and directions in engineering and society
- become increasingly effective in the workplace
- be able to help, influence and lead others
- be confident of their future employability
- have a fulfilling and rewarding career.

By adhering to agreed national and Europe wide standards, information will be capable of being transferred easily from one system to another, reflecting the increasing mobility of the lifelong learner.

Opportunities for enhanced personalised development

Learners will be well supported through a range of online and face-to-face mechanisms by academic and work-based staff and mentors. Work-based mentors (Professional Engineers) and other relevant staff within employing organisations will have the information and support they need from the University and peers to become fully engaged in supporting and following the progress of work-based learners.

Learners will record and reflect on their personal and professional development achievements on an ongoing basis, and share these with employers, professional bodies, peers and educational institutions as they choose.

The CPD opportunities meet the standard demanded by UK-SPEC (UK Standard for Professional Engineering Competence) for registration as a Chartered Engineer (CEng). These opportunities are available to lifelong and work-based learners, consisting of a range of study hours, differing course lengths and attendance patterns. Learning activities and assessments will relate to the learners own employment or other contexts and recognise the value of collaborative work.
Appropriate support to develop skills for lifelong learning and employability will be available in the light of the learners needs.

Although CPD-Eng will work initially with learners in the engineering field, the expectation is that the online environment and identified key features can subsequently be applied to other sectors involved in offering professional qualifications. This will be possible once a structure and concept have been developed, tested, piloted and evaluated.

**Technical overview**

Without the management of identity, no form of personalisation - provided, adapted or adaptive - is possible. Information about an individual's identity, their roles and their affiliations is required to provide targeted information to a user in a personalised environment.

The deployment of Suns Identity Management software provides the necessary building blocks to construct the identity access infrastructure required by CPD-Eng.

CPD-Eng will integrate established systems to create a seamless, learner centred environment. The project will result in the provision and coherent presentation of services, including desktop tools, which are both personal and personalised for learners and educators within the consortium partnership, as well as the engineering sector.
Interactive and Collaborative Reflective Practice

Roy Trevor Williams, Simone Gumtau, Regina Karousou

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This paper will report on, and demonstrate the interactive tools that have been created and used in the Affordances for Learning research project in 2008.

The project developed and tested the Nested Narrative method for reflective practice, which produces a series of uniquely rich personal, interactive and collaborative texts on learning, practice, and professional identity, for the student or employee, as well as for the academic or workplace institution.

Multimedia texts are captured in an interactive interface, which is a resource for:

- Personal exploration and articulation of tacit knowledge and understanding.
- Expanding sense making and reflexive learning through multimedia
- Interactive reflection in a range of settings with a range of people
- Collaborative reflection with colleagues, tutors, line managers or researchers, through additional multimedia, and potentially with kinaesthetic multi-touch tables.

The process and the interactive interface also produce:

- Unique facilities for strategic reflection and research at organisational level
- Rich exemplars for other learners, employees and the profession
- Ongoing personalised learning and continuous professional development.
- Knowledge sharing on complex tasks.

The Nested Narratives method is based on story telling, and on complexity theory and ecological psychology. It is the outcome of a research project funded by the HEA in 2008, Affordances for Learning.

S23E: Skills development and assessment

An e-Portfolio to Support Work-Based Degrees: the UK Experience

Tom Holland, Rob Arntsen

MyKnowledgeMap, United Kingdom;

In September 2007, the first students from Tesco began studying for a work-based degree covering retail management. The course was filling a real need: how do you support people to take the leap from supervisor responsibilities, to the managing of a large, complex superstore? These first students were piloting the course, which was delivered via a blend of distance learning and intensive workshops. Developed by Foundation Degree Forward, the UK government agency for work-based degrees, and delivered by two leading metropolitan universities, the pilot has since proved successful and has gone mainstream.

The Foundation Degree in Retailing faced a complex technical challenge. Within Higher Education, the model tends to be one where a single institution delivers a single course to many individual students. Our expectations for online support systems e-portfolios, virtual learning environments have generally been informed by this model, so the systems sit within the single institutions, and where we have expectations about interoperability, this usually relates to how you get the data you arrived at the institution with into their system, or how you get it out at the end of your three-year course.

But the model for work-based degrees that is being developed in the UK is about employer engagement, and in this case was about meeting the needs of large, national businesses. Because
of the national scope required by Tesco, several institutions were required to deliver a single consistent course to a single large employer the usual model is turned on its head. But how, when the delivering institutions use quite different and incompatible systems to support delivery, do you ensure this consistency?

In terms of the way that it was assessed, and the systems that supported the delivery of this assessment, the Foundation Degree in Retailing is very innovative. Reflective activities and assessments are built into the supporting content at every stage, but because of the system used to deliver the content, evidence of learner’s competencies, and reflections on workplace activities, can be submitted at any point and used as part of the assessment. We explore how the system evolved to meet the needs of employers, from the facility to quickly rebrand a slick interface to match a new employer investing in the programme, to the high level management reports and cross-institutional ROI reports that were required to demonstrate the value of employers investment in the programme.

In this workshop, well present a practical exploration of the technical challenges that MyKnowledgeMap faced in creating an infrastructure to support cross-institution employer-focussed degrees. The workshop will include hands on demonstrations of some of the technologies used and developed for the course, and we will take participants through the process of authoring new assessment materials. We will bring in perspectives from some of the key players the employers, UK government, the delivering institutions, and the national standards-setting body for retail o look at how the project moved from the definition of competencies and occupational standards, through the development of a cross-institutional e-portfolio where evidence of these competencies could be gathered, through to the awarding institutions validation and accreditation process based on this system, and finally at how the programme become a mainstream success. Key to this success was the design of the e-portfolio; the e-portfolios ability to adapt and develop to meet the needs of other employers taking up the course will be the key to its continuing success.

We will look into the future to see how this programme will continue to change to meet the needs of other retail employers.

**Key skills for the labour market and input for portfolio**

**Marc Troch**, VDAB, Belgium;

VDAB is the official service for employment and vocational training in Flanders, the Dutch speaking part of Belgium with 6 million inhabitants.

The organisation has 5050 employees, working in 360 offices all over the country, 68 training centres with 1100 training collaborators.

The annual budget is about 427,000 euros.

Last year, we had 910,000 job offers, with a fulfilment ratio of 83%, 573,000 business contacts, 461,000 registrations of job seekers and 48,000 training courses.

The training courses are about technical and administrative jobs, jobs in the health sector and language training in Dutch.

**Training in key skills**

In the past, we paid much attention to training of technical skills. But, during the last years, it became obvious that it was also important to pay in a more explicit way attention to the development of more generic skills, which determine if a jobseeker is able to behave on a work floor as expected.

After a explorative study of projects in the own country and abroad, we came to the definition of 12 generic skills which are considered as very important and which are trainable, observable in most of the training courses, which take at maximum six

This year, we are starting with a systematic observation of thirteen key competences during the vocational training. These key competencies are:
• attention for personal appearance
• respect for rules
• having perseverance
• being able to cope with stress
• working in a safe way and having respect for materials
• being careful and precise
• being focused on a result
• working in an efficient way, being able to concentrate
• being able to plan and organise
• being able to communicate in the language of the region, i.e. to understand and to speak Dutch
• being able to use ICT tools in daily life
• being able to manage the own professional career

These key competences are translated in performance indicators for each sector (i.e. metal, transport, construction) and the vocational trainers have an observation grid with these indicators on four levels. This makes it possible to assess the trainee and to make plans for improvement concrete and clear (SMART).

A large communication campaign with folders, posters and a workbook accompanied the start of this action.

The trainers are supported by their team leader (who got a training in coaching competencies) and they can use edugames (specific for a sector) to make the trainees aware about the importance of generic skills. Link: http://www.youtube.com/watch?v=xgS1xE7URZc&feature=PlayList&p=AE6711FCBC9705B8&index=0&playnext=1

Relationship to portfolio
It is important that jobseekers can talk about their generic skills and are able to show their level of mastery.

Pupils who follow a field of study which is oriented to the labour market (technical training) are made aware about the importance of generic skills and register their achievements in a portfolio, called My Digital Me.

Youngsters in large cities who often did not finish their school and hang around in the streets because they are unemployed are guided by an organisation who makes them aware of the importance of generic skills, helps them in the development and also registers their achievements in a digital portfolio called C-Stick (memory stick about competencies). In this project, the youngsters learn to improve their key skills and they get an accreditation on their digital portfolio.

There are plans to make a standardised XML communication tool to import these data into the portfolio for job seekers, called My Career, which is in development.

The C-Stick project: innovative practices for assessing key competencies
Marjan Van de maele, JES vzw, Belgium; marjan.vandemaele@jes.be

Background or context
JES is a plural non-profit organisation. Its mission is to create equal opportunities for young people to actively participate in society. JES is based in three Belgian cities: Brussels, Antwerp and Ghent. Its main activities include training and guidance, training for youth work volunteers, outreach work, support for youth clubs and youth work initiatives. These activities focus on young people, living in large cities, between 6 and 30 years old, of whom a lot are low-skilled and with migrant background.
In 2006-2007 JES carried out the C-stick project. One of the main objectives of this project was to develop a competence framework and tools for self-, peer and expert assessment of key competencies. An important criterion for this framework was accessibility for a low-skilled target group, so very simple and straightforward vocabulary was used. A second criterion was that it should be usable in different settings (leisure time activities, training, job counselling), regardless professions or sectors.

Objectives

It is often stated that it is impossible to measure or assess competencies regardless a specific profession or sector. In the actual debate the focus of attention is put on the context in which a competency is developed. Nevertheless, transferability from one setting to another is one of the preliminaries of the competency concept and underpins the idea of lifelong and life wide learning.

Since we wanted to make a framework that would be usable in all our activities (leisure time, training and job counselling), we tried to create tools that would make it possible to assess competencies in a neutral context, regardless a specific profession or sector.

In our presentation we want to present our framework and assessment tools, comment on their strengths and weaknesses and feed the ongoing debate on the importance of context versus transferability with some practical experiences.

Summary of results

The competence framework we developed consists of a set of 16 key competencies that was selected on the basis of a small survey with employers. For these competencies observable performance indicators were defined and tested. The performance indicators consist of very simple and straightforward statements on behaviour that is shown during a practical exercise and indicates the level of development of a competency. During our presentation, we will show some examples of our competence framework.

We use group dynamic exercises to assess the key competencies, because these exercises don’t have a link with a specific sector or profession and are very attractive and funny for young people. In the mean time they provide a lot of observation material on certain key competencies. While young people participate in these exercises, they are observed by an assessor, who notes down everything he observes. Afterwards the assessor uses the set of performance indicators to assess the level of development of a certain competency using his notes. During our presentation, we will present some examples of possible exercises.

The developed competence framework and tools were used in our Youth Competence Centre during leisure time activities. The Flemish Employment Service used the competence framework during several experiments for job counselling and some schools also used it for screening at the start of the new school-year. In all settings, the framework proved to be very useful.

Conclusions and recommendations

We think key competency assessment regardless a specific sector or profession is indeed possible and might have several advantages that are crucial to lifelong and life wide learning:

• Enhance social orientation
• Create a link between different settings (leisure time activities, training, job counselling) by a shared terminology
• Create an integrated learning experience

Nevertheless it is true that our assessments have their limits: they can reveal strengths and talents of people (indicative value), but they cannot proof that someone meets the standards of a specific profession, since they are not specific enough and there is no standard defined.

To encourage and enhance lifelong and life wide learning, it would be beneficial to develop a shared terminology with shared performance indicators. It would be an interesting exercise to agree on a set of neutral performance indicators (regardless sector or profession) and see whether it is possible to translate this common set to the specific context and needs of sectors and professions. Such a framework would improve transferability of competencies from one setting to
another and therefore enhance accreditation of prior experiential learning and facilitate career transitions.

**E-portfolio: a tool for assessment and empowerment in the skills recognition process**

*Teresa Mota, Francisco Restivo, FEUP, Portugal;*

Recognition, Validation and Certification of Competencies (RVCC), is playing an important role in the qualification of young people and adults, through the formal recognition of skills, knowledge and competences gained through work experience, informal learning and life experience. During the process candidates are assisted by technicians and trainers to identify and recognize acquired skills/competences, to gather supporting evidence in order to demonstrate them. A web platform was developed according to the principles of user oriented design to aims to support the activity of all the actors in the RVCC process. It aims, in one side, to help technicians delivering their work more efficiently, through the complete digitalization of the process and the use of artificial intelligence (neural networks) and data visualization techniques to analyse and validate data, and on the other side to provide high levels of autonomy and empowerment, inclusion and participation of candidates, while building their own dataset and personal e-portfolio on-line for assessment, through the use of a GUI that primes for accessibility and usability aspects. It is also possible to store digitally all the data related with thousands of RVCC processes, in order to achieve an historical archive which in paper would be useless.

**S24A: Workshop ePortfolios – The Cornerstone of Personalised Learning**

**ePortfolios – The Cornerstone of Personalised Learning**

*Simon Tindall, Charlene Douglas, Desire2Learn;*

Advocates of ePortfolios claim they are the biggest software evolution in education since the creation of learning management systems. According to Love, McKeen and Gathercoal (2004), ePortfolios may have the most significant effect on education since the introduction of formal schooling. ePortfolios are gaining momentum in the eLearning technology space as today's students, teachers, and institutions search for a personalised learning experience that extends beyond the boundaries of the face-to-face or online classroom to include social networks of peers, evaluators and even external experts.

ePortfolios facilitate users to:

- Plan educational and training programs
- Document knowledge, skills, abilities and learning
- Track development
- Define, develop and embark on a career path
- Evaluate a course, program or institution
- Monitor and evaluate personal performance
- Share and collaborate with others

Yet, student, faculty, and institutional usage of ePortfolios differ greatly and true benefit will arise only if ePortfolios are implemented successfully.

This interactive session will discuss the concept of ePortfolios and demonstrate how they can be used to support student-centred learning by encouraging students to collect, organise, share, reflect on and present their learning experiences in a collaborative online environment. Also we will
discuss how faculty utilise portfolios to not only track and personalise learning for students, but also share information with colleagues as well as demonstrate their personal growth.

Finally, we will discuss best practices we've collected from our research and experience in this area and critical success factors in implementing ePortfolios.

Anyone interested in ePortfolios, whether or not your institution has implemented ePortfolios or not is encouraged to attend.

S24B: Parallel session

User control in an Employability Portfolio

Dries Pruis, Lex Polman, Kenteq, The Netherlands

Abstract

The world today is growing more interconnected with both markets and supply chains having global dimensions. This greater interconnectedness, coupled with advances in technology and new business models is creating markets of dynamic opportunity. The concept of a dynamic opportunity is an opportunity that is potential and time limited. Economies, businesses and employees need to be able to capitalize on these opportunities when they are present. Governments must look at the regulatory environment and the context for doing business in the country as foundations for attracting such opportunities. Businesses must look at flexible, adaptable, efficient and competitive business models coupled with an appropriately skilled and resourced workforce. Employees must have the required skills and capacity to seize the opportunity. All of this, coupled with the objectives of the Lisbon Agenda to make the EU the most competitive region in the world, has significant implications for the employment paradigms that have been the basis of current societal concepts of work life and job security. Technology, new business models and cultural and lifestyle trends have resulted in a greater likelihood that people are more likely to change jobs (either voluntarily or through workforce changes) and be more mobile during their lifetimes. Technology today is more able to support this greater likelihood of workforce change and general mobility but concepts of accountability and user control have not kept pace.

Skills requirements are becoming more dynamic and change more often over the lifespan of a employee than ever before. Jobs and employment opportunities are shifting. In some cases, technology is eliminating the need for some mid-level positions that were mostly data re-entry though by self-service applications. In other cases, efficiencies derived from technology may require less people to manage a process or workflow. Finally, the greater fluidity of the job maker coupled with the global nature of markets and value chains may mean some jobs are being shifted to other locales. In all these cases, valuable employees are faced with a need to revaluate their skills. Companies are faced with a greater complexity of training needs and career planning to assure that they have the right workforce to capitalize on opportunities.

Kenteq implements employability projects at several companies together with other parties. The employability services can be used both by employers as well as employees. In pilots we executed the APL process (Accreditation of Prior Learning), exchanged the data to the employability portfolio and testing how the employee can have control over the personal employability data.

User control

Distributed work environments coupled with greater mobility of persons have created an increasing need to address portability of information and access to related and supporting services in a dynamic, secure and user-centric way. The employability sector deals with some of the most sensitive data in an individuals life. The other important factor is that the data is cumulative and need to be maintained over the persons lifetime. Thus while there are transactions within the context of employability that have defined lifecycles for providers, much of that information is relevant throughout the persons lifecycle. These greater complexities coupled with the previously mentioned need for portability of records to accommodate mobility of persons and allow greater choice in professional associations creates new challenges in defining an environment that offers
security and trust over a lifetime. We also must consider the greater user involvement in control and management of these records and the need for technology as well as policy and legal instruments to be accessible and usable by people not specifically trained in those disciplines.

**Workshop**

In this workshop we demonstrate how the employee can have control over his employability data from the APL process that is stored in the database of Kenteq.

- **Legally (contracts)**
- **Ethically (privacy rules)**
- **Technically (user policy)**

Discussions with users on what level they want to be able to set policies for access to their personal data and to whom they want to grant access.

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**S24C: Workshop**

**Creating sustainable National/institutional wide e-portfolio development**

**Marij Veugelers**, SURF, The Netherlands, , University of Amsterdam;

*a workshop with the community manager SURF NL Portfolio Marij Veugelers*

What are the main issues around building up a national/institutional wide EPortfolio community?

Based on the experience in the Netherlands, higher education portfolio community with an international view to the UK and the USA.

Main target: Sharing the experiences from all the participants in this workshop and building up a list of tips and tricks that can be shared in the world wide community.

After a short presentation the participants will share their experiences.

The resources for this workshop are:

1. The keynote presentation EPortfolio Australia conference febr 2009
   

10 years community building in the NL, step by step attention for:

- an ePortfolio Odyssee
- joining forces
- sharing materials
- bringing stakeholders and their perspectives together
- structured inventarisation
- exploring new grounds
- working on relations outside e-portfolio circle
- working on sustainable implementation

Presenting a list of 15 instruments for community building.

And showing what's ahead of us in 2010?

   

The product of this workshop will be published after the conference.
**S24D: Workshop**

**ePortfolio Best Practices for Teachers and Students: Launching a large scale ePortfolio program while encouraging, not stifling, student creativity and innovation by Cyri Jones**

**Cyri Jones**, Capilano University, Canada

Abstract: This workshop will start by providing an overview of the current status of the ePortfolio landscape in colleges and university globally. It will then highlight via an interactive simulation game ePortfolio best practices for teachers or administrators wishing to launch or re-launch their large scale ePortfolio program while encouraging, rather stifling, student creativity and innovation as they develop career-oriented ePortfolios. The workshop will conclude by showcasing real life student ePortfolios that demonstrate the impact of an ePortfolio program that fosters creativity and innovation, using the experiences of the ePortfolio program at the School of Business at the British Columbia Institute of Technology in Burnaby, Canada. Participants will have the opportunity to challenge the best practices proposed and contribute their own experiences from their institutions. The final, collaborative results from the workshop will be presented back to the wider community via a blog or wiki.

Description: This interactive workshop will begin with an ePortfolio game that will help participants get a good foundation of the status of the ePortfolio landscape. What percentage of students globally has an ePortfolio, what percentage of schools has ePortfolio programs? How many ePortfolio tool options are there? Which social networking tools have ePortfolio functionality? How many countries have official ePortfolio programs? What percentages of students go on to actually use their ePortfolio for career or other purposes after graduating from their institution? What percentage of student ePortfolios would be considered innovative and creative?

There will then be two simulation games where participants will have a chance to 1) try to launch the best, large scale, ePortfolio program possible within a university or college environment, and then 2) to try to launch a creative and innovative, personal, career ePortfolio (from the perspective of being a student). Participants will be asked to make a series of decisions. After each decision, they will roll the dice and then see the result of their decision. The results will be based on probabilities of different outcomes modelled from ePortfolio research and personal experiences of launching a large scale, ePortfolio program at the British Columbia Institute of Technology.

Some of the issues that will come up in the simulation games and best practices discussion include:

- How to structure a large-scale ePortfolio program that encourages rather than stifles student creativity and innovation?
- How can students effectively promote their career ePortfolio while at the same time protecting their privacy?
- How to decide between the many ePortfolio tool options? Which will foster the most creativity?
- Where does the ePortfolio fit in the social networking tool mix?
- Should students have multiple version of their ePortfolio?
- How can students gather feedback on their ePortfolios to continuously improve?
- How to gather student feedback to continuously improve an ePortfolio program?
- How creative student ePortfolios can be used to help viral-market an educational institution?

The end result will be a lively and rich, interactive experience

Inter-mixed in the workshop will be numerous examples of real student ePortfolios created with a variety or tools and how they showcase creativity and innovation and the best practices discussed in the workshop.
The workshop will also conclude with a brief recap of what to do and what not to do tips again using real student ePortfolios created with a variety of tools as examples.

Participants will have the opportunity to challenge the best practices presented and share with the group their own best practices they have discovered implementing ePortfolio programs at their institution. The end result of the workshop will be an improved collaboration of ePortfolio best practices that will be documented via a blog and shared with the wider community.

Objectives: By the end of the workshop, participants will have a good understanding of the decisions involved in launching or re-launching an effective ePortfolio program and how best practices can be leveraged to boost the creativity, innovation and effectiveness of student ePortfolios.

Background knowledge expected of participants: Basic understanding of ePortfolios. Experience with starting an ePortfolio program or being involved with planning of an institution ePortfolio program would be beneficial (but not essential).

Experience of Workshop Leader: Cyri Jones, B.Sc., M.B.A., P.M.P. is a professor at Capilano University (Marketing) and the British Columbia Institute of Technology (Operations Management) in Vancouver, Canada with over 15 years of web development and consulting experience and five years experience in leading one of British Columbias largest ePortfolio programs. His focus is using free, third-party, Web 2.0 tools such as Blogger, WordPress, Mahara, and Box.net to develop an open and creative approach to ePortfolio development.

S24E: Workshop

Creating Self-regulated Learners Using ePEARL

Anne Wade, Phil Abrami, CSLP, Canada; wada@education.concordia.ca

This workshop will introduce participants to ePEARL--bilingual, web-based electronic portfolio software available within the CSLP’s Learning Toolkit. Currently in use in Canada, the United States, France, the UK and Portugal, ePEARL is based on sound research evidence, along with feedback from the field, and is designed to encourage self-regulation in learners within student-centred K-12 curricula.

ePEARL promotes:

• Planning: Setting general learning goals for a term or year, as well as task goals and strategies for a specific artifact.

• Performance: Creating new artefacts (via a text editor, built-in recorder), linking to work created outside of the software, and editing artefacts.

• Reflection on the process and finished product.

• Feedback from peers, parents and teachers on the portfolio as a whole or on a specific artefact.

ePEARL is available at no charge to the educational community.
Key3: ePortfolio Plenary

Personalisation through technology-enhanced learning

Gráinne Conole

What is personalisation? Although this seems to be a deceptively simple and common term, its usage in an educational context is complex and subtle. Dictionary definitions of the word personalise include to endow with personal or individual qualities of characteristics, or design or produce (something) to meet someone’s individual requirements. It means many different things.

Indeed the personalisation agenda (like the technology-enhanced learning agenda) raises profound questions about the nature of education. This presentation will look at the ways in which personalisation and personalised learning are referenced from three perspectives: in policy discourse, in terms of technical developments and pedagogically. It is intended as a general overview of the field; looking both at the vision and the challenges that attempting to adopt a personalised approach raise.

Lifelong ePortfolios: Creating your Digital Self

Helen Barrett

In the age of the participatory Web, popular social networks are creating new opportunities for reflection, collaboration and self-publishing. This keynote will outline a scenario of lifelong ePortfolios, from families to formal education to the workplace to retirement legacy stories. What are the common themes that support ePortfolio development across the lifespan? How can individuals and institutions adapt their ePortfolio strategies so that they are more engaging, and learners will want to maintain their ePortfolios for life?

E-portfolio values

Simon Grant, JISC CETIS, United Kingdom

The motivation for considering e-portfolio tools and values together was initiated by Grant & Grant (2006). E-portfolio tools are routinely used to help with personal and professional development; professional identity involves professional ethics and conduct; and part of being a competent professional involves the appropriate choice of certain actions or kinds of action (including things spoken) over other possible ones, which is the essence of values.

As Grant (2009) points out, values are complementary to abilities. You can only choose between courses of action that you can actually carry out. Because e-portfolio tools very commonly help people to assess, develop, claim and evidence their abilities, it would seem to make much sense also to use the same tools to help with the recognition and development of values, which are intimately linked to personal identity - a highly sensitive subject, so tools need to be owned and controlled by the people themselves.

Since 2006, the literature continues to point to the importance of these matters. For instance, in the bluntly titled "The No Asshole Rule", Robert Sutton (2007) eloquently and popularly describes the damage done when people treat others negatively. We can imagine people taking these kinds of negative actions when they see others as having different values, combined with the fact that their own professional values allow these negatively critical patterns of behaviour to be expressed. Lack of self-awareness is also implicated.

In a more recent popular book, "Multiplicity", Rita Carter (2008) clarifies much of the case for understanding that people generally have several different personalities, depending on the situation they are in. The important implication of this work is that people may be held back from
understanding their values by the variety of values that they live out in different situations. Most people seem uncomfortable with the idea that their values are actually dependent on the situation, and they naturally want to develop coherence and consistency.

But younger people (say, under 30) often have insufficient life experience to know their own preferred values explicitly. It may even be counterproductive to get them to focus on what their values "are", as this may lead to a premature espousal of values that do not have deep roots in their lives.

In view of recent thinking, how can we now extend beyond Grant and Grant (2006)? This paper sets out two areas for this: first, distinguishing between different kinds of values, and second, a program of values development based on those distinctions.

The distinction of four aspects to personal values is proposed.

1. Professed values: These are the values that people publicly declare they support.
2. Espoused values: These are the values that people believe they really hold to.
3. Dispositional values: These relate to the choices that people actually make, when they are free to make such choices.
4. Apparent values: These relate to what people do, irrespective of the constraints that actually affect them.

A vital part of the development of personal and professional values lies in the recognition of the distinction between espoused values and dispositional values. There would appear to be a clear scope for this distinction, and the associated ethical issues, to be addressed through e-portfolio tools and related practice.

These steps could be embedded in a range of varied programmes. They include the outline of the suggestions in Grant (2009) but point beyond.

a. Develop an understanding in learners of the significance of dispositional values as the habitual choices between courses of action (including words) in contexts (kinds of situation) where more than one option is available.

b. Help learners to observe and recognise the apparent values that other people typically display in different contexts, to interpret what the underlying dispositional values might be, and to compare and contrast with professed values.

c. Encourage learners to be actively involved in situations where different values prevail.

d. Encourage insightful observation of the consequences of dispositional values in different contexts.

e. Support reflective / reflexive observation and appreciation of the effect of following different dispositional values on oneself as well as others.

f. Develop the ability to compare one's own dispositional values across different contexts.

However, it must be recognised that these processes are unlikely to be completed within the period of formal full-time education, and ways need to be found for establishing and continuing the processes in workplace contexts.

References


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**Ready or not, the Personal Learning Environment is coming with the ePortfolio Process as the Keystone.**

**John Pallister**

Wolsingham School and Community College, Durham, UK

The much heralded shift from teaching to learning appears to be happening quite slowly. The majority of learners are following their Destiny; their teachers plan their learning; they follow the pre-planned journey, often reluctantly, often influenced by distractions provided by the technology and media rich environment that they operate in. Their experiences and expectations are different from that of previous generations. The opportunities and stimuli offered by the planned learning journey have to compete with those available from other sources. Learners have learning choices to make even if their school is still emphasising the teaching and have not prepared their learners to manage their own learning.

Whether planned or otherwise the learners will find themselves having to take decisions about their learning. Many will not have had the opportunities to develop the skills that they need to manage their own learning and thrive in their personal learning environment.

Every thing that will be discussed and explored at this conference will rely on the ePortfolio process; a process that requires learners, while they tackle and solve problems, to plan their actions, review, reflect and record their progress and development. For this to happen, the learner will need to have opportunities to solve problems and need the time and space to allow them to share their thinking and reflections with their teachers, peers and others.

The ePortfolio process relies on the learner knowing what they need to do or learn, and on them having the freedom to plan their own learning. They will need to operate with a large degree of independence, controlling their own learning. In addition to being able to select from the curriculum opportunities offered by their school they will also be able to benefit from those available from a wide range of other sources. The learner will decide what is appropriate to their learning needs or plans. They will follow a learning journey that they will personalise.

Shift happens slowly; but without the shift towards personalised learning, the ePortfolio process has little to offer the learner. As a product the ePortfolio can record evidence of achievement, experience or competence that the learner could use to support their transition to employment, training or Higher Education. Simply as a product, without the active reflection component, it will not contribute to the learning process.

Another, perhaps obvious message would be that without the commitment, time and space that would allow the ePortfolio process to be embedded into everyday practice, discussions on tools, technology and supporting processes will be of little value. Everyone at this conference has a vested interest in making sure that the process is embedded; that is if the ePortfolio process does have the potential to support learning.

Before exploring how best to integrate the ePortfolio process into everyday practise, if might be useful to examine the drivers; specifically what demands, initiatives and expectations being placed on the curriculum that the ePortfolio process might be able to support. No sense promoting a process unless it has something to offer.
At the core of current national curriculum initiatives is an ambition to improve children and young peoples lives by providing them with a curriculum that would enable them to become: successful learners, confident individuals and responsible citizens.

The emphasis has shifted from teaching to learning; the learner is placed at the centre of the process and it is expected that they will be challenged to reflect on their learning and identify how they can improve and exercise choice as they develop as independent, lifelong learners. There is also an expectation that the curriculum should provide compelling learning experiences that provide real and relevant contexts for learning.

I will explore now what contribution the ePortfolio process can make to each of the current educational initiative.

S31A: Workshop

The Personalisation of Learning Framework

James Ballard, Philip Butler

University of London Computer Centre, United Kingdom;

The Personalisation of Learning Framework: Since 2006, ULCC has been developing a model framework that learning providers could utilise for the implementation of 'personalisation of learning' as outlined in the DfES Harnessing Technology Strategy, where "the system conforms to the learner, rather than the learner to the system". The project is based on open source technology utilising existing applications, and new developments commissioned to expand these as required.

From the outset, it became apparent that to attempt a 'one-size-fits-all' solution would be ineffective and have too many limitations. Subsequently we adopted a modular approach distinguishing between elements provided by the institution and those personal to the learner. This is clarified through the concept of 'process ownership' and curriculum focus which is key to planning. The framework has allowed learning providers to bridge the gap between institutional portfolio requirements and personal portfolios, anticipating trends towards learner portal or personal learning environment implementations.

The current framework is a culmination of ULCC projects and focus groups as well as a JISC CETIS funded project implementing e-portfolio interoperability standards and JISC/BECTA funded projects for 'Transforming Curriculum Delivery Through Technology'. Implementations of the framework have been adopted by a number of beacon colleges in the UK.

The workshop will explore tools and technologies to support the framework, issues faced by learning providers, examples of innovative practice, and system integration and interoperability. The session is suitable for both managers and practitioners interested in how e-learning can support the personalisation agenda, with a focus on five key areas:

1. Virtual Learning Environment

VLEs provide support for teaching and learning through delivery of course materials and learning activity, utilising assessment, communication, collaboration and content tools. Integrated with student record systems they provide the focal point for learning activity within an institution.

2. Personalised Learning Plans (e-ILPs)

PLPs support the process of learning through appt routes from a starting point to the achievement of individual goals. They facilitate effective dialogue between tutors and learners, give an overview of progress as well as embedding pastoral support into the curriculum.
3. e-Portfolio: Assessment
The assessment portfolio provides support for summative, formative and other assessment through tracking evidence of work completed in relation to assessment criteria and learning outcomes. Awarding body criteria are mapped to user activities and evidence, enabling reports to be generated on progress and facilitate verification requirements.

4. e-Portfolio: Learning Space

The learning space portfolio provides support for collation and presentation of learner activity helping facilitate transition between stages of learning and employment. ‘We learn many different things in different places and at different times.’ Learners can store and showcase their learning activities to various audiences, and take this with them as they move between different institutions and employment.

5. Web2.0, Social Networking and the Cloud

This collates together the wide range of tools available to learners in the wider web environment. Valuable learning activities, particularly informal, occur within these systems. The framework explores how these can be supported and captured within institutional delivery.

Presenters:

James Ballard formerly worked with Barking College as a learning technologist, before joining ULCC in June 2007. His expertise lies in working with the latest learning technologies and over the last five years has established himself as a leading practitioner in the practice and potential of Moodle. James frequently consults with colleagues nationwide and has been involved in the DfES ICT Test Bed Project and as a consultant to BECTAs e-portfolio requirements for apprenticeships workshops. He has produced research papers and reports assessing the impact of ICT in the classroom and is currently leading on the development of the framework.

Philip Butler has worked in post-16 education for over 25 years and, as a teacher developed a strong interest in Technology Enhanced Learning. He was a founding member of JISC Regional Support Centre for London and worked with them for eight years as the Senior e-Learning Adviser developing regional strategies to support the effective use of Virtual Learning Environments and e-Learning. He now works for the University of London Computer Centre and has worked as a consultant on several major projects for national advisory boards with JISC, NIACE, BECTA, NLN, etc. along with presenting at regional and national conferences.

S31B: Workshop

Dropping the Pebble in a pool..............

Emma Purnell, Megan Lawton, University of Wolverhampton, United Kingdom;

In 2003/4, the University of Wolverhampton decided that for both practical and pedagogical reasons providing a paper-based system for recording personal development planning (PDP) to all students would be inefficient and would go against the institutional ethos of using technology to support learning. As a consequence of this came the development by Pebble Learning of an electronic tool PebblePad. At the start of the academic year 2005/6 this tool was rolled out across the whole of the University with each member of staff and each student having their own account. At this time, an organic growth of development and innovative use started to happen in a number of schools and a community of practice of early adopters and enthusiasts began to develop. Since then, we have had 2 major University initiatives that have contributed significantly to the scaling up of ePortfolio activity; both the Centre of Excellence in Teaching and Learning (CETL) activity and a
recent Pathfinder project will be discussed as part of the session to highlight their contribution to the wider institution take up of ePortfolio.

We are very proud that we currently have over 19,000 active users in the institution, since 2005/6 users have created over 150,000 ePortfolio pages, uploaded 180,000 files, created 16,000 action plans, shared 22,500 assets between them and published 52,500 assets for assessment to one of the 2000 gateways we have. Most recently, in 2008, a Blended Learning Strategy (BLS) was created as an appendix to the Learning and Teaching Strategy which articulates 6 entitlements that students will have in relation to how technology will be made available as part of their studies, PebblePad is one of the tools used to support these student entitlements.

This session will cover is:

1. An institutional overview from implementation to embedding PebblePad, this will look at the following:
   - Technical support
   - Curriculum design
   - Staff development issues
   - Supporting student use

2. Practitioner perspectives looking at different teacher led use of PebblePad, this will included:
   - Assessments, feedback and Gateways
   - Working with students studying remotely (Case study China)
   - Work based learning

3. Student views of using Pebble Pad, this will include:
   - Personal accounts
   - Working with Teacher-led activities
   - Perceived value and benefits

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S31C: ePortfolios in higher education

Evaluation of the implementation of an e-portfolio system – processes versus platform?

Olivia Fox, Neal Sumner, Ajmal Sultany, City University, United Kingdom;

Introduction

This work-in-progress paper will report on our evaluation of the institution-wide phased implementation of an e-portfolio system at City University. It will report on the methodologies and results of the evaluation and discuss how successful the e-portfolio system and the University’s current support model is in engaging students in the processes of:

- Information/evidence collection
- Organisation
- Reflection
- Planning
- Feedback
- Collaboration and
- Presentation. (Adapted from Hartnell-Young et al., 2007, JISC 2008)
Higher Education institutions are using e-portfolio platforms to support various requirements across diverse programmes. Inevitably, there are some inherent contradictions, for example between assessment of and for learning and between personal and institutional ownership.

This paper will use the results of the evaluation to address the extent to which the affordances of the e-portfolio platform has enabled the realisation of the range of processes demanded by both staff and students.

**Background**

City University is a medium-sized university which focuses on courses for business and the professions. The University has piloted the e-portfolio system, PebblePad, since 2005. In 2008-09 the University has moved to phased implementation of PebblePad and made e-portfolio accounts available to all year one Undergraduate and Postgraduate students. The ePortfolio has been used to support a number of different activities across a diverse range of programmes. In some cases the e-portfolio system has been integrated into programme curricula, in others an e-portfolio activity runs in parallel to the programme. In addition students may not be using the e-portfolio system as part of their formal course, but have an opportunity to engage in developing an e-portfolio supported through a self-directed online module entitled Improving my Success, (Improving my Success has been adapted from the My PDP module developed at University of Dundee).

**Objectives**

Students are currently being surveyed for their opinion on the experience of using the e-portfolio system. Separate staff and student online surveys were launched at the end of February 2009. The student survey comprises 22 questions, the majority multiple choice, to get student views on the purpose of using an e-portfolio on their programme, their experience of using an e-portfolio to support different processes and how they would like the e-portfolio to be used on their programme.

The online survey will be followed up with focus groups to:

- Find out how effective our current support model is in scaffolding the student and staff experience of using e-portfolios.
- Analyse the efficacy of the e-portfolio platform in supporting students in e-portfolio processes.
- Identify from the survey and focus group the processes that are well supported using the e-portfolio system and areas where further support is required.

**Conclusions**

The results of the online surveys and focus groups will feed back into development of the support model for the e-portfolio system and ensure that the emerging needs of the diverse e-portfolio community at City University will be met now and in the future. Moreover, we believe the results of this evaluation will be relevant to the wider e-portfolio community as many Higher Education institutions are grappling with these issues as they move from pilot phases to wider implementation.

**Breaking out of the bondage: SAMSON (Shared Architecture for eMployer, Student and Organisational Networking)**

_Sandra Winfield, Tom Kirkham_

Centre for International ePortfolio Development, University of Nottingham, United Kingdom;

**Background/context**

In the UK, as elsewhere in Europe, the importance of graduate employability skills is greater than ever in the current economic climate. It is generally agreed that work placements provide a means by which students can obtain these skills, offering opportunities to build relationships with employers which often result in job offers.
However management of work placements is often not joined up across, let alone between, institutions. Moreover, for learners there is a risk that they become disjointed or stand-alone experiences; while some learning outcomes may be met, there is a need to integrate the experience into personal and academic development and planning.

**Objectives**

The project will build a generic, scalable infrastructure model to support continued evolution and multiplication of processes and services, and which can include a wide range of stakeholders across institutions, thereby generating increasingly rich information and connections. It will enable secure and dynamic collaboration, supported by a security architecture based on a federated approach (to support SSO and ensure continuity) and user-driven policy management technology as trialled for the EU TAS³ project. By working with employers to define learning outcomes using collaborative ontologies to mediate language to express competencies that will bridge academia and employment, we will support sharing of protocols to match learners to requirements and provide an automated means of integrating data between systems using semantic web services.

SAMSON, a new JISC-funded project, is providing a joined-up experience for Nottingham postgraduates on work placements and enabling full communication between currently disparate employer engagement initiatives within individual universities and between learners, HEIs and the employers they are partnering in workforce development. By creating a dynamic web service infrastructure to present a platform for users and service providers to collaborate securely and dynamically through hosted services, it is supporting a cycle of workforce activity which includes processes required by an array of stakeholders. Policies, services and applications can be added according to user need.

By using the users ePortfolio as a portal to access the system, we will explore the impact of this technology on lifelong learning and employability services, providing end users with seamless interaction between multiple information systems and technologies. We will also trial use of emerging standards, building on development work from earlier pilot projects using XCRI and LEAP 2A.

The ePortfolio will manage learner-owned data, hosting learning activities and facilitating communication and formative feedback between stakeholders. Learning services will focus on RPL processes for skills self-audits. Learners will have greater control over matching learning outcomes to evidence of formal and informal achievements, be enabled to pull together evidence from their own ePortfolios and perform secure ePortfolio-based sharing of learning plans, competency targets and information on progress for their employers and mentors, using existing functionality provided within an ePortfolio wherever possible. From their ePortfolios, learners will be able to access tools for discovery of work placement opportunities, application for work placements, an ePortfolio/CV builder, competency service, skills audit and feedback/communication with an employer/mentor.

For other users, we are building services to extract and display relevant data within a portal, which will enable different groups to aggregate information on learning opportunities and provide services that are interoperable and available to all types of learners within the project, using the XCRI standard. Relevant services will be activated according to role, and via an ontology service requirements for each type of user will be presented in appropriate terminology. Data requests will also encounter services such as security, data transition, and tracking and auditing.

**Summary of results**

The 2-year project is still in its infancy, but the construction sector, which already has some awareness of ePortfolio-related learning from similar approaches for apprenticeships, has been identified as a likely pilot area. We are currently conducting a thorough stakeholder needs analysis on a cross-institutional, multi-sector basis; results from this to be available soon.

The projects outcome will be a reusable model of portal architecture combining access to services provided by others, use of federated access management to support SSO, and advanced trust and security processes informed by work from the TAS³ project.
We anticipate that by joining up existing systems for users and institutions, there will be appreciable efficiency gains through enhanced timely access to better and fuller information about work-related learning and opportunities to facilitate learner up-skilling and knowledge transfer.

Conclusion/recommendation

We anticipate that the project will support two-way exchanges between HEIs and employers, both for postgraduate work placements and CPD for employees.

**ePortfolio for the professional insertion of students**

Laurence Perennes, Dominique Duhaut, Université Bretagne Sud, France;

This paper presents the organization defined in the University of South Bretagne to help students to define and manage their personal lifelong project. It is based on an ePortfolio that records personal information. This ePortfolio will follow the person all his life because the university will keep it available after the end of study in the university. Coming with the ePortfolio a set of activities along the university curriculum is developed to help the student to build his first project and learn how to manage it. One particular point of this is that his management is done through an email process.

**Process and product assessment with e-portfolios in the first academic year at the university of teacher education**

Andrea Christen, Martin Hofmann, University of teacher education, St.Gallen, Switzerland;

The students of the University of Teacher Education, St.Gallen (Switzerland, www.phsg.ch) document aspects of their learning process affiliated with their experiences in a practical training class during their first academic year linked with a reflective eportfolio (the teaching profession, my personal motivation; training of my personal and social skills; media literacy). The study reports findings of two student questionnaires at the beginning and at the end of an investigation period of 21 weeks (2007/2008; N=129; process orientated assessment group, n=67, 15 weekly assessed postings; product orientated assessment group, n=62, assessment of all 15 postings at the end of the investigation period; assessment by assessment scale).

Students reports of attitude, interest, use, relevance, effort, learning progress, increments of learning content, choice of assessment mode, and media literacy have been compared (questionnaire, 25 items; Man Withney U-Tests; Wilcoxon signed Rank Tests). A second strategic focus has been put on the work schedule of involved professors (N=12, assessment of one posting weekly, n=6, 12-14 e-portfolios per professor; assessment of 15 postings at the end of the investigation period, n=6, 12-14 e-portfolios per professor).

The results reveal a significant increase of reported attitudes, use and relevance of the weekly assessed student e-portfolios. No differences exist between the two groups concerning interest and effort. Not as expected, the students of the process orientated assessment group report significant lower learning progress and significant lower advancement of learning content, although they report a significant higher motivation at the end of the investigation period.

All students, however, would prefer the weekly assessment mode. Not surprisingly, the students of both groups rate the technical handling and the development of their media literacy while working with their e-portfolio without differences at a high, easy grade. The self reported work schedule of participating professors identifies no significant mean differences between the two assessment modes, but inter-individually not to be neglected discrepancies.

Further investigation at the University of Teacher Education St. Gallen (Switzerland, www.phsg.ch) has to develop process orientated assessment of student e-portfolios and to clear the question as to what extent and under what conditions the work with an e-portfolio on a weblog enhances learning progress and the increments of learning contents based on the needs of the students (for more details: www.ePortfolio-phsg.ch).
Using video in an ePortfolio to enhance learning

Harry Owen, Sue Skinner, Chris Carapetis, Cyle Sprick, Kris Hayres, Flinders University, Australia;

The focus of medical education has recently moved from the taught curriculum to student learning outcomes. Several surveys have uncovered that many new medical graduates are not confident or competent to undertake emergency care of seriously ill patients. It is not clear whether this comes from inadequate teaching, learning or assessment. In one study of teaching and assessment of basic life support (BLS), trainers frequently departed from the curriculum and poor performers were allowed to pass.

It is essential that medical students acquire basic and advanced life support (ALS) skills but accrediting bodies do not stipulate when in the course this should occur. We have deliberately started this training at the beginning of Year 1 so that students can demonstrate how they add to and improve their skill base. Assessment of ability and performance from evidence collected continuously from diverse sources is more reliable and valid than the occasional sampling of summative assessment.

We are now providing PebblePad for students to create an acute care skills portfolio. The portfolio is used to aggregate evidence of knowledge, skills and attitudes associated with resuscitation skills. This includes evidence of capability (e.g. video of performance in a simulated emergency), clinical performance (e.g. being able to manage the airway of an unconscious patient in the post-anaesthesia care unit), response to feedback, relevant clinical experience and reflection. Video of the student performing emergency procedures on a patient simulator and output from the simulator are used for assessment. This improves objectivity of assessment and eliminates bias from coaching or other encouragement.

The International Liaison Committee on Resuscitation has recommended that that Video should be recognised and more widely adopted as a useful assessment tool for research and quality control purposes to be used with objective mechanical measurements. (1) However, moving video files between computers through the web is not a trivial exercise. A standard definition digital video file is typically around 10MB per minute so even a short video clip is too large to be sent as e-mail. Bandwidth, upload limits, file size limits of software and even download quotas from the university impact on video use in the ePortfolios. Video files can be compressed but this leads to reduced image and audio quality and traditional objective methods of video quality correlate poorly with subjective quality ratings at lower bitrates and frame rates (2). We have found that compressing a 3 minute (approx) video of a student performing BLS to 5MB (1.7MB/min) is compatible with assessment but further compression to 2MB (0.7MB/min) resulted in unacceptable quality. This video was compressed using mp4 and compression using an alternative codec could give different results.

Students upload short video clips of themselves performing BLS (approx 3 mins, 7-10MB) to their ePortfolio. This is used as the basis for reflection and skills development planning in. Self-assessment and ownership of learning are the foundation of lifelong learning and the ePortfolio is used to show they can self regulate. We are also able to use the video that students publish in their ePortfolios for quality control through benchmarking our standards of assessment with external experts.

(1) Chamberlain DA, Hazinski MF. 2003, Resuscitation
(2) Ong et al. 2006, J Visual Communication Image Representation

From University to Retirement: the ePortfolio continuum to support Scottish Dentists

Alex Haig, Karen Beggs, NHS Education for Scotland, United Kingdom;
Scottish NHS (National Health Service) dentists are set to be the first health profession in the United Kingdom to be supported by e-Portfolios from the first year university through their career in the health service. From 2009 a range of e-Portfolios provided by NHS Education for Scotland (NES) will migrate their lifelong learning records as they pass through the various stages of training into continuing professional development and revalidation.

Scottish Dentistry introduced their first e-Portfolio in August 2006 with a 12-month pilot to determine the feasibility of postgraduate dental trainees completing their summative assessments for satisfactory completion (legal requirement to practice) via an electronic, rather than paper, medium. The success of this pilot e-Portfolio (the Record of Progress and Achievement, eRPA) led to its mandatory replacement of paper systems, expansion of its functionality and the development of further versions to support postgraduate dental education.

Postgraduate dental trainees are placed in one of six training programmes (vocational, hospital, etc.) that use various combinations of the eRPA, the eTRB (Training Record Book) and Foundation e-Portfolios. The eTRB is a complimentary formative version to the eRPA that structures reflection and encourages interaction between trainees and their supervisors and peers. The dental Foundation e-Portfolio closely matches the UK medical version, and is designed to support learning, assessment and reflection in Foundation posts.

Scotland has two well-established undergraduate dental programmes at Glasgow and Dundee, and a new undergraduate school was launched at Aberdeen in 2007. NHS Education for Scotland is committed to lifelong learning of health professionals across their careers and has supported the creation in 2009 of electronic versions of the existing paper e-Portfolios at Glasgow and Dundee, with Aberdeen invited to join in the near future. The undergraduate versions will maintain the individual educational processes, curricula, etc. of the schools, but an agreed common core of information will transfer with trainees into their postgraduate training with NES.

2009 (April) will also see the launch of the first collective version of NES e-Portfolios in the dental Practice Development Plan (PDP). Piloting with 100 practices across Scotland, this version allows shared and individual use of educational or others tools, including assessment, reflection, audit, significant event analysis and professional planning. Structured levels of permission will allow the dental staff (dentists, therapists, hygienists, nurses, practice managers) to access and contribute to personal or practice-wide plans throughout their careers.

The PDP e-Portfolio is also supporting the UK pilot for dental revalidation. Revalidation is the process by which dentists (and doctors) will have to demonstrate their continued fitness to practice at regular intervals. PDP dentists in the revalidation pilot will submit documentary evidence from their e-Portfolio to a managed file structure that the General Dental Council will sample and appraise. It is envisaged that as the PDP e-Portfolio is expanded across Scotland it will continue to support revalidation once this process is evaluated and formally established.

This paper would:

- Describe the functionality of the spectrum of dental e-Portfolios and compare this to what is being used in other health professions
- Present a (brief) usage analysis of assessment tools
- Introduce the topic of version interoperability, between and out with NES ePortfolio including LMS and HR systems
- Describe workforce analysis features and how these relate to more individual career planning

Whilst the use of electronic resources and platforms are still, for the most part, in early stages for Scottish dentistry, establishing a continuous individual learners record should greatly enhance dental career management and professional development.

**Dissonance in healthcare students’ professional and personal digital identities in social networking sites and the potential role for professional and educational bodies**
Stella Howden, Deborah McMorran, Janet Morrison, Huw Scott, Susi Peacock
Queen Margaret University, Edinburgh, United Kingdom

Background/Context
Social Networking Sites (SNSs) such as Facebook or Bebo are used extensively by university students for online communication and sharing personal information. These applications commonly engage users in the generation of a personal profile, through the use of text, images and video which they can share with friends. It is suggested that the collection of information linked to an individual reflects, in part, an aspect of their personal identity, thus a digital identity is created. Through complex networking, friends, and friends of friends, can co-construct an individuals digital identity and facilitate the transmission of personal data through cyberspace. In this way, digital identity can be seen to be relatively easy to create, access and modify.

A recent report highlighted the possibility that the construction of healthcare students digital identities may be contrary to their construction of a professional identity as a future healthcare professional. UK employers are increasingly using search engines to gather on-line information regarding potential employees. Healthcare users are going online to investigate health-related issues. Does this lead to a dissonance between healthcare students ever evolving digital identities and their development of a professional identity? Is there are role for healthcare professional bodies and/or educational institutions to provide some guidance for these students, if so, what kind of guidance is needed?

Objectives
This study undertook a survey of healthcare students in their final year of university to:

- understand more about their use of social networking sites; and
- to explore their knowledge about access to their digital profiles by future/current employers, patients and work colleagues.

Students views on the notion of a digital identity and the relationship this may have with their professional identity were explored using focus groups.

Summary of results
51 students, from five different healthcare programmes (physiotherapy, nursing, occupational therapy, speech and language therapy and dietetics) completed the questionnaire (mean age 23.5 SD 5.8), with 25 volunteering to take part in the focus group study. 88% of students had at least one SNS profile and used a SNS regularly (averaging over three hours per week). Students estimated they were linked to approximately 180 other users with nearly half of participants either not using security settings or reporting they were not aware of how to use these. 30% had not considered that employers may access their profile; this figure grew to 57% in relation to patients accessing profiles.

Students perceived that some of their behaviours, as implied by their online profiles, were in direct conflict with their understanding of their professional codes of conduct and the related behaviours they adopted in the healthcare context. Concern was raised about the relative permanence of the some of the materials that shaped their digital identities online and that the generation of profiles through SNS’s was, at times, out with their control.

The majority of students reported they would welcome advice on how to manage the security settings within their SNS as well as guidance about the potential future impact of their digital traces of self that they (and others) were creating.

Conclusions and recommendations
University healthcare students are regular users of SNS’s, generating their own personal profiles which can be co-constructed through linked friends and at times, friends of friends. The relative ease and speedy generation of online, sociable digital identities may be at odds with the relatively thoughtful, personally controllable crafting of professional identities within real world healthcare contexts. Through clear guidance from professional bodies and associated educational institutions students are made aware of expectations within the non-digital world but do not appear to transfer
these principles to cyberspace. The message for professional bodies and educational institutions is one of encouragement, to probe further, with their own online communities to explore the potential unmet needs of their membership regarding advice/guidance for online activities. This may be especially valuable for those younger members who bring with them years of online-generated materials. Raising the awareness of these issues may be all that is needed to evoke a more thoughtful approach to engagement with on-line digital identity building; this may also provoke thought about crafting positive on-line professional identities.

This work continues with the generation of an online package of information for healthcare students and evaluation of its usefulness.

**OCAP Online - lessons from innovation in UK Orthopaedics**

**David Pitts**, British Orthopaedic Association; Royal College of Surgeons of Edinburgh

The Orthopaedic Curriculum and Assessment Programme (OCAP) began in 2002 to develop a portfolio of assessment tools to enhance the quality of higher surgical training in UK Trauma and Orthopaedics (T&O). The early days of the project were focussed on the development of assessment tools and the Procedure Based Assessment (PBA) is now accepted in all UK surgical specialties. In 2006 the tools were integrated into a comprehensive curriculum. More recently the new curriculum and its tools have been combined with an existing surgical logbook to form the online T & O curriculum OCAP Online OCAP Online is a joint project of the British Orthopaedic Association, The Trauma and Orthopaedic Specialist Advisory Committee and the Royal College of Surgeons of Edinburgh. It provides a sophisticated surgical logbook as part of an e-portfolio of assessment tools. These tools, together with other elements in the portfolio, record and measure trainees progress through the UK’s Trauma and Orthopaedic Curriculum.

OCAP Online has been developed and implemented against a background of change in healthcare as a whole. The change in public attitudes towards doctors and the way in which they are trained has, together with other pressures, resulted in the development of new curricula for all medical specialties, including surgery. Changing the mechanisms by which an entire surgical community teaches, assesses and accredits its future members has generated numerous challenges and the move to an online curriculum for orthopaedics is the challenge addressed by ocap online. Within this context there are many unique requirements of a surgical ePortfolio that set it apart even from other medical specialties (but interestingly provide common ground with certain other professions).

In recent years the international orthopaedic community has shown significant interest in OCAP and it is hoped to pursue collaborations in the future.

In this case study we will review the following, in the hope that others may learn from our successes and mistakes:

- Pressures leading to the development of UK surgical curricula
- Unique features of a surgical ePortfolio and the community it serves
- The strategy through which trainers and trainees have been familiarised with the online curriculum
- Key design features of OCAP Online
- The present state of development
- Lessons to be learned and shared
- Expected pressures and obstacles to be overcome in future development

**S31E: Quality assurance and organisational learning**

**Can individual and organisational ePortfolios manage quality assurance?**

**Martin Taylor, Debbie Carlton**, Synergetics, United Kingdom;
In order to assess the contribution of ePortfolio applications to quality management it is necessary to establish from whose perspective this is viewed. Stakeholders can be broadly grouped into three categories:

- Government
- Employers
- Individuals

Each of these groups have expectations and demands placed on them in order that workforces develop recognised qualifications and transferable skills that will meet the needs and challenges of a shifting Labour market. (UK context tension of The Leitch Review and inflexible system to accommodate changes in time)

The ubiquitous ePortfolio will of course resolve all our dilemmas, once purchased, installed and individuals are given access to it. Too simple perhaps?

This presentation will use the model below of Business Planning, Workforce Development and Organisational Competence to discuss accountability and quality issues as well as looking at the application of policies and processes required to support audit.

Business Planning

- Identifies Need
- Workforce Development
- Develops workforce to meet need
- Organisational Competence
- Efficiency and Safety
- Audit
- Scrutiny
- e-Portfolio platform - Business processes & portability
- Management information services
- Organisational management & planning

ePortfolios can of course contribute to quality management but this is not an automatic outcome of the purchase of such applications. To support this outcome all stakeholders (educators, qualification providers, employers etc) that contribute to ePortfolio enabled functions, must have policies and processes in place that align to each other to provide a seamless environment that allows data to be transferred in a trusted and secure setting, as well as enabling people to transfer across and between organisations.

Underpinning the policy and processes must be an organisational culture that encourages individual and stakeholder engagement with the use of ePortfolio applications as a prime management tool to aid the assessment of performance management. It is widely accepted that people in today’s Labour Market will be changing roles more frequently to meet employment demands. Not only will they change their role but they will change careers and move in different Labour Market directions.

Is it sensible then or even necessary to lose evidence of past competent performance? How at present is this evidence captured and validated for the current or potential role? This is not a process that is undertaken by an individual or a single employer or a single education provider. This a collective process that must have rigor and scrutiny at its heart in order to provide quality assurance for all users at any juncture of the process.

Individuals should be developed from the ground up, building on core skills and acquiring learning and qualifications at key points in their development as well as learning from their experiences. How is this information passed on or used?

Employers need to create competence profiles for their workforce form the Business Planning
process to inform them of the knowledge, skills and understanding they require to be organisationally competent. How is this conveyed to job seekers or education providers?

Education providers require a seamless process that is capable of following an individual’s progress through their stages of development, primary, secondary and tertiary. How do individuals contribute to this and how can prospective employers access what is relevant to them?

Qualifications whether academic or vocational must relate to an accredited qualifications framework in order to provide meaningful development which is relevant to both the individual and the employer.

ePortfolio applications must support the assessment of such development and the interactions between the stakeholders, (education provider, employer, assessor, learner and verifiers), involved in delivering the development content and those involved in the audit and quality assurance processes in line with privacy, security and other administrative policies.

The use of e-portfolios will provide opportunities for more diverse forms of evidence and assessment to be used when measuring competent performance. Groups such as the UK Sector Skills Councils and Standards Setting Bodies are well placed to assist stakeholders to develop common policies and processes that address the introduction and adoption of ePortfolio applications.

What could it look like?

Portfolio based Lifelong Employability Services

**DigOport-II: the Dutch example of Institutional Portfolio 2006 - 2009**

**Alex Kemps, Marij Veugelers**, INHolland University, The Netherlands

**Background**

In 2005 two interesting articles were published about Web-based Institutional Portfolios: an article giving an overall view by Lorenzo and Ittelson (2005) about examples from the United States of America and an article by Oosterhuis (2005) with a Dutch example.

In both examples, the contents of the e-portfolios consists mainly of re-accreditation self-studies. The objective of the American examples is that this and other information supports an institutions accomplishments.

The objective of the Dutch example is, besides the use of multimedia as evidence, in particular the support of continuous quality care; the cyclic work on quality improvement.

With the description of the Dutch example, it seems there is more emphasis on ePortfolio as a tool, whereas in the American example, ePortfolio is depicted rather as a method.

The set-up and elaboration of the Dutch example, which Oosterhuis introduced to ArtEZ Institute of the Arts as DigOport, has incited two other universities to follow this example: INHolland University and Fontys University of Applied Sciences. Together with ArtEZ they broadly applied this example between September 2006 and March 2009 and developed it further into the project of DigOport-II. This project is financially supported by SURF-foundation.

**Objectives**

The three objectives for the project were:

1. support the educational quality care
2. visualize educational development and educational quality care, for students and tutors (making it transparent also has the objective to promote that quality care becomes a continuous process)
3. find out which way of use and set-up of digital educational portfolios will fit which educational situation.

Six functions of DigOport were defined: self-evaluation/profiling, presentation, document management, continuous quality care, multimedia furnishing of proof and institution accreditation. These functions are the rendition of the various views of DigOport of the three partners. Then, the objectives were elaborated in an objective-efforts-recourses network.
Summary of results

The set-up of the DigOport-II project is characterized because each project partner has had an independent development course. DigOport has become a method rather than a tool.

Concrete deliverables of the project are for example the numbers of applications of DigOport for educational programmes, faculties and institutions; and the descriptions of the functional and technical design of the latest versions that were developed.

User research and descriptions of experiences show that DigOport supports the educational quality care: advantages are experienced; DigOport is experienced as a useful tool. Application of DigOport also proves to lead to ambition and awareness: users want to continue to visualize educational quality.

Making educational development and educational quality care transparent has partly been realized. Practically all applications are aimed at accreditation self-studies. And nearly every application is separate, so that no development can be visualized. Still, an ambition to continue has come up and the latest versions of DigOport more expressly aim at continuity as well. Current users of DigOport are mainly management, staff employees and support services. In the user research, 20% of the respondents consisted of tutors. At the time of the project, DigOport was not yet student-oriented.

Models for use and set-up of digital educational portfolios in relation to an educational situation have not yet been described. In the project, three distinctive DigOport methods have clearly come into being, each with a matching functional design.

Conclusions and recommendations

The DigOport-II project has delivered a contribution, specific for each partner, to the development towards digital support of the integral quality care. The set-up of the project, with three sub-projects and common evaluation and dissemination and in which the application was directive and the tool adherent, has been good. The fact that the developments could connect with the specific context of the institutions has increased the chance of sustainable use and further development. Because of this set-up, however, the transfer of experiences will rather be realized in the form of tips and tricks or simple formats, than in the form of a good practice to be copied.

What is striking in the current Dutch examples of institutional portfolios is their being oriented towards external quality care. The three project partners have the ambition to broaden the application towards both external and internal quality care, so that Dutch institutional portfolios can also contribute better to the transparency of institutions accomplishments. And exactly this is also the major recommendation of the project. It is interesting to find out what we can learn from the existing American examples during this step.

Exploiting tacit knowledge through knowledge management technologies

Frank Nyame-Asiamah, Brunel University, United Kingdom

Background

The era of knowledge economy has been increasingly transforming organisational working practices from a traditional management style into a new management role of using informal commitments and networks to set goals in order to meet customer’s wants. As marketplace becomes progressively more competitive and innovation increases, knowledge must correspondingly evolve and be assimilated by organisations at a faster rate so as to survive in dynamic business environments. Consequently, organisations could remain competitive in future if they embraced knowledge sharing strategies which would involve human and technological network capabilities for exploiting collective expertise and experience.

However, embedded knowledge localised in minds of individual workers or a group of employees within a particular department or working cluster is potentially valuable to organisations yet these unstructured, intangible, gut feelings and intuitions are usually difficult to capture and codify. In addition, early retirements and rising mobility of workforce can lead to loss of knowledge and at same time it takes longer to develop experience that would increase organisational knowledge.
Further to the difficulty of identifying existing knowledge from outside the organization, lack of time or reward precludes individuals from sharing knowledge in organisations.

To address the issue of tacit knowledge extraction, knowledge management (KM) techniques should involve the coordination of cognitive understanding of people and knowledge within a given organisation. This new dimension of creating knowledge intensive organisations originated from the field of organisational learning, a management paradigm which involves processes, development and nurturing of new patterns of thinking for business transformation. For the benefits of an organisation, tacit knowledge needs to be exploited, shared and managed through an iterative process of socialisation, externalisation, combination and internalisation. In other words, both knowledge creation and organisational learning complement the concept of community of practice and are fundamentally able to adopt renovations.

In this regard, the complexity of knowledge creation and management requires technologies which are robustly useful for communication, collaboration, storage and retrieval of information.

**Objectives**

The purpose of this paper is to examine the contributions and suitability of the available KM technologies, particularly the Web 2.0 in exploiting tacit knowledge. It proposes an integrated framework for extracting and managing tacit knowledge in organisations, which include Web 2.0 technologies, organisational learning and community of practice.

**Current State of KM Technologies**

Previous research confirms that organisational knowledge can be managed through a myriad of technologies such as: E-mail, internet, intranet, fax machines and telephones for communication; collaborative computing tools including groupware and electronic brainstorming capabilities; and databases including data marts and data warehouse for storage and retrieval of information. For instance, BP exploited knowledge stored in the minds of its employees through the use of communication technologies including e-mail, internal web and video conferencing, which linked employees in cellular forms. Similarly, proportion of corporate knowledge management systems often depend on Internet-based collaborative computing tools including corporate portals, knowledge management suites and intranets. One recent study reveals that electronic discussion board and e-mail are the most important technologies for knowledge sharing while corporate yellow pages of skills expertise is the most essential technology for transforming tacit knowledge into explicit knowledge.

Despite the effort being made by organisations to use technologies in their knowledge creation and management strategies, many publications have revealed evidence of KM failure in organisations. The reasons for this include: Failing to communicate KM strategies well with staff, refusal of best employees to publish their good ideas on KM platform, staff showing lack of interest when KM systems become fully implemented, poor content management techniques, mismatch between KM technologies and cognitive maps of knowledge workers, and lack of incentives for KM system users. The question which unravels in the literature is: What KM technologies are more suitable for capturing tacit knowledge and how effective are these in knowledge creation?

**Conclusions and Recommendations**

As a consequence of the above, we recommend that knowledge creation and management strategies must encompass transparent and multiple interactions of organisational agents, shared mental maps, new generation of collaborative and distributed knowledge technologies (Web 2.0), absolute commitments of organisational members and self-organising attitude. We also propose that researchers and practitioners should consider the integration of these strategies for tacit knowledge exploitation and management for organisational transformation.

**Using ePortfolios to Support Assessment of Qualification Coursework**

Matt Wingfield, TAG Developments, United Kingdom; m.wingfield@taglearning.com

In 2001, TAG launched their award winning e-Portfolio system for schools called MAPS (Managed Assessment Portfolio System).
Whilst originally designed to meet a specific curriculum need in UK schools to assess students ICT capability at the end of Key Stage 3 (14 years old), the intervening years have seen the system develop into a fully fledged assessment e-portfolio system that supports the management and assessment of curriculum and high-stakes and vocational qualification coursework for more than 140,000 individual candidates in schools, colleges and training centres. It has also been further developed to offer specific support to awarding bodies such as AQA, OCR and SQA within verification/moderation of coursework submitted for an increasing range of qualifications, including AQA’s Extended Project GCE, French Speaking Test GCSE, Spanish Speaking Test GCSE, German Speaking Test GCSE, Electronics GCE, ICT GCE, Design and Technology GCE, OCRs CLAIT and iMedia, as well as pilot work with a number of awarding bodies in supporting controlled assessments of practical coursework in Design Technology, Science and Geography GCSE qualifications through the e-Scape project being run by Goldsmiths College and BECTA, which is the subject of a separate paper being submitted for consideration by Eifel.

This paper will present a case study on how one particular secondary school in Coventry has used the system to provide specific support to students undertaking and teachers delivering OCRs new iMedia qualification. The case study will look specifically at how students interact with the ePortfolio, uploading evidence and self-assessing themselves against the criteria set by OCR for this qualification. How the work is handed into the teacher supervising the work, for teacher assessment against the iMedia mark scheme built into the ePortfolio system, and then finally looking at how teachers are able to electronically submit the coursework and related marks attained by each student to OCR for moderation.

The paper will also discuss how OCR then use a similar MAPS based system that has been designed specifically to model the external moderation process and link to OCRs existing back-end exam management systems.

The accompanying presentation will be given by the Deputy Head Teacher at the school, who has been responsible for implementing the system, and who is now looking to roll out the system to support work in other subject areas.

**S32A: Workshop**

**Constructing Professional Identity in Senior Capstone Seminars**

**Susan Kahn, Lee Vander Kooi**, Indiana University-Purdue University Indianapolis, USA

This session focuses on the use of ePortfolios to help university seniors in culminating capstone seminars make the transition to the professional world. The presenters represent two different disciplines: English Studies (literature, linguistics, writing and rhetoric, creative writing) in the School of Liberal Arts at Indiana University-Purdue University Indianapolis (IUPUI); and Visual Communication at IUPUIs Herron School of Art and Design.

The senior capstone seminar is intended as a concluding academic experience wherein students integrate their learning across courses in their field of specialization. In some capstones, this integration takes the form of a real-world project. In these capstones, students are asked to develop ePortfolios that include artefacts demonstrating their learning, as well as retrospective and prospective reflections that consider this learning in the context of professional development. An intellectual framework is provided by IUPUIs six Principles of Undergraduate Learning the key liberal learning outcomes, like critical thinking and communication skills, which the university wants all students to achieve, whatever their major or intended professional field. Major-specific outcomes provide additional structure for artifacts and reflections.

In both capstone courses, students work on identifying key transferable skills that will support lifelong learning and development of a successful career path. In the English capstone, students meet with English major alumni who have pursued a variety of careers, read essays and studies that speak to the value of liberal learning in the workplace, and write reflections on their artefacts that consider how the skills, abilities, and dispositions they have acquired will serve them as professionals and lifelong learners beyond the university. In the Visual Communication capstone,
students create visualizations that represent their learning and integrate their understanding with their visual sense making skills. In addition to these reflections in action, students also develop written reflections that explore their ways of working and learning, along with career goals and possible career paths.

Instructors for both courses have found that use of ePortfolios has more powerful outcomes for students than initially anticipated. As students develop their capstone portfolios, collecting examples of past work and then reflecting on this work, they find that they have learned more than they had thought and they see connections among learning experiences that they may not have considered before. Most students report that while the portfolio work takes a considerable amount of time, it facilitates better understanding of their career goals and choices. By the end of the semester, students express more confidence and are more articulate about the knowledge, skills, and abilities they have acquired and the value of this learning for the workplace and beyond.

Participants in this session can expect to gain insights into how a capstone course for students about to graduate can effectively use an ePortfolio to provide a culminating experience that helps prepare students for the job market and workplace. They will see examples of both the Visual Design students visualizations of their learning and of the English majors reflective writing. The presenters will also share examples of reflection prompts and a rubric that describes stages of development in reflective thinking.

Background knowledge of participants: basic understanding of what an ePortfolio is.

**Presenters experience:**

Dr. Susan Kahn is director of the ePortfolio program at IUPUI and has worked with electronic portfolios for more than ten years. She teaches the English capstone seminar described in this proposal.

Professor Lee Vander Kooi leads a project that is integrating an ePortfolio into the curriculum of the Visual Communication Department at IUPUI. He teaches the Visual Communication capstone described here.

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**S32B: Workshop**

**Role of the e-portfolio in the Assessment of Health and Social Care students in Work-Based Practice**

**Gareth Stuart FRITH, University of Leeds, United Kingdom**

The use of the e-portfolio is increasingly being used by students from Health and Social care professions to record their progress as undergraduates and to build evidence for their long term careers in the UK National Health Service (NHS). They do this by being assessed and by recording evidence whilst they are learning in Healthcare environments such as Hospitals, Clinics and the Community.

The ALPS-CETL (Assessment and Learning in Practice Settings) is a UK Centre for Excellence in Teaching and Learning. It is a partnership of five West Yorkshire Universities (Leeds, Leeds Metropolitan, Bradford, Huddersfield and York St John) and the NHS Workforce. The objective of ALPS is to support the confidence and competence of Health and Social Care students from a range of professions including Medicine, Nursing, Radiography, Physiotherapy and other related Healthcare professions.

The workshop will cover the work and progress of ALPS in building a mobile learning and assessment environment and how it is supported by mobile learning and an e-portfolio system. It will feature a discussion on how this is being used by students when they are learning and being assessed in healthcare practice within the UK NHS. Participants will be able to sample an example of building a mobile assessment and submitting it to an e-portfolio. The different Student and Tutor views of the e-portfolio work will be demonstrated.

The use and importance of e-portfolios has developed throughout the project in two areas.
Firstly the e-portfolio has established an important role as a personal repository for the storage of assessment and learning collected by the student on their mobile device whilst in practice. Students can store the outcome of an assessment of the student made by a Healthcare Professional.

Secondly the development of Skill and Competency Maps for inter-professional assessment by the ALPS partners has allowed both inter-professional and professional (for example: the General Medical Council for Medicine or the Royal College of Nursing for Nursing) skills frameworks to be mapped in to the e-portfolio. This means that the student can record evidence in multiple frameworks for their undergraduate assessment and also for longer term career development such as their postgraduate careers in Medicine or other Healthcare professions.

The workshop will report on this work and cover areas such as how these systems support CPD and LifeLong Learning.

The workshop will also discuss how School of Medicine is embedding this work in their new curriculum development through their Technology Enhanced Learning Strategy with the objective that every student should have access to an e-portfolio and that the content should be portable and carried forward through the careers as doctors.
S32C: ePortfolio evidence assessment

Comparative Pairs Assessment

Matt Wingfield, TAG Developments, United Kingdom

The eScape Project was conceived and is now managed by the Technology Education Research Unit (TERU) at Goldsmiths College in London. eScape was established as pilot project in 2004 and received funding from the then Department for Education and Skills (now the Department for Children, Schools and Families), which since 2007 has been channelled through the British Educational Communications and Technology Agency (BECTA).

The initial aim of the project was to establish a reliable and quantifiable method of assessing candidates skills in collaboration and creativity in qualification coursework, which are softer, more subjective skills, which are harder to quantify through traditional assessment methods.

TERU began by piloting a paper-based assessment mechanism through the context of a six hour practical examination as part of a General Certificate of Secondary Education GCSE in Design and Technology. This model utilised a large double sided sheet of paper on to which are printed general instruction and 23 individual sub-task boxes, each containing written instructions for that particular part of the assessment, and a space into which the candidate can write, draw or stick photos to show how their ideas develop through the coursework. Each sub-task is undertaken within a set time frame, and the piece of paper is passed around a pre-defined group of candidates in order to facilitate collaboration.

This paper-based method was successfully piloted in the summer of 2004, and lead to a desire to e-enable this process. As a recognised leader in the field of assessment e-portfolios for schools, TAG was approached by TERU and asked to develop an electronic version of the paper-based model. TAG did this by utilising Personal Digital Assistants PDA’s as portable and non-intrusive candidate digital devices, which are perfect for capturing a range of evidence including written notes, drawings, photos and voice files. The PDA’s are connected to a school based server via WiFi, which in turn is connected to a web-based e-portfolio that drives the delivery of the timed sub-tasks, the collaborative sharing of work and the capture of the resulting evidence assessment and moderation. The system was successfully tested with a number of centres in the summers of 2006 and 2007, once again within the context of a GCSE in Design Technology.

The project is now well into its third phase and has been focused on implementing the system in a range of other subject areas including Science, Geography and Maths. Phase 3 has also looked at the possibilities of using supplemental communication technologies, such as 3G, and an increasing range of portable devices including mobile phones and Linux based sub-notebooks. The underlying theme of phase 3 has been to see if the system can offer a greater flexibility of access to candidates, whilst minimising the technical impact on the schools, and a number of successful trials of the new system have been carried out in centres during the summer of 2008.

A key development of the project through the latter stages of phase 3 has been the development of a web-based Comparative Pairs Assessment Engine, that enables more subjective assessment criteria, such as creativity, to be judged through the implementation of the Law of Comparative Judgement, as initially described by Thurstone in the early 1900s. Uniquely, the integration of a web-based Comparative Pairs Assessment Engine within a ePortfolio context, makes this innovative and highly accurate form of assessment available globally for the very first time.

This paper and the supporting presentation, will case study the Comparative Pairs pilot that took place as part of the eScape project during the latter half of 2008, which involved judges in a variety of different locations all over the United Kingdom assessing student’s ePortfolios at exactly the same time via this revolutionary pairs assessment engine. It will discuss the benefits offered to students, institutions and accreditation bodies by this form of assessment, and look at other possible applications such as the standardisation of coursework assessment.
Evidencing WBL Progress with Mahara

Derrin Michael Kent, The Development Manager Ltd., United Kingdom

In this talk Derrin Kent from UK-Based Mahara Partner organisation: TDM (http://tdm.info) will:
1. walk you through a process which can already be used to assess Work-Based Learning evidence with Mahara.
2. Look ahead to Mahara / Moodle integrations afoot which will make the assessment process even easier
3. Look at two ULCC-contributed open source Moodle modules which can be used to make it smoother still!!

1. Mahara is very much a tool for personalised, reflective learning: both on a private basis and also in groups or communities of practice. It does, however, have a controlled groups functionality which allows users to submit their work for assessment by a staff member or administrator. This assessor then retains editing control over the work submitted until they can feedback usefully. The assessor releases the view for resubmission until the required standards are evidenced. Once the evidence is approved as satisfactory, the assessor can retain control over the work until it has satisfied internal and external verification processes.

Mahara does not (and will not) offer an e-tracking facility to record NVQ progress. Progress tracking of this nature can already be supplied, however, by means of a simple spreadsheet. The Mahara assessment process described can then be approved by an external verifier in the same way that they might approve a paper-based, dvd-based or USB Stick-based e-Portfolio of evidence as supported by any necessary documentation which satisfies accrediting body requirements.

2. There is however, even better news ahead for those interested in e-portfolio-based e-assessment using Mahara + Moodle.

The Mahara project do not want to create a gradebook in Mahara when Moodle's gradebook is excellent (excellence arising as a consequence of much investment). Mahara is not an LMS and very much sees itself as working in tandem with Moodle. The following ideas are, therefore, being explored:
- Set up an activity module in Moodle which allows learners to submit their Mahara evidence for assessment within the Moodle Gradebook.
- Work with the Moodle Portfolio API which will allow a Moodle Teacher to see a Mahara View
- Automatically creating Mahara Groups which match Moodle Courses
- Using Moodle's repository API to allow Mahara users to submit artefacts and Views to Moodle

These integration ideas will obviously be able to satisfy assessment tracking requirements. Follow the Mahara RoadMap for more details: http://wiki.mahara.org/Roadmap

3. The University of London Computer Centre have already Open Sourced their ILP Module:
- http://moodle.ulcc.ac.uk/course/view.php?id=107

which facilitates integration with Management Information Systems (such as Maytas or PICS).
ULCC also have their Assessment Manager Module for Moodle available at a Beta Stage:
- http://moodle.ulcc.ac.uk/course/view.php?id=140

This module will also be made available under an Open Source licence. Integrated with both Mahara and Moodle, these two modules make up what ULCC are calling a Personalisation of Learning Framework. Read more here:
- http://moodle.ulcc.ac.uk/course/view.php?id=139

How should we mark digital files within a Student's ePortfolio?

Matt Wingfield, TAG Developments, United Kingdom;

Until now educators only option when marking a piece of digital coursework was to print it out and mark it in the traditional way with a pen. However, this approach is time consuming and wasteful,
and more-over seems counter intuitive where digital work is concerned and sends the wrong message to students with regards to the advantages of working in a digital format.

With all of this in mind, TAG have recently launched an innovative on-screen marking and annotation tool capable of handling any digital file format. Called The Red Pen Tool, this highly innovative software echoes the traditional paper based marking approach, but removes the necessity to print out the work, allowing students (for self-assessment) and teachers (as part of the final assessment) to annotate their comments and mark or reference assessment objectives directly onto the work in digital format, saving time and simplifying the marking process. All teacher comments, notes and annotations appear in a colour of their choosing on a separate transparent layer that sits on top of the original student work.

The unique Red Pen Tool, which is web-based allowing anytime, anywhere access, will automatically convert the student coursework into a Flash readable file format, meaning that teachers no longer have to install on to their computer the actual software application that the student used to create the work, and instead only require the freely available Flash plug-in to access and mark the work. Once marked by the teacher, the work is automatically sent back to the student, allowing them to quickly review how they have done.

The key benefits of the Red Pen Tool can be summarised as follows:

- No need to print out work;
- Supports a wide range of popular application file formats, including Microsoft® Office;
- No need to install the original software used to create the coursework;
- Teachers can add notes or comments directly on to the digital work;
- Assessment objectives can be placed directly on to the work at the point where they are evidenced;
- The original student coursework is not altered (critical for qualification related work);
- Students quickly receive the marked work electronically, complete with the teachers comments.

This paper will aim to illustrate how the Red Pen Tool works and will also include a case study of a secondary school in Windsor who have been using the tool as part of their ePortfolio solution to mark and annotate student coursework in all areas of the curriculum. If accepted, the accompanying presentation will be delivered by a teacher from the school in Windsor, illustrating how the tool works with appropriate examples, and talking about the benefits that the teachers and students have found using this technology.

**Multimedia Support for the ePortfolio eDossier in Language Learning**

Pedro Pablo Sanchez-Villalon\(^1\), Manuel Ortega\(^2\), Asuncion Sanchez-Villalon\(^1\)

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In the education world it is widely accepted that language learning is one of the pioneering disciplines in standardizing lesson plans. They set the basis for learning design, one of the last advances in the pedagogical organization of education through Learning Managing Systems. Most recently, language learning has also contributed to the origin of the implementation of Portfolios to education. The European Portfolio for Languages (EPL) appeared in the year 2000 as a precedent for the Common European Framework for Language Learning Teaching and Assessment (CEFR, 2001). The three components of the EPL (the Linguistic Biography, the Europass and the Dossier) were mainly respectively based on the reflect, connect and collect principles, though they all share part of each principle. Soon most textbooks introduced the Linguistic Biography for reflective self-assessment in the final part of each lesson unit or section, and it took the main name of portfolio maybe due to the fact the raison d’être of a Portfolio is reflexive learning. But most successful was the Europass (the Europass Language Passport), a kind of document which the learner used for communicating their language abilities and competencies in an standard and normalized format following the language levels and descriptors established by the CEFR. Following the Europass
style the Europass CV has extended for the standardization of the users' experiences in all their abilities and skills.

The Portfolio and the Europass components have been translated into a digital form (both on CD and on the Web) and can be easily created and updated. However, the Dossier component is harder to be seen as transferable in an electronic way. Innovation and creativity are required for the wide use of the Dossier in a digital online format. We have developed the eDossier.

Through our development AIOLE (An interactive Online Learning Environment) the learner can select the CEFR criteria and objectives, they can select content guided by the tutor and progressively in a more independent way, and they can give evidence of the learners' language experiences and level of competency. AIOLE offers the facility to edit, access, and update the European Language Portfolio, with the three components in an electronic online way (Europass, BioLingua, and eDossier). Multimedia in the eDossier can be used to give evidence of the learners' linguistic experience.

Using the information and communication technologies (ICT) learners can follow their learning process and show the achievements as an evidence of their language skills and abilities. That is why this paper focuses on the facilities offered by the ePortfolio in AIOLE as an innovative way for accountability of every learner's learning outcomes through the access to institutional reference frameworks, as well as access to tools which offer multimedia facilities for demonstration of the language skills and experiences. Learners can edit the eDossier uploading audiovisual materials to the system. These materials can be pictures taken with their cameras or mobile phones, scanned certificates and diplomas, or previously recorded audio and video files. In AIOLE a competent ICT user can upload them and link to them or to existing online multimedia files, easily displaying them embedded when publishing their automatically HTML-generated webpages. All this can be presented as an evidence of their lifelong learning experiences.

Thus, based on institutional frameworks for learning, we can integrate pedagogically-driven multimedia to enhance language learning with technology. The writing/reading capacity initially offered by AIOLE can be extended to the development of the listening skill and the viewing and understanding video files. The initial official learning recommendations and frameworks can later evolve to informal learning environments and practices, allowing users to become permanent learners who, after an initial stage of being guided to learning with technology, will be able to design their own learning plans. They will be able to make use of the Web as a social network, accessing information, publishing their achievements in ePortfolios and sharing their learning experience with others by communicating and writing about their own learning experiences and thoughts, using micro-resources known as widgets, wikis, blogs, podcasts, on what has been termed the Web 2.0 or the Read/Write Web for their lifelong learning.

### S32D: ePortfolio adoption

**Raising awareness of the Europass language passport and European language portfolio: the ELP-desk project**  
**Michael John Hammersley**, Fondazione Aldini Valeriani, Italy

**Background**

The Europass Language Passport is part of the European Language Portfolio that was initially proposed by the Council of Europe in 2000 as a means to help individuals describe their language skills in an unambiguous manner that is easily understood. In addition to the Language Passport, the Portfolio also comprises two further documents: the Language Biography and the Dossier.

The Language Passport and Portfolio documents offer an easy-to-use and extendible means of understanding, defining and presenting linguistic skills, competences and expertise and can underpin the crucial EU policies supporting European mobility (for work and leisure), a multi-lingual and multi-cultural environment, and facilitated recognition of qualifications, including those obtained...
through informal and/or non-formal education and training.

In recent years, European Union Member States have set up National Europass Centres to coordinate activities related to the these documents and to assist those wanting to use and learn more about Europass and the Language Portfolio. Additionally, National Reference Points have been established to provide information and support regarding the comparability of European academic and vocational qualifications. However, despite these efforts, the Language Passport and Portfolio have so far failed to realise to the full the expected recognition and acceptance among their intended targets (i.e. students, workers and citizens, on the one hand, and teaching/training institutions and employers, on the other).

To respond to this problem, our group has designed and presented the elp-DESK project which is seeking to define methodologies and identify tools to promote and raise awareness of the Passport and Portfolio and, in particular, to disseminate their use across all learning and working communities. The project has attracted funding under the European Unions Lifelong Learning Programme (Education, Audiovisual & Culture Executive Agency, Transversal Programme, Key Activity 2: Languages) and will run from January 2009 to December 2010.

Objectives

The over-reaching objective of the elp-DESK project is to investigate how the Europass Language Passport and European Language Portfolio can become standard and recognised elements of the professional and academic curriculum of all European citizens.

Specifically, work will concentrate on areas within which measures can be undertaken to realise this objective:
- providing access to support and guidance for those wishing to prepare a portfolio or passport and those evaluating the documents;
- assessing and defining whether and how the documents can be directly integrated into language teaching and training;
- prototyping and realising hardware and software resources to encourage and facilitate the use of portfolios;
- promoting and encouraging the implementation of the Language Passport among all relevant stakeholders (individuals, educational institutions, companies).

All of these activities will depart from an in-depth analysis of current systems and best practice to develop innovative and effective approaches to ensure that a critical mass of acceptance can be accessed and so stimulate the broad-based and enduring dissemination of the portfolio resources.

Summary of results

Early results based on a survey across target groups in the partner countries would appear to substantiate the prevailing lack of awareness of the existence, scope and potential of the European Language Passport and Portfolio. At the same time, the feedback also indicates some of principal barriers to adoption (e.g. difficulties of self-assessment) that will be addressed in the next stages of project implementation. Fuller results based on the further analysis of the survey returns will be available in the next months.

Conclusions and recommendations

We imagine that the project output will include specific guidelines for the implementation of the Language Passport and the Portfolio in the various educational and employment contexts that will be analysed, together with the development and presentation of software and hardware artefacts that we believe will both stimulate and ease the spread and adoption across the European Union of a portfolio-based approach to the presentation of individual linguistic ability and competence both among those wishing to demonstrate their abilities (students, prospective employees, etc.) and those needing a reliable, comprehensive and comparable indication of formal, informal and non-formal linguistic expertise.
Participating Organisations

Fondazione Aldini Valeriani per lo sviluppo della cultura tecnica, Italy (lead partner)
Université Paris 13, France
Tempo Training & Consulting, Czech Republic
Fundaia Centrul Educaional Soros, Romania
AUXILIUM pro Regionibus Europae in Rebus Culturabilibus, Austria
Crystal Presentations Ltd, UK
Koinonia tis Pliroforias Anoihti stis Eidikes Anages, Greece
Nsf Cyberall Access, Cyprus

Lifelong learning supported by ePortfolio processes

Yuliya Bozhko, Massey University, New Zealand;

The concept of lifelong learning has become quite popular throughout the last years. From the very beginning its original idea changed a lot going through the stages of continuing, recurrent, adult and community education (Jarvis, 2004), and even now there is no common point of view how it should work. On one hand, the idea lifelong learning has entirely economical background where the learners themselves are seen as tools for economical development and their needs are actually tied to the needs of the industry (Carter, 2008). On the other hand, as stated by UNESCO lifelong learning is some kind of a cultural policy which has an influence on and promotes the changes in society (Boshier, 2000).

However, no matter which concept is accepted to be the leading one, world economics, employment policy and society are changing and the importance of lifelong learning is increasing respectively. That is why lifelong learning skills, like technical, interpersonal, and methodological (Weert & Kendall, 2004), developed in the early stages of ones life are extremely important for full participation in education, workplace, and society.

But still a lot of unanswered questions remain. Basically, lifelong learning is an individual process which continues throughout the lifespan (Jarvis, 2004), and it is a well-known fact that individual motivation plays quite important role in the learning process. That is why to be successfully accepted by learners the idea of lifelong learning should be supported on different levels and areas. One of the main problems that we face now is that lifelong learning requires an environment which will facilitate lifelong learning for every person, will be focused on individuals and their demands and will empower them as they move through their life.

Electronic portfolio is suggested to be such type of environment as it has all the features necessary to showcase ones progress over time, to reflect, to plan future learning, and to evaluate the achievements (JISC, 2008).

The paper provides the preliminary investigations for the ongoing research project on lifelong learning supported by e-portfolio processes held at Massey University, New Zealand. The project is conducted to explore the nature of lifelong learning and its representation at the different stages of ones life. It is explored how we can fit the concept of lifelong learning to the electronic portfolios process, what is the e-portfolio perspective for the lifelong learning and what strategies can be used to effectively engage and support learners.

References


Specialising, engaging, and sharing knowledge with members using social computing: The RIBA R&D experience

Clare Sinclair, Royal Institute of British Architects, United Kingdom

An overview of the RIBA Research and Development department's experience with engaging members through a recent initiative which focuses on knowledge sharing - including through harnessing social computing. The study first establishes the drivers for the project - both unique to the RIBA and its members, and the construction industry, but also attempts to draw some parallels with the perceived challenges facing other professional membership organisations. The project progress to date is outlined: implementation, user base, aims, progress, and opportunities for the future.

Our members - architects - require a long training period: an undergraduate degree, an additional degree, two years professional experience, and examinations, followed by registration with the Architects Registration Board (ARB) and hopefully becoming a Chartered Member of the RIBA. Our chartered members are required to do at least 19.5 hours of core CPD, and at least 15.5 hours of professional development in related subjects, every year.

Recent RIBA research identified key future challenges to the architectural profession, including: responding to the opportunities and threats of increasingly globalized competition, the impact of climate change, technical innovations, and increasingly demanding customers. Possible solutions were felt to include the proactive building of members expertise in particular specialisation, establishing new connections between research and practice, and providing for greater membership engagement increasing internationally.

In establishing the context to our approaches to these challenges, we acknowledge the influence of current theories about Knowledge Management (KM). In particular, the RIBA has undertaken research which indicates that architects regularly engage in formal networks to share knowledge - with a high preference for membership organisations, but that the majority of architects share information informally. It was also felt that there was a need for architects to develop a sense of professional identity whilst at the same time reducing the tendency towards forming professional silos of expertise.

It is important to stress that KM should not be IT-centric, but nevertheless, the key role of the internet, and more recently, social networking, and web 2.0 reflects how professionals engage with each other and clients in the twenty-first century. In light of this, we can identify the risks of not harnessing the way in which members are using social networking sites (particularly Facebook and LinkedIn) and believe that we need to anticipate the needs of members who are digital natives.

Our RIBA Knowledge Communities project proposes a new governance structure for existing membership groups as well as new special interest areas, using new technology, policy feedback, and engaging members through online tools. Other membership organisations have looked at similar models, but the optimum approach and most appropriate technologies are arguably not clear.

We developed a bespoke professional networking and community-focused site, which includes a number of familiar web 2.0 tools such as discussion forums, blogs, wikis, and personal profiles. Several communities have been established and although not proactively marketed to date, we have had demonstrable interest from members. We are developing the site incrementally using open source software, in response to user feedback. The project is ongoing, but we can identify challenges we've encountered to date: defining membership benefits (and sharing information more widely), balancing generational interest in social computing (and digital divides), information...
overload, and the management of user-generated content and control by the RIBA as a super-
brand with a prominent reputation to uphold.

Finally, we can identify several future opportunities using social computing to engage our
members, including looking ahead at integrating CPD (which is becoming more reflective), and
more widely, encouraging architects to proactively collaborate and build on their knowledge as a
professional community.

**E-Portfolio adoption gathers real pace in the UK**

*Alexander Guy Charles*, iProfile, United Kingdom

A review of the key UK e-portfolio initiatives in both public and private sector. The session will
highlight the significant progress and coordination of e-portfolio initiatives within the graduate,
employer and staffing domains using genuine examples of user adoption and re-use capability
across both organisations and domains.

The session will take a look to the future and predict some of the likely key short and medium term
developments that will affect the e-portfolio landscape. It will consider the role of public and private
sectors in end user adoption.

The session will specifically consider the role of the following providers in the future fabric of the e-
portfolio domain:

- Education
- Government/Public Sector
- Professional Network providers
- Passport or Online CV providers
- Single Sign-On/Info Card providers
- Employers

**S32E: ePortfolio policies**

**A Comprehensive ePortfolio Strategy for King Faisal University: Learning and Leading in Saudi Arabia**

*Kathryn Barker*, Futured, UAE

The new Department of Skills Development (DSD) in the Deanship of Academic Development
(DAD) at King Faisal University (KFU) proposes to utilize an ePortfolio system as the backbone of
the development of both the individuals we serve (faculty, administration, students, employees and
clients) and the Department itself. We intend to pilot an ePortfolio tool and service that meets a
variety of purposes - managing skills development and learning, demonstrating quality of learning
and services, and building learning communities while developing critical ITC skills and services. In
this process, we will learn from the ePortfolio leaders worldwide and lead in the implementation of
ePortfolios in the Kingdom of Saudi Arabia.

The DSD ePortfolio strategy sets out purposes and outcomes an integrated approach using
ePortfolio tools and processes for reflective learning and self-assessment of non-formal learning,
assessment and demonstration of formal training and education, assessment and demonstration of
quality of training products and services, and collaborative learning and communications.

Underpinning the strategy is the need for ePortfolio tools, digital storage, and expertise; policies for
access, security and ownership; and processes for training, development and management of
ePortfolios.

This proposed strategy is set in the context of the Islamic religion and culture of Saudi Arab that
pose unique challenges to the ePortfolio assumptions of photography, exposing personal identity,
and acceptable types of communications. At the same time, it is set in the context of a university
growing, changing and moving into the 21st century with eLearning and international accreditation
efforts.

Ultimately, this strategy will be implemented in phases, from a small pilot to a broader
implementation, and beginning where all ePortfolio needs to begin: with the faculty. It will be
designed as a research project supporting the training functions of the Department of Skills.
Development, gathering data on the effectiveness of the training and demonstrating Return on Investment in this new approach to the management of learning.

From the outset, we will seek to study the degree to which our ePortfolio strategy can contribute, at King Faisal University, to:

- Improved teaching, research and community service by helping faculty develop and use explicit competencies through targeted and accountable training managed by an ePortfolio framework;
- Increased learning by giving students training, tools and supports to manage their own learning and take pride in achievements;
- Improved administration, management and leadership by helping individuals in those roles to target skills deficits and improve personal and organizational performance;
- Improved human resources management by identifying and utilizing the University’s entire bank of human capital, by supporting Continuing Professional Development for career development, human and social capital development of all those associated with the University;
- Increased and innovative use of learning technologies associated with effective eLearning and appropriate uses of the Internet;
- Increased effectiveness of committees and committee work, meetings and projects using online communication tools;
- Awareness of DSD products and services that support the skills development of faculty, administration and employees at KFU;
- Implementation of a lifelong learning approach to support skills development and academic development throughout the regions served by KFU.

How to incorporate ePortfolios into the curriculum in a development country? The case of American University of Central Asia (Bishkek, Kyrgyzstan)

Sania Battalova, Sharon Bailey, American University of Central Asia, Kyrgyzstan

Introduction

In spite of the dynamic global development of ePortfolio, the Central Asian academic community has not yet taken a deep interest in this phenomenon. What is the reason of it? And could ePortfolio find its niche in the academic and professional development of students and professors in our region?

Objectives

American University of Central Asia is an international, multi-disciplinary learning community in the American liberal arts tradition and is almost the only liberal arts institution in Central Asia (Kyrgyzstan, Kazakhstan, Tajikistan, Uzbekistan and Turkmenistan). Our University, established in 1993 in Bishkek, Kyrgyzstan, is a small but powerful engine of intellectual freedom and critical thinking that fuels education in a caring, corruption-free and student-centered environment.

Students and faculty are eager to study and pursue their dreams. Our goals are to enhance our distinctiveness as a learning community grounded in the liberal arts that prepares a new generation of leaders for the democratic transformation of Central Asia and the world beyond. On the basis of these principles, the University is aimed at educational and research environment, which instil critical thinking skills, effective intellectual and creative activity of the students and formation of continual education.

One of the main tasks of the University is to give students necessary complex of skills and knowledge that help them to adopt successfully to the modern labor-market, to be the competitive
specialists aimed at improvement of own knowledge. For this reason, we are exploring ways to incorporate technological skills into our curriculum in ways that further our mission and provide a rigorous academic experience for the students.

Goals and Methods

The vital task of the University is to improve student's skills on independent intellectual work. We have to teach them to compile and systematize information. We wish to teach them to critically evaluate of own intellectual potential, to determine the tasks necessary to gaining knowledge and to be able to present in an effective way their own knowledge and skills to potential employers.

ePortfolio can be a tool that allows students to demonstrate their own skills and knowledge base in order to
1) Present in an effective way their own knowledge and achievements,
2) Manage their own learning process,
3) Inform potential employers about their creative and professional potential.

AUCA is only beginning to explore the possibilities of ePortfolios, but we have been strengthening our IT foundations for many years. The successful experience in electronic course system implementation, the great achievement in this process and deep motivation of students and teachers give us reason to believe that there will be broad support for ePortfolio implementation. In the next year, we plan to introduce ePortfolios to narrowly targeted groups, in order to learn the specific needs of our community and potential for wide-scale development.

Target Groups:

1) Students of Journalism and Software Engineering Programs, and seniors who are completing honors theses,
2) AUCA teachers and researchers who are working on their research projects,
3) Staff and administrators who have good experience in project implementation and are aiming at professional and career growth.

We believe that own ePortfolio development of each group will help to start planning professional development and continual education.

3) Implementation
We have a basic model of new ideas implementation within the University which consists of the following phases: selection, evaluation, analyses, testing, and building a work group to implement new programs, software, corporate principles, and to develop the technological, organizational and normative basis for sustainability.

Problems of ePortfolio adoption and implementation in AUCA:

1) Lack of awareness in the AUCA community of ePortfolio opportunities and of the potential for career development.
2) Limited opportunity for collaboration with other universities and organizations experienced in this direction within our country and region.
3) And, the main problem what should be selected as a basis? Which software is more flexible to be integrated in the existing electronic information environment of the University?

Conclusions
ePortfolio implementation should be the vital part of the learning experience of AUCA students, setting them on the same footing as students of the leading universities of Europe and America. Being in the early phases of selection, evaluation, and analyze, we consider ePortfolio future development within AUCA, from student portfolio to the University portfolio, as a key area for University development within the country and region as well.

**E-portfolio implementation in Flanders: building bridges between separate projects**

*Marjan Van de Maele*, JES vzw, Belgium;

**Background or context**

JES is a plural non-profit organisation. Its mission is to create equal opportunities for young people to actively participate in society. JES is based in three Belgian cities: Brussels, Antwerp and Ghent. Its main activities include training and guidance, training for youth work volunteers, outreach work, support for youth clubs and youth work initiatives. These activities focus on young people, living in large cities, between 6 and 30 years old, of whom a lot are low-skilled and with migrant background.

In 2006-2007 JES carried out the C-stick project. During this project an innovative digital portfolio was developed: the C-Stick. The C-Stick is a central database where young people can gather and store all kinds of relevant information, it provides them with a framework for personal development plans and it contains a tool to create adjusted CVs in a very quick and easy way.

The portfolio was created on a USB flash drive, a very well known and attractive tool to young people that has several other advantages: firstly it can be permanently updated. Secondly its also a concrete and tangible tool young people can carry with them at any moment, unlike an e-portfolio on a website. However, the C-Stick portfolio on the USB flash drive is also connected via the internet to a server, in order to keep a backup of the data. Its also linked to an administrative system by which tutors can send files and competence assessments to their pupils.

Since we wanted to create a portfolio apt for our target group, an important focus of attention throughout the development was to raise the level of accessibility by creating a very attractive and easy-reference interface and simple navigation structure and by using unsophisticated vocabulary.

**Objectives**

The C-Stick project is now moving from a very small-scaled pilot at JES to a more large-scaled implementation in some sections of the Flemish Employment Service (VDAB) and integration with their e-portfolio Mijn Loopbaan (My Career). Other youth organisations and schools also started using the C-Stick. This evolution was not initially planned and grew from a bottom up process, but seems to set standards for future e-portfolio development in Flanders. It might as well be an interesting model for other countries or regions.

In our presentation, we point out the main successes and difficulties we met throughout the process and present the model that was developed in Flanders.

**Summary of results**

The C-Stick project originated from an ESF-call (European Social Fund). The most important strengths of the C-Stick project were some of the preliminaries that underpinned it: we wanted to create a portfolio that is accessible for a low-skilled target group and coincides with existing terminology and data systems. This pushed us to establish cooperation with the Flemish Employment Service.

At the end of the ESF-project, many other organisations were interested in using the C-Stick. Nevertheless, we faced some severe difficulties: technically the C-Stick system was not developed to be used by several organisations, on the juridical side there were no clear agreements with the software developers concerning ownership and finally there was no funding for further development and to cover staff costs.
These problems were solved thanks to funding from the Flemish Employment Service, own investments and successful negotiations with the software developing company. A centre was set up at JES to provide training and distribute C-Sticks to other organisations. Technical research and development is carried out to accomplish data transfer between the C-Stick and Mijn Loopbaan, based on an xml-standard. This research should lead to a standard model for data transfer for future e-portfolios.

**Conclusions and recommendations**

In Flanders, several e-portfolios were developed, but no clear choice was made on large-scale implementation. Awareness grew on the fact that it's impossible to create one portfolio that meets the needs of all target groups. Nevertheless, people should be able to switch from one portfolio to another. Therefore the Flemish Employment Service will develop Mijn Loopbaan as a central, secured platform from which data can be imported and exported from and to other e-portfolios. The only conditions for future e-portfolios will then be to use a shared competence terminology and a shared standard model for data transfer.

To make large-scale implementation financially possible, the following issues should be addressed: respond to the needs of a specific target group or organisation, make clear ownership agreements to avoid expensive licences and a sound business plan to finance continuing training and distribution.
Posters

**FLUIDS_ID: e-portfolios and life stories - digital contents for social inclusion and employability in RL and SL**

*Maria Barbas, António Moreira*

The project "FLUIDS_ID: e-portfolios and life stories - digital contents for social inclusion and employability in RL and SL" questions different representations of final higher education students at national, European and Latin-American level, who seek jobs resorting to accessible and inclusive WEB 3.0 tools, made available to every citizen.

We created a space where we identified world experiments that generated good practices of employability, we adapted Kolb’s Experiential Learning Theory and developed the Puzzle Metaphor respecting the learning profiles of the citizen, with DublinCore metadata, where every student can insert e-portfolios and life stories, by selecting a profile of competences, impersonated by an avatar, defined under Kolb’s theory. We underline the fact that this platform will allow the inclusion of personalized videos with the Machinima technique (used in Second Life).

We built the prototype in May 2007. It was awarded the 1st prize, and later the 3rd prize, at the Poliempreende Competition (respectively at the regional and national competitions).

Presently we propose:

a) to index the various profiles that are part of the platform to companies capable of giving them an employability response;

b) to develop the platform for every student who finishes higher education, projecting its internationalization to Europe and Latin-America, with the goal of including the present study under the policies adopted worldwide (to create an e-portfolio for all until 2010);

c) to promote research at post-doctoral, doctoral and master level, including the integration of young graduates in Research Integration Grants.

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**Raising awareness of the Europass language passport and European language portfolio: the elp-desk project**

*Michael John Hammersley, Fondazione Aldini Valeriani, Italy*

**Background**

The Europass Language Passport is part of the European Language Portfolio that was initially proposed by the Council of Europe in 2000 as a means to help individuals describe their language skills in an unambiguous manner that is easily understood. In addition to the Language Passport, the Portfolio also comprises two further documents: the Language Biography and the Dossier.

The Language Passport and Portfolio documents offer an easy-to-use and extendible means of understanding, defining and presenting linguistic skills, competences and expertise and can underpin the crucial EU policies supporting European mobility (for work and leisure), a multi-lingual and multi-cultural environment, and facilitated recognition of qualifications, including those obtained through informal and/or non-formal education and training.

In recent years, European Union Member States have set up National Europass Centres to coordinate activities related to the these documents and to assist those wanting to use and learn more about Europass and the Language Portfolio. Additionally, National Reference Points have
been established to provide information and support regarding the comparability of European academic and vocational qualifications. However, despite these efforts, the Language Passport and Portfolio have so far failed to realise to the full the expected recognition and acceptance among their intended targets (i.e. students, workers and citizens, on the one hand, and teaching/training institutions and employers, on the other).

To respond to this problem, our group has designed and presented the elp-DESK project which is seeking to define methodologies and identify tools to promote and raise awareness of the Passport and Portfolio and, in particular, to disseminate their use across all learning and working communities. The project has attracted funding under the European Unions Lifelong Learning Programme (Education, Audiovisual & Culture Executive Agency, Transversal Programme, Key Activity 2: Languages) and will run from January 2009 to December 2010.

(see session S32D)

Using an ePortfolio to Review PostGraduate Medical Training in Scotland

Claire Tochel, Alex Haig, Karen Beggs

Introduction

All postgraduate trainee (Foundation) doctors in Scotland are required to demonstrate evidence of learning and professional competence using the ePortfolio developed by NHS Education for Scotland. This evidence spans clinical skills across hospital settings (Work Place-based Assessment); structured tools for self- and peer-assessment (Multi-Source Feedback); flexible tools which facilitate the recording of individuals learning events (Educational Log); and ultimately formalised sign-off by educational supervisors that standards were reached during each post (Supervisors Report).

For the first time, the entire national dataset for one year of a Foundation programme has been analysed in detail to systematically determine the extent to which all educational requirements asked of trainees and their supervisors were met. The findings will be used to review how the ePortfolio supports the Foundation programme across Scotland for local and national accountability and highlight areas for future development to ensure the quality of training.

This poster will provide an update to the preliminary findings presented in Maastricht in October 2008 - graphically presenting the analysis and key results from the extensive audit and exploring the complex relationships between data entered into different assessment tools.

Methods

The ePortfolio database was designed for data security combined with user flexibility and has evolved and expanded considerably since its inception in 2005, making its structure extremely complex. It was interrogated in-depth to export anonymized, linked assessment data for 1st (n=800) and 2nd year (n=810) trainees in post in Scotland in the year to August 2008 (when ePortfolio version 2 was launched). Summary completion rates for every required assessment and learning tool were compiled for both training years, and the quality of scores entered for trainees was explored.

Results

At least 95% of 1st and 2nd year Trainees submitted each required WPA (21 items in total over two years). Median scores for WPA's were high (indicating very satisfactory or highly satisfactory standards); fewer than 2% of submitted scores in each year were less than satisfactory. Median MSF scores were also high, and unsatisfactory score rates were well below 1% for both self and non-self assessments. Over 93% of 1st and 2nd year trainees used the educational log to record a total of 15,545 and 19,298 learning events respectively: most commonly tutorials, procedures and lectures. A substantial proportion of these entries contain evidence of reflection by the individual. Supervisors Reports were submitted for 91% of 1st year and 90% of 2nd year posts, and Certificates of Performance (the final sign-off) for 87% & 85% of posts respectively. Further
information is being sought from each deanery to understand the reasons for this rate of omission. Submitted reports revealed very small numbers of posts during which trainees failed to reach required standards (n=12: 1st year; n=19: 2nd year).

Discussion
This ePortfolio is firmly embedded in the foundation programme in Scotland, reliably supporting formative and summative assessment. The majority of trainees successfully demonstrate clinical and professional competences required of them and ongoing work is underway to learn more about the minority of trainees and supervisors who have not fully engaged with the system. The small number of trainees with low assessment scores appears to indicate that the ePortfolio may be currently used to mark the point at which trainees have reached the standards expected of them, rather than to track the entire learning trajectory. Ongoing work, fully supported by regional deaneries, will include the development of a system of regular reporting on assessment completion rates, keeping them fully informed and accountable for their trainees.
Analysis of surveyors’ research skills by designing a self-assessment questionnaire.

Victor Reyes-Alcázar, Belén Sotillos-González, Antonio Torres-Olivera

Background or context
This study has been carried out between November 2008 and February 2009 at the Andalusian Agency for Healthcare Quality (Spain), an institution belonging to the regional public health system that covers a population of over 8 millions inhabitants, with more than 1.500 primary care centres, 34 hospitals and over 82,000 healthcare professionals. The mission of Agency is to promote excellence in the delivery of health services to the people of Andalusia by guaranteeing quality and continuous improvement. Since 2003, the Agency is developing its work in the field of accreditation, running several accreditation programs besides a Patient Safety Observatory. These initiatives are a unique opportunity to make progress towards research-based policies, in terms of knowledge creation, sharing, organization and management.

The study herein presented explores two dimensions of research in surveyor staff: a) research capability and b) research activity.

Research capability can be divided into two levels: research-related functions (study design, literature review, critical reading, collecting data, writing reports, presenting results, etc.) and proficiency with document resources and bibliography management tools. The second dimension explores research activity through questions about: post-graduate and post-doctorate training, attendance of congresses and participation in international projects, responsibilities such as principal investigator, publication of articles or other materials.

Objectives
Understanding research on healthcare quality as a critical source of evidence, the objective is to assess the research potential of surveyors from an organisation geared to boosting healthcare quality - Andalusian Agency for Healthcare Quality (Spain)-, by means of a self-assessment tool on research skills which contains specific questions dealing with research capability and activity.

Summary of results
(1). The Research Potential among interviewees was seen to be highly variable with a mean score of 8.5 and an inter-quartile range of 13.32.

(2). Specifically the Research Capability dimension (calculated on a scale of 10) disclosed a mean score of 6.19 (± 3.37). The three aspects of such dimension in which the largest number of professionals responded affirmatively are: information searching through the Internet (100%); writing up contents for a congress to be held in their mother tongue (90.3%); data collection and analysis (80.6%). Meanwhile, those aspects that need strengthening refer to article writing (48.4%) and oral expression in foreign languages (38.7%).

(3). 7 out of 10 documental resources and bibliography management tools in the questionnaire had been used by 30% of the interviewees. A highlight here was Pubmed, used by 64.5% of the subjects of the study.

(4). Finally, with regard to Research Activity, contributions to congresses held in the home country (90.3%) far outnumbered those to foreign congresses (41.9%).

Conclusions and Recommendations
(1)The use of a self-assessment questionnaire on research skills in surveyors from an organisation aimed at enhancing healthcare quality helps professionals to identify improvement areas, which, in this case, were those referring to acquiring knowledge and skills for the various stages of the research process.

(2) Applying the self-assessment questionnaire helped the interviewee surveyors to reflect on the significance of research in organisations devoted to healthcare quality and accreditation programmes.
The application of the self-assessment questionnaire enabled people with a high research potential to be identified in different departments throughout the organisation.

The study was a useful way of shaping the design of the organisations research strategy for the coming years.

As a general conclusion, organizations devoted to accreditation generate lot of valuable knowledge, and what is needed is a scheduled strategy for processing all that information and transforming it into researchable questions, managing surveyors research skills.

**Improving the quality of Continuous Training activities**

**Maite Periánez-Vega, Carmen López de Lis, Victor Reyes-Alcazar, Laura Villanueva-Guerrero, Justo Centeno-Astudillo, Antonio Torres-Olivera**

**Background**

The Andalusian Agency for Healthcare Quality (Spain) implements three accreditation processes with regard to Continuous Training (CT):

1. Accreditation of Continuous Training Activities (since November 2003).
2. Accreditation of Continuous Training Units and Centres (since February 2006).
3. Accreditation of Continuous Training Activity Programs (since March 2008).

The accreditation of CT Activities and Activity Programs were considered in this analysis.

**Objectives**

To make a comparative analysis of quality improvements obtained in Continuous Training Activities and Activity Programs accredited by the Andalusian Agency for Healthcare Quality (Spain).

**Methodology**

Quality standards and items covered by both accreditation processes under analysis were defined by a panel of experts on the basis of criteria laid down by the National Commission for Continuous Training of Medical Professionals and taking into account, among other publications, the WFME global Standards for Quality Improvement in Medical Education with regard to Continuous Professional Development (CPD).

In the process of accreditation of Activities and Programs, these standards are grouped into common blocks (need for training, learning process, trainers, planning and resources, and outcomes) and into criteria internally connected.

- Thus, in the process of accreditation of Activity Programs 47 standards are evaluated and classified as: (1) purpose, (2) objectives (3) design and development, (4) assessment mechanisms, (5) selection and training of professionals (6) structure, (7) facilities, resources and equipment and (8) continuous improvement.

- In the accreditation process of Activities, 34 standards are evaluated, grouped into 5 criteria: (1) relevance, (2) objectives, (3) organization, (4) methodology and (5) evaluation.

The methodology used in the study is a descriptive analysis of the total number of activities accredited between March 2008 and March 2009 (n=1.091). The variables under study are:

- The number of accredited activities.
- The mean quality score for those activities, on a range from 1 to 2.8.
- Achievement of quality standards related to criteria and expressed in percentages: purpose, objectives, methodology, assessment, selection and structure.

Data for the analysis were extracted from the accreditation process software program.

**Summary of results**

1. The number of individually accredited activities was 907, while the number accredited as a series of activities (program accreditation process) was 184.
(2) The mean quality score for individually accredited activities was 1.33 compared to activities accredited as programs, which was 1.87.

(3) The results of the criteria analysis were:

- **CT Activity Programs**: Purpose (76.39%), Objectives (86.09%), Methodology (65.41%), Assessment (61.97%), Selection (77.94%), Structure (86.00%)
- **CT Activities**: Purpose (57.50%), Objectives (70.00%), Methodology (62.00%), Assessment (52.00%), Selection (50.00%), Structure (80.00%)

**Conclusions and Recommendations**

(1) The accreditation of activities, when its accreditation is integrated in a training program, scored more highly in quality terms than those accredited as independent activities.

(2) The results of the criteria analysis reveal a quality improvement in all of them, having more significance in: purpose, assessment, and selection of training professionals.

(3) The accreditation of activities, when its accreditation is integrated in a Continuous Training Activity Programs has a wider scope than if they are accredited as isolated activities and it encourages the importance of outcomes based assessment.
S11B: Plugfest, Room C348
Chair: Simon Grant & Marc Van Coillie
The objective of the ePortfolio plugfest is to make the different pieces of an ePortfolio-enabled architecture work seamlessly. During one day we will explore how to connect together:
- several ePortfolio platforms
- individual ePortfolios and institutional ePortfolio management systems
- ePortfolio platforms and VLEs (virtual learning environments)
- individual ePortfolios and human resource systems
Sync and swim: Ensuring student participation in ePortfolio learning processes through integration of organisational systems, James Christopher Rope, Christopher Murray, Nancy Davies, Gary Frith, Pat Harkin, Helen Mistry, John Sanders, Dave Walker, 1: Leeds University, UK; 2: MyKnowledgeMap, UK

Coffee Break

Mary Moss
The Digital Village and informal learning
Chair:

Helen Barrett
S12A: ePortfolio workshop: Your Digital Self — Web 2.0 as Personal Learning Environment Room C390
Chair: Helen Barrett
Chair: Evangeline Harris Stefanakis
Part 2 of the one day workshop given by Helen Barrett

S12B: Plugfest Room C348
Chair: Simon Grant, Marc van Coillie
The second part of the plugfest day will address UK Leap2a interoperability and will be chaired by JISC-CETS
Interoperability for Qualification ePortfolios – the creation of an open standard, Matt Wingfield, Karim Derrick, TAC Developments, UK

S12C: Key Competencies Room C343
Chair: Kirstie Coolen
Integrating Big6 Information Literacy Skills in Project Based Learning: A Case Study in Higher Education, Simon Grant, Karadeniz, Frankus, Birgit Zens, Angela Sanders, Dave Walker, 1: MyKnowledgeMap, UK; 2: MyKnowledgeMap, UK

S13A: Workshop Room C343
Chair: Marc Van Coillie, Simon Grant
This last part of the plugfest will address Europe’s Interoperability and will be based on several concrete how-to’s or European research projects state of art to open discussion with attendees on several interoperability scenarios:
- European mobility
- social network exploitation
- background checking and recognition of accreditation and competencies
Integration of Europe’s CV and LP how-to: 5 minutes for interoperability!
EPortfolio interoperability how to: from LinkedIn social network to Europe (exploring lrssumne microformat)
State of art European Research project TAA3: Extending CV to ePortfolio: Exploring how new HRXML V3 specifications could be used to add semantic and external references (Diploma Supplement) as well as ensuring privacy

S13B: Plugfest Room C348
Chair: Alan Clarke
The use of e-portfolios provides many opportunities for creating rich environments to develop learners skills and knowledge. However, in order to bring about the successful application of e-portfolios requires tutors and trainers to be aware of the changes in their practice that need to be brought about.
The workshop will be participatory with delegates asked to contribute to the discussion...
E-portfolios and the tutor, Alan Clarke, NACE, UK
E-Guides: Lead by example, Angela Sanders, NACE, UK

S13C: Workshop Room C343
Chair: Alan Clarke
The use of e-portfolios provides many opportunities for creating rich environments to develop learners skills and knowledge. However, in order to bring about the successful application of e-portfolios requires tutors and trainers to be aware of the changes in their practice that need to be brought about.
The workshop will be participatory with delegates asked to contribute to the discussion...
E-portfolios and the tutor, Alan Clarke, NACE, UK
E-Guides: Lead by example, Angela Sanders, NACE, UK

S13D: Parallel session Room C339
Chair: Sön Karadeniz
Digital Activist Inclusion Network (DAIN) East Midlands, Andria Birch, WEA, UK
E-Innovation, eportfolios and blogs, Duncan Gillespie, Robert Brown, Gumnies and Galloway College, UK
"Kompetenzkatalog.de" an ePortfolio for IT-Competence, Thomas Schmidt, Daniel Schütz, Hollewood media & education, Germany
eProfilPASS - A Vision of an ePortfolio for the ProfIPASS, Thomas Schmidt, Daniel Schütz, Hollewood media & education, Germany

Coffee Break

Lunch

Plenary session, Oliver Thompson Lecture Theatre
Chair: Lee Davies
Blending New Generation Skills, Portfolio and Learning Content Management Systems for personalizing learning in Europe (and surviving global crisis and competition), Fabrizio Cardinali, Glunt Lags, Italy
Managing one’s identity is a key skill, Serge Ravet, EIEL, France
ePortfolios for All? Chris Yap, UK

S13A: Workshop Room C343
Chair: Mary Moss
The Digital Village and informal learning
Mary Moss/NIACE, Steve Thompson/University of Teeside, UK
In this workshop we propose to consider ways in which taking part in the creation of digital media encourages and develops skill in using ICT as well as promoting active engagement in community activities. It will consider some of the key characteristics of informal adult learning in relation to active learning for active citizenship.
We will present some examples of local projects focusing on an exciting development known as the Digital Village. We will invite participants in the workshop to contribute other examples and experience and to discuss the following questions:
- Does creating content contribute to building communities of confident, curious, critical and creative people?
- What are the principles of active learning that enable key competences to be developed?

S14A: Workshop Room C343
Chair: Serge Ravet, Simon Grant
This is the first meeting of the working group on "Universal Access to Competency Definition" otherwise called "Wiki of competences." The objective of this working group is to establish a simple set of rules, based on existing standards, to allow the use of public URIs to competency definition in ePortfolios and other applications. This work follows the publication of a Green Paper on this issue.

S14B: Working group meeting Room C348
Chair: Serge Ravet, Simon Grant
This is the first meeting of the working group on "Universal Access to Competency Definition" otherwise called "Wiki of competences." The objective of this working group is to establish a simple set of rules, based on existing standards, to allow the use of public URIs to competency definition in ePortfolios and other applications. This work follows the publication of a Green Paper on this issue.
Planning a successful e-portfolio project: learning from JISC-funded activities, Lisa Gray, JISC, UK.

The session will start with providing participants with a short opportunity to discuss their views and attitudes about e-portfolios, processes and purposes in small groups. This will be followed by a presentation which will share models and thinking around e-portfolios, and examples of the role they can play in enhancing and supporting learning and teaching, drawing on a range of JISC-funded work, as...

Chair: Sue Rhodes, Institute Learning, UK.

S20: Workshop Room C301

Assessment Renaissance: Writing Learning Statements and Rubrics that Yield Actionable Data, Stephanie Pfister, Brian McBay-Epp, eCollege, USA.

This workshop is ideal for Institutional Rubric Writers. Participants will discover how to write assessment statements that are clear, concise and achievable, and that can drive student success. No previous experience is necessary. This workshop balances a facilitator led presentation of assessment best practices with a collaborative, group-based case study that allows participants to immediately apply concepts and skills. Participants will discuss strategies to implement an institution-wide assessment plan. We w...

S21A: Workshop Room C308

ePortfolios: The Cornerstone of Personalised Learning, Simon Tindall, Charlotte Douglas, DesdeLearn, UK.

Canadian Beer Tasting During Workshop!

This interactive session will discuss the concept of ePortfolios and demonstrate how they can be used to support student-centred learning by engaging students to collect, organise, share, reflect on and present their learning experiences in a collaborative online environment. Also we will discuss how facultual utilise portfolios to not only track and...

S21B: Workshop Room C348

Emploability and ePortfolios Room C348

Chair: Kat Wehrheim

User control in an Employability Portfolios, Dries Prins, Lex Poelman, Kentey, The Netherlands

The workshop will explore the use of ePortfolios in the teacher education classroom: developing a blended learning strategy. Lee Davies’, Jean Kelly’, Maggie Hazelline’, Sandie Bates1, 1: Institute for Learning, UK; 2: City of Wolverhampton College.

This workshop will start by drawing heavily on the experience of the teacher educators based in Wolverhampton College delivering the Post-graduate Certificate in Education (PGCE) and Certificate in Education (Cert Ed) accredited by Wolverhampton University. The presenters will showcase the use of REfLECT as a personal learning and virtual environment learning (VLE) platform. Delegates will have the opportu...

S22C: ePortfolio implementation Room C348

Chair: Borcu Orenet Aybak

ePortfolios to support and enhance learning: Key factors of implementation, Margaret Lamont, City of Wolverhampton University.

Wolverhampton College is one of the lead partners in REfLECT, a £4 million programme which has been set up to identify the power of the technology to move people who have made change possible 4 members of staff who have identified the power of the technology to transform their learning and that of their students. This session offers delegates the opportunity to hear from learning professionals.

S22D: Learning and Teaching ePortfolios Room C340

Chair: Martin Owen

Portfolios: DEveloping portfolios in successful HE institutions, Simona Laface, Shane Sutherland, PebblePad, Alan Paul, FE University of Wales.

ePortfolios as a vehicle for recording Recognition of Prior Learning at RMIT University, Malaysia.

Mohammed Mosalley, Carlo Di Pietro, RMIT University, Australia.

A case-study of implementing a trial of a sociable enterprise ePortfolio system at RMIT University, Margaret Bottari, Garry Allan, RMIT University, Australia.

A case-study of implementing a trial of a sociable enterprise ePortfolio system at RMIT University, Elizabeth J. Meyer, CSLP Consorutium, Concordia University, Canada.

Using the Student Voice to Build and Embed An E-Portfolio, Christopher Murray, Nancy Davies, Gareth Frith, Pat Harkin, Helen Mistry, James Rone, John Sands, University of Leeds, UK. David Waller, Mycroftedup, UK.

DeeFleefo and Constructive Alignement, The Challenge of Translating Theory into Practice, Kevan Brown, Kelsey University, New Zealand.

S22E: Skills development and assessment Room C310

Chair: Andrea Christen

An e-Portfolio to Support Work-Based Degrees: the UK Experience, Tom Holland, Rob Amos, MyPearl.com, UK.

Portfolios are a powerful tool for assessment key competencies, Marjan Van de maele, JE'S nv, Belgium.

E-portfolios: a tool for assessment and empowerment in the skills recognition process, Teresa Mota, Francesco Restivo, FEUP, Portugal.

S23A: Workshop Room C340

ReflECT at Knowsley Community College: The Learners’ Mind and Abilities Languages, and Portfolios: A Window into Personalised Learning, Evangeline Harris Stefanakis, Institute for Learning, UK, UK.

This workshop, facilitated by Sue Rhodes, will examine the impact of REfLECT when used as part of a whole organisation approach to supporting the professional development of teachers. The role of REfLECT at Knowsley Community College has not been without complications sometimes to do with the technology and at other times related to this being part of a technological revolution, requiring on...

S23B: Workshop Room C348

Transforming organisations through personalisation, Lee Davies Michelle Jennings, Institute for Learning, UK, UK.

S22B: Workshop Room C346

Chair: Martin Owen

Portfolios: DEveloping portfolios in successful HE institutions, Simona Laface, Shane Sutherland, PebblePad, Alan Paul, FE University of Wales.

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Keynote: ePortfolio Plenary, Oliver Thompson Lecture Theatre

Chair: Kathryn Chang Barker & Harry Owen

Personalisation through technology-enhanced learning Graeme Conole, Open University, UK

Lifelong ePortfolios: Creating your Digital Self Helen Barrett, USA

ePortfolio values Simon Grant, JISC: CETIS, UK

Ready or not, the Personal Learning Environment is coming with the ePortfolio Process as the Keystone, John Pallant, Wobolding School and Community College, Durham, UK

11:00 Coffee Break

11:30 $S31A$: Workshop Room C150
The Personalisation of Learning Framework, James Ballard, Philip Butler, University of London Computer Centre, UK
Since 2006, LLCC has been developing a model framework that learning providers could utilise for the implementation of ‘personalisation of learning’ as outlined in the DfES Harnessing Technology Strategy, where “the system conforms to the learner, rather than the learner to the system”. This project is based on open source technology utilising existing applications, and new developments commence...

Chair: Meaghan Botterill

Closing session the job market and what can postgraduates do, and new graduates can effectively transition to the professional world.

Participants in this session can expect to develop ePortfolios to help university seniors in preparing for their professional life.

Wednesday 24 June 2009

13:00 Lunch

14:00 $S32A$: Workshop Room C135
Constructing Professional Identity in Senior Capstone Seminars, Susan Kahn, Lee Vander Stout, Indiana University-Purdue University Indianapolis, USA

This session focuses on the use of ePortfolios to help university seniors in culminating capstone seminars make the transition to the professional world.

Participants in this session can expect to gain insights into how a capstone course for students about to graduate can effectively use an ePortfolio to provide a culminating experience that helps prepare students for the job market and w...

Chair: Karen L. Beggs

Role of the e-portfolio in the Assessment of Health and Social Care students in Work-Based Practice, Gareth Stuart FRINTH, University of Leeds, UK

The ALPS-CETL (Assessment and Learning in Practice Settings) is a UK Centre for Excellence in Teaching and Learning. It is a partnership of five West Yorkshire Universities (Leeds, Leeds Metropolitan, Bradford, Huddersfield and York St John) and the NHS Workforce. The objective of ALPS is to support the confidence and competence of Health and Social Care students from a range of professions included...

Chair: Geoff Robbeck

Subjective Assessment of ePortfolio Evidence – Project escape & Comparative Pair Assessment, Matt Wingfield, TAG Developments, UK

Evidencing WBL Progress with Mahara, Derrin Michael Kent, The Development Manager Ltd., UK

Multimedia Support for the ePortfolio eDossier in Language Learning, Pedro Pablo Sanchez-Villalón, Manuel Ortega, Asuncion Sanchez-Villalón, 1. University of Castilla La Mancha, Spain; 2. ECI Ciudad Real, Spain

$S32B$: Workshop Room C348

$S31B$: Workshop Room C348

Dropping the Pebble in a pool………………

Emma Pursell, Megan Lawton, University of Wolverhampton, UK

This session will cover:
1. An institutional overview from implementation to embedding PebblePad, this will look at the following:
   * Technical support
   * Curriculum design
   * Staff development issues
   * Supporting student use
   * Practitioner perspectives looking at different teacher led use of PebblePad, this will included:
     * Assessments, feedback...

$S31C$: ePortfolio in higher education Room C140

Chair: Meaghan Botterill

Evaluation of the implementation of an e-portfolio system – processes versus platform?, Olivia Fox, Neal Summer, Ajmal Sartor, City University, UK

Breaking out of the bondage: SAMSON (Shared Architecture for eMployee, Student and Organisational Networking), Sandra Winifred, Tom Kirkham Centre for International ePortfolio Development, University of Nottingham, UK

ePortfolio for the professional insertion of students, Laurence Perennes, Dominique Duhaud, Université Bretagne Sud, France

Process and product assessment with e-portfolios in the first academic year at the university of teacher education, Andrea Christen, Martin Hofmann, University of teacher education, St.Gallen, Switzerland

$S31D$: Healthcare ePortfolio Room C130

Chair: David Sowden

using video in an eportfolio to enhance learning, Harry Owen, Sus Skinner, Chris Carpeatis, Cyle Spruit, Kris Haynes, Flinders University, Australia

From University to Retirement: the ePortfolio continuum to support Scottish Dentists, Alex Haig, Karen Beggs, HIE Education for Scotland, Uk

Dissonance in healthcare students’ education, Martin John Hammersley, University of Central Asia, Kyrgyzstan

Using ePortfolios to Support Assessment of Qualification Coursework, Matt Wingfield, TAG Developments, UK

$S31E$: Quality assurance and organisational learning Room C118

Chair: Ravi Vajulsky

Can individual and organisational ePortfolios manage quality assurance?, Martin Taylor, Debbie Carbon, Synergetics, UK

DigSport-it: the Dutch example of an Institutional Portfolio 2006 - 2009, Alex Kemps, Marij Veeulgers, InHolland University, The Netherlands

Exploiting tacit knowledge through knowledge management technologies, Frank Nyyne Askiv, Brunel University, UK

Using ePortfolios to Support Assessment of Qualification Coursework, Matt Wingfield, TAG Developments, UK

33:30 Coffee Break

15:30 $S32D$: Workshop Room C348

Role of the e-portfolio in the Assessment of Health and Social Care students in Work-Based Practice, Gareth Stuart FRINTH, University of Leeds, UK

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$S32C$: ePortfolio evidence assessment Room C140

Chair: Karen L. Beggs

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$S32E$: ePortfolio policies Room C118

Chair: Emma Purnell

A Comprehensive ePortfolio Strategy for King Faisal University: Learning and Leading in Saudi Arabia, Kathryn Barker, Falcon, UAE

How to incorporate ePortfolios into the curriculum in a development country? The case of American University of Central Asia (Bishkek, Kyrgyzstan), Sania Rattalova, Sharon Bailey, American University of Central Asia, Kyrgyzstan

E-portfolio implementation in Flanders: building bridges between separate projects Marjen Van de maels, JESS icw, Belgium

16:00 Closing session, Oliver Thompson Lecture Theatre

Chair: Simon Grant & Serge Rave

Delegates and speakers are invited to a highly interactive session with an expert panel to discuss the roadmap for ePortfolio development for 2010 and beyond.

17:00 Closing cocktail
Learning Forum London 22-24 June 2009