

# A critical review of current literature and policy relating to the future use of e-portfolios in Further Education for learners and tutors.

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## **Abstract**

This Paper describes the various ways of defining an e-portfolio such as characteristics of operation, by model, based on learner use and by their purpose. A review is made of some current thinking on how e-portfolios can and could be used in the light of current and proposed Government policy that relies on the development of e-portfolios such as the need to develop Basic Skills for employment.

E-portfolios have been used very successfully by the generation of web users who are about to come into FE. This knowledge appears not to have figured in Government thinking on how providers of learning might make portfolios available to learners. Consideration is given to using these latent skills in 'Social learning'.

Specific consideration is given to the application for the use of e-portfolios in supporting Tutors to record training and reflection on training for continuing professional development (CPD).

Further consideration is given to ways in which e-portfolios can contribute to learners' needs and ultimately that of the education system in preparing for the emerging global competitive market place and how this broad scenario of circumstances might cohere with how the so-called 2<sup>nd</sup>. Generation Internet uses technology through the use of the e-portfolio. The Project concludes with ideas for further enquiry and application relating to e-portfolios in education.

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### **Introduction and Rationale**

The Government has recently republished an e-learning strategy<sup>i</sup>. The Strategy cites three aims that rely on an e-portfolio to achieve. It specifically refers to e-portfolios and those references remain in the recently published White Paper<sup>ii</sup>. The first is as a record of the learners' ability, learning style, objectives, achievements and qualifications<sup>iii</sup>. The second is as a mechanism to carry a record of achievements across all forms of education and into employment creating a learning record for life<sup>iv</sup>. The Strategy also refers to e-portfolios having mobility to stay with a learner for life as they move from primary education through to employment<sup>v</sup>. Consequently, portfolios are likely to play a central role in learning for all age groups and in supporting continuing employment both in education itself and beyond in the wider world of work. The latter being the role of continuing professional development. E-portfolios have become better recognised in the last few years as technology and access to it has made the functionality required to support e-portfolios commonly available. The aspirations for delivering personalised learning and using e-portfolios is possible now due to the accommodation of technology to support it. Whilst the principles have been agreed, it is unclear at this stage how detailed questions of ownership, accessibility, and content will be decided. As the portfolio is being introduced in conjunction with a unique learner number<sup>vi</sup> that crosses all learning institutions, it suggests the DfES<sup>vii</sup> has a model of portfolio in mind that is centrally controlled and prescribed in terms of portfolio ownership, content, activity, access, purposes to which data is put and location (ie. where the portfolio is held). This project reviews the uses of e-portfolios and considers ways in which it may contribute to current themes in Further Education (FE).

Meeus al<sup>viii</sup> gives a partial explanation for this proliferation of purpose accorded to e-portfolios. They suggest that the original portfolio was a simple, ordered and prescribed set of paper based records of competence, achievement and thus qualification. However the introduction of possibilities that comes by locating the portfolio onto servers that operate across the Internet opens up a range of added possibilities in terms to contributors, added areas for record storage, on to personal storage, tagged reflection and so on. They suggest the education sector has yet to decide where the advantages lie for teaching and learning and how they should be exploited for purposes of assessment and organisation of learning. These new possibilities are both exciting yet still unproven.

A portfolio is not a new phenomenon. It's meaning was first taken from French political language referring to the collection of tasks allocated to the King's ministers.

Portfolios have provided a repository for many groups. For artists it has been their artwork, for financiers it is a collection of stock and shares held. In each case its virtue lies in holding a collection of objects that are not necessarily similar, but the pattern has a personal affinity with the owner. In education, Wikipedia<sup>ix</sup> refers to it as:

A personal collection of information describing and documenting a person's achievements and learning.

In the case of a learner, the collection of diverse objects may include a list of personal achievements, a curriculum vitae, reflective writing, assessed work with tutor comments and qualifications; in fact any combination of information types that describes the learning career of the learner brought into the one place.

Mason et al <sup>x</sup>(2004) define an educational portfolio in terms of learner usage as follows:

*Learners continually contribute to their portfolio throughout their learning life and draw on it for assessment, for job interviews and for maintaining a record of achievement. (Mason et al 2004)*

Portfolios have been a major aspect of the development of National Vocational Qualifications (NVQs) where evidence of compliance with performance criteria and gathering of knowledge evidence is amassed for storage, assessment and future reference.

Ravett<sup>xi</sup> (2006) charts the development of the early e-portfolio from one that simply provides an electronic solution with the attendant benefits of technology for activity that was already done in a paper based model. In this country that would typically be a paper based Portfolio of evidence to support an NVQ. In the USA there is history of them used to gather electronic records of achievement and qualifications. From replication of paper based models, the wider possibilities of allowing the use of personal space for creating writing and storing ideas was added.

This idea of the movement of activity from provider (institutions who declare purpose and structure of e-portfolios) to individuals who create their own content and communities and purposes accounts for much of the confusion or at least wide range of opinions of the purpose of an e-portfolio. The learner-driven model offers so much more quality of experience and value yet lacks the control colleges wish to exert. The introduction of the electronic Portfolio has added two new innovations to the paper-based portfolio.

- It can be easily indexed and cross-referenced where its volume is not limited.
- It can be shared across the Internet allowing others to draw conclusions about the career and achievements of the learner as well as adding comments to the learner's portfolio.

In education portfolios have several definitions. The somewhat ubiquitous nature of portfolios creates difficulty in knowing how best to employ it as a tool of learning. Meuss & Van Looy<sup>xii</sup> (2005) refer to its 'multiplicity of nomenclatures and classifications which it has accumulated' and that this is both its strength and weakness.

## **Describing an e-portfolio**

### **E-portfolios as a model**

Meeus et al<sup>xiii</sup> (2006) list 4 general models of an e-portfolio:

#### **1. Learner centred**

In this model the portfolio is owned by the learner and in effect it becomes the learner space to create, store and share work. It develops a personalised feel under the direction for the learner, including what is kept private or shared. The question of ownership of content and design is considered in more detail later.

#### **2. Competence oriented**

This model implies the storage of work that may have been read and assessed. The Portfolio here becomes a record of qualification and achievement. The disadvantage of this model is that the learner in part loses control of the shape and content of the portfolio in the quest to meet the requirements of presenting work. They may also be a reluctance to preserve anything that appears as an error or reflection on a mistake, yet it may be precisely the decision to keep a record of misdirections that provides such quality of experience.

#### **3. Cyclical with regard to action and selection**

This model uses the portfolio as a learner journey where work completed and reflection in it leads to new avenues of enquiry and creation. Although it appears cyclical it is actually more of a liner journey. The cyclical part refers to the constant accumulation and reflection on learning cycle.

#### **4. Multimedia oriented**

This model uses the Portfolio to showcase the learner's ability to accurately reflect themselves and their achievements for an outside audience. All forms of media are employed to create as subtle and honest a picture of the learner so they are truly seen in the best light. Again the learner may only want to include success stories that may not demonstrate the learning journey.

Another way of defining e-portfolios is to describe learner usage rather than characteristics.

Mason et al (2006) describe portfolios by the type of learner activity it is used for. The full range of activity includes 'collaboration, selection, reflection, projection, and presentation.' This activity describes much of the learner's learning journey, but the portfolio can stop at any point along the line. A Portfolio may not ever be presented, stopping at the reflection stage so the portfolio becomes the sole reference material of the learner author. It relies on the tutor and learner deciding to what degree the Portfolio becomes part of the course (if part of the course at all). The Portfolio may reduce to simply a document store and personal diary.

**E-portfolios by characteristic**

E-portfolios fall into the same range of definitions already provided for portfolios but has the unique characteristic, in that they reside on the Internet in portfolio software or inside a course area such as a Virtual Learning Environment (VLE). They are occasionally referred to as Web-folios because of this. The added value in e-portfolios is that they draw together the advantages for learners that come from using a paper-based portfolio and in using the Internet as a store and means of communication; the e-portfolio combines the two. Beetham (2006)<sup>xiv</sup> defines the characteristics of an e-portfolio as a construction of characteristics:

- a collection of resources
- that provide evidence of an individual's progress and achievements
- drawn from both formal and informal learning activities
- that are personally managed and owned by the learner
- that can be used for review, reflection and personal development planning
- that can be selectively accessed by other interests parties e.g. teachers, peers, assessors, awarding bodies, prospective employers.

Beetham further adds the need for an e-portfolio to have interoperability to allow the learner to take the record between different institutions following a tutor's career.

Other writers have attempted to define an e-portfolio by discussing its application.

## E-portfolios by purpose

Mason et al (2004)<sup>xv</sup> define the purpose of e-portfolios by the kind of learner activity:

**1. Collection & selection**– a place where documents and evidence can be easily gathered together and accumulated throughout a course of study. The documents can relate directly to the qualification but may include records of achievement and personal observations by way of a learning diary.

**2. Reflection** – Through reflection on collected learning experiences the learner learns to make sense of and understand. This material may or may not be shared with a wider group of learners.

**3. Projection** – A learner is able to give a sense of direction to their learning as the information gathered and reflected upon informs the next direction of learning and what needs to be accomplished. This may require sharing and discussing with a tutor or mentor.

**4. Presentation** – Parts of the e-portfolio can be published publically on the Internet making identified objects available to prospective employers and Universities.

Mason et al perhaps provide the most straightforward definition because they fit the purpose of an e-portfolio into recognised learner activity. They imply that an e-portfolio is capable of adding value to any learner activity and therefore the learning experience as a whole. A criticism of this definition is that it perhaps oversimplifies the qualitative aspects of using e-portfolios effectively. The definition makes no comment about how the quality of learning or the learning experience, including social learning is enhanced.

It seems simple definitions of an e-portfolio are not possible and any attempt to do so leads to a wider discussion of purpose, character, model and content.

Perhaps the greatest source of thinking on e-portfolios in the FE sector has been undertaken by the BECTA Technology group. The requirement comes from Priority No. 2 in Harnessing Technology<sup>xvi</sup>. This is the Department for Education and Skills 5-year e-learning Strategy that calls for 'integrated on line personal support for children and learners'.

This requirement has been repeated in the current Bill on FE before Parliament. The British Educational Communications and Technology Agency (BECTA) has responsibility for the delivery of Government policy for e-learning. They see e-portfolios performing many roles for the College, learner and teacher. They suggest that the e-portfolio can perform every role and rather than having one or two roles, becomes central to learning and the recording of learning.

BECTA<sup>xvii</sup> goes further to suggest that:

*Individuals from socially excluded groups can readily access training in ICT and e-learning with appropriate sustainable support systems.*

And that:

*Every learner has a personalised space that supports their individual learning needs by September 2008.*

The suggestion is that e-portfolios will be able to draw in excluded learners attracted by the new ways of learning offered by e-portfolios. This further suggests that e-portfolios can be tools of social engineering in helping to reach potential learners not attracted by orthodox methods of studying and learning. This might explain Government interest in e-portfolios as it addresses wider issues of social exclusion. The British Educational Communications and Technology Agency (BECTA), the Government's chief agency for information learning technologies makes no suggestion as to how learners will be attracted beyond the inference that the use of technology generally will itself be the attraction.

The Government also propose an extension of the e-portfolio to provide personalised space for learners that suggests an area outside the control of the college. Perhaps this is designed to match the freedom enjoyed by people used to using portfolios such as 'My Space, Bebo and U-tube. What is certain is that BECTA see an e-portfolio as a multi-solution tool in teaching and learning, providing not just storage and personal learning space but will reach new learners currently excluded from traditional education. BECTA does not address the more difficult question of ensuring learners use the personal options and areas of the e-portfolio beyond what the learners are required to do by the college. The transferability or transition between learning experiences will be aided by the issuing of a personal learning number that remains with the learner. Some learners may find this unsettling to be given a lifetime account number and may exclude themselves from the whole process.

It is possible to find evidence that e-portfolios are tasked to provide an answer to many problems and in the process and confusion be lost by overstretching. It also ignores the evidence that by far the most effective use of technology such as texting, and other content creating activities works through adoption by the user rather than imposition by the provider. As colleges feel the pressure to insist as an element of a course that a portfolio be used in a given way it loses a degree of learner ownership and to a commensurate extent a degree of value to the Learner.



## The value of E-Portfolios in Further Education learning Experiential Learning

For learners to use e-portfolios to write reflectively and from personal experience requires the development of experiential learning. Experiential learning means to learn from experience and is a component of social constructivism where learners construct new understanding based on personal experience and those of other learners through sharing (see Wikipedia<sup>xviii</sup> (2006)).

Laurillard<sup>xix</sup> (2002) makes a further point about learner knowledge always being situated in experience and that learners learn by placing what they know in the context of where they are and their own experience. She argues that all learning occurs in a known context. She refers to this as 'situational learning'.

The Portfolio could become a place where the immediacy and personalised context of learning can be captured. Another way of describing this approach to learning is 'experiential learning'.

Mason<sup>xx</sup> (2006) describes 2 major ideas behind the value of experiential learning for adults that have value to all learners but particularly in support of FE tutors and their continuing professional development (see below).

Firstly he suggests that adults are able to manage their own learning more successfully than younger learners and rather than concentrate on *subject* learning, and secondly adults achieve more through *experiential* learning. He acknowledges the work of Kolb<sup>xxi</sup> (1984) who describes education as a cyclical process from experience to reflection to application to review. His work is often cited as the theory behind Continuing Professional Development (CPD). It draws on the ideas of Schon<sup>xxii</sup> where learning is not simply reflection on an issue but reflection on the reason behind the issue and attempting to recalibrate the wider picture to address the problem. His so-called 'double loop' thinking is the basis for CPD. There is an argument here to support giving learners more space to think and record their own understanding and having it valued by others rather than expecting learners to follow a tutor led exposition of truth recorded by notes and perhaps lacking any personalised context. The portfolio with its element of privacy, accessibility and ability to join ideas and thoughts together into a network of understanding has the potential to meet this approach to learning very effectively.

Jarvis<sup>xxiii</sup> (2004) warns that when learners receive assessment, 'they frequently treat it as assessment of them as persons'. The difficulty is that reflective writing is often personal by nature and the learner may be wary of allowing reflective or experiential learning to be commented on. It may in extreme circumstances lead to learner self-censorship and writing what the learner believes the tutor wants to read. This compromises the value of reflective writing. Jarvis further suggests that learner self-assessment removes this potential barrier to accurate and honest reflective writing. It would require a remarkably good and trusting relationship between learner and tutor or, as Jarvis suggests the tutor comments on the learners own self-assessment. Whilst the process may appear laboured, it allows the learner in the body of their reflective writing to consider context and reasoning for the views and conclusions they come to. Again, the e-portfolio would be able to support this process.

Wenger (1998)<sup>xxiv</sup> who argues that experiential learning draws on learning as an activity in social participation, where learners live, work and learn in teams. He opines:

*We all belong to communities of practice. At home, at work, at school, on our hobbies – we belong to several communities of practice at any given time. And the communities of practice to which we belong change over the course of our lives, In fact, communities of practice are everywhere.*

Mason holds that ‘the value of experiential or social participative learning is that they create, hold and distribute knowledge in ways that exceed individual capabilities’.

Wenger (1998) sees adult learning as a communal activity where the learning acquires the behaviour and language of the community and uses it to fashion learning.

Taking the two ideas together, it could be argued that an e-portfolio has value in not only allowing learners to create and store learning experiences, taken from the group and fed back in, but they are able to further reflect on those experiences in making sense of the learning offered for themselves. JISC Infonet<sup>xxv</sup> (2006) state that:

*Whatever model or approach you take, the heart and soul of an e-portfolio is reflection, which is a crucial skill in facilitating a journey of lifelong learning.*

It further follows that were this process shared with others in the learning community then it has the value of informing others’ practice and offering the learner further learning from others’ review and criticism. Ultimately the learning community would develop a sense of received practice that could be termed ‘best practice’ as the community sees it. Ravett<sup>xxvi</sup> (2006) sees e-portfolios as pivotal in the life of the Learning Organisation as originally described in the work of Schön. Ravett suggests that the e-portfolio as developed by employees that are then shared within the organisation creates the dynamic engine of the learning organisation. In a college setting the e-portfolio is not only a place to store records of personal professional development, but by the careful and selective sharing of content within the college would create not just professional learning communities but lead to a organisation of continuous learning. The e-portfolio activities helps create a community of learners who are not defined simply by physical proximity or that they even share the same classroom at the same time. Communities are now created through shared interests and endeavours and can become so much more interesting in the mix of experience and perspective brought to each other’s learning.

### **E-portfolios and experiential learning**

An e-portfolio can have the capacity to support initial storage and creation of experiential writing that allows further reflection and sharing across a group. A good example of this in a College would be in a Professional Learning Community (PLC). These were described by Schön as a characteristic of a

'Learning Organisation'. In my college we have established groups like this amongst College Mentors, VLE users and Tutorial Representatives all of who are experts in the field. Users derive a sense of confidence in their practice knowing it is shared and approved by their peers. Currently these groups are supported by a Virtual Learning Environment (VLE) rather than an e-portfolio. Papers and learner reflection (or thinking) is stored centrally as if in a Library rather than in personal areas that are then shared. By not using an e-portfolio it lacks the ability for members to store personal thoughts and experiences so it lacks evidence of individual learning and development that an e-portfolio would offer. Consequently it lacks what Wenger called 'the social capital resident in learning communities'. There is an absence of value that comes with a sense of part ownership. It would be a valuable exercise to see to what degree more ownership of ideas and protocols would bring to the value of Professional Learning Communities supported on VLEs only. Backlund<sup>xxvii</sup> et al (2001) described the value of creating personalised learning folios as a means of combating what they saw as the fragmentation of learning that occurred in universities as the numbers of learner increased without a rise in the number of teachers. The portfolio here is seen as a place where learners who are taught to manage their own learning can store the fruit of that work and by becoming their own learning coach, rely less on the Tutor and thereby redress the problem of fragmented learning. It is interesting that this folio was not necessarily an 'e' version but can never the less be implied from the hypothesis that an e-portfolio helps colleges and Universities cope with issues of loss of quality in teaching and learning as a result of increasing ratios of learners to tutors. Wenger (1998)<sup>xxviii</sup> went on to suggest that the role of educators is to work to help learners become participants in learning communities of practice. This is an extension of the idea of a teacher of adults as facilitator of the learner's own learning and development rather than the provider of it. That would place the tutor as the supervisor of the on line activity (e-portfolio sharing), whether as an adjunct to a VLE community or instead of one and to make sure the e-portfolio was available, workable, understood by learners and that a momentum is started and maintained. The e-portfolio could become the tool by which this approach to learning can be accommodated. This idea has been adopted as an hypothesis by BECTA<sup>xxix</sup> ref and is an underlying premise of their ideas examined later in this Project.

**Ownership of an e-portfolio**

This theoretical approach to the use of E-Portfolios suggests that ownership rests with the individual learner and to a degree to the learning community. By ownership is meant the ability of the learner to determine the structure and content of the Portfolio. This would include the ability to choose the sharing properties, the style, colour and use of images, and the ability to set permissions on what parts of the Portfolio can be seen by others including the College.

However, ownership will be tempered to the degree the College wants to use the Portfolio for assessment purposes and as an official record of learning. There may be further incursion into learner ownership by the setting of corporate colours, logos, layout and compulsory completions such as a personal profile, a learning style audit for example. Any degree of normative criteria setting in the content of the e-portfolio has the advantage of improving the normative assessment of community learning, but detracts from the intimacy and subtlety of the writing that is included in it. This could be argued as detracting from the quality of the individual learning on two counts.

1. It reduces the freedom of learners to write about their experiences. This withdrawal may lead to learners ignoring the e-portfolio as not relevant to their learning.
2. It may also reduce the exploration of learning where the exploration is seen as not addressing the core assessment requirements of the learning.

However it does have the advantage of supporting what may be an imperative outcome of the learning, which is the recording of competence, as in meeting the performance criteria of an NVQ. The loss of pedagogic value is compensated in this scenario by the gain in administrative simplicity of recording all learner achievement electronically.

The success of portfolios such as Bebo and My space and Utube amongst the young can be attributed to the personal ownership of the space and the freedom to use it without instruction from a supervisor is part of its widespread appeal as discussed in a recent Guardian article.<sup>xxx</sup> These spaces are part of the new movement in Internet activity called Web 2.0. A main characteristic of successful Web 2.0 activity is that content comes not from the central provider but from the subscribers and audience of the site. It is questionable whether an educational e-portfolio would be as popular once control of it is seen as lost or at least shared with a college tutor. However, many writers see this new generational development in the use of the Internet as supporting the development of wider communities of learning and part of developing 'e-citizens'<sup>xxxii</sup> who use technology in their dealings with Government and Local Authorities. To a degree these are developments outside the work of education although they are often referred to as informal education because the learning and community development can occur spontaneously and informally. It is interesting to note that in the Epistle project<sup>xxxii</sup> managed by BECTA, due to the limited success of e-portfolio take up one key observation was the degree to which the use of e-portfolios would be 'pull led' by university admissions tutors and employers asking for and using portfolios as tools for assessment for

admission to university and employment respectively. In other words, the use of an e-portfolio is unlikely to be spontaneous and needs an element of imperative to drive its use. The problem is that in driving the use of Portfolio, the supporting of a learning Community may be lost. The answer appears to lie in finding a way for learners to see sufficient value in an e-portfolio to want to use it for their own sake.

Perhaps a synthesis of this debate is to be found in the work of Spendlove D. and Hopper M. (2006)<sup>xxxiii</sup>. Their study was into the use of an e-portfolio in the teaching of new teachers. They described the overuse of 'process learning' as the 'tyranny of the portfolio' that led to:

*a stifling of the critical and reflective engagement by pupils and an over emphasis of the portfolio as the principal assessment tool in the design component of public examinations of the subject'.*

Instead they suggest that the Portfolio should be a haven of creative and reflective activity where the outcomes only were assessed and not the processes used.

They criticised the

*tendency in many schools of the portfolio to be largely made up of predictable manufactured and frequently retrospective work, which diminishes the opportunity for learners to purposefully engage in a design challenge.*

In this instance, they are arguing that the outcome is the only accessible area and by leaving the creative area private to the learner and other learners the quality of the outcomes will be better and the learning experience enriched leading to improved learning outcomes.

Whilst there is scope to question how the teacher ensures all learners remain purposefully engaged in this social constructivist approach to learning outcomes, it seems to offer one way of taking the better of two opposing uses of an e-portfolio and extracting the parts that work. Spendlove's idea suggests also that there may be no absolute position to take and using e-portfolios well remains an issue of pedagogical judgement for the teacher.

**The Portfolio as a record of achievement.**

Storing records of training undertaken, qualifications completed and other achievements have already been successfully captured by some Higher Education providers inside a course e-portfolio. But there is also scope for Portfolios to capture and display demonstration of softer and opportunistic achievements. These are skills that are generally desirable, are often transferable to different situations and are prized as equipping the learner to improve their learning skills for either further study or in employment. The Leitch Report<sup>xxxiv</sup> has recently been published. It was commissioned by the treasury to research and report on the likely skills needed by the British workforce over the next 20 years. It reports that whilst many abilities are measurable by qualification, some skills (particularly the softer skills) are not so easily assessed or measured yet of equal importance to the economy. What is clear is that there is no simple definition of an e-portfolio not because it is difficult to identify but the content and purposes can be diverse. Its purpose ranges from the simple to complex possibilities and the component parts change accordingly. Ownership of content and structure appears to be important in how the learner chooses to interact with the e-portfolio.

The Leitch Report recognises that all ability is measurable by qualification and some skills are not assessed at all. These so called 'soft skills' such as customer awareness are personal attribute that transfer easily to any given circumstance. The Confederation of British Industry (CBI) (2006)<sup>xxxv</sup> refers to them as valuing 'a positive attitude- the ability to make a difference or add value; self-confidence, motivation, regard for others and integrity'. They refer to them generically as generating a positive attitude to the world of work.

It is possible to develop these skills through social study and capture them in action. Clearly working in isolation can't help this kind of development. They could however be identified in the quality of the writing and recording of thoughts and activities by learners in their e-portfolio as a result of interaction between learners. The DfES<sup>xxxvi</sup> say Employers value abilities such as enterprise, and imagination to be fully equipped with the skills necessary to compete in business. The Qualification and Curriculum Authority (2004) Paper: 'Framework for Achievement'<sup>xxxvii</sup> in support of this suggests movement away from set qualifications to allowing the accumulation of learning achievements that will include both formal qualifications and personal, ipsative achievements. The e-portfolio would become the place where an individual learner can gather together all the unique and individual learning experiences in one place giving an employer a coherent picture of the learner's abilities and accomplishments that would include and possibly highlight the softer skills that are so important to employability. The e-portfolio can show the activity, the outcomes and the processes gone through in completing work. The e-portfolio then becomes a record in action rather than simply a record of action.

**The e-portfolio and personalised learning.**

Personalised Learning has been developed by the DfES as an important approach to learning in its own right. It moves the delivery of teaching from mass provision to learning that is designed and delivered in a way that is unique to the needs and preferences of the learner. This includes involving the learner in the provision in terms of pace, style and timetable. It has been highlighted in The Government's current FE Bill. It follows the preceding White Paper<sup>xxxviii</sup>, and draws on many other documents including the Leitch Report<sup>xxxix</sup> on the skills required for employment in a global market and the Government's Skills Strategy<sup>xl</sup> and the Foster Report. If it becomes law, the role of FE colleges will be defined more tightly at upskilling the current and prospective workforce to maintain continuous employment in an ever increasingly competitive global market. In order to achieve this it looks to colleges to develop 'personalised learning', a greater emphasis on teaching and recording skills attained, and developing a culture of learning as a continuous process rather than one taken in steps. In each case the e-portfolio has a role to play. The DfES<sup>xli</sup> (2006) defines personalisation in FE as:

*Working in partnership with the learner – to tailor their learning experience and pathways, according to their needs and personal objectives – in a way which delivers success.*

Personalised Learning is a wider public policy term aimed at:

*'putting citizens at the heart of public services and enabling them to have a say in the design and improvement of the organisations that serve them'.*

Personalised learning is more than customisation of learning on a mass scale. David Milliband (2004)<sup>xlii</sup> as Minister for Education stated Personalised learning in the following way:

*The experience of successful schools shows (that) decisive progress in educational standards occurs where every child matters; careful attention is paid to their individual learning styles, motivations, and needs; there is rigorous use of pupil target setting linked to high quality assessment; lessons are well paced and enjoyable; and pupils are supported by partnership with others well beyond the classroom. This is what I mean by Personalised Learning"*

The Department view (2006)<sup>xliii</sup> is that personalised learning 'recognises that when learners participate in decisions affecting their learning experience, they are likely to play a more active role in the provider's quality improvement process'. An e-portfolio becomes a possible tool to support personalised learning. It can store a learner's unique learning journey. It can be designed and populated by the learner containing a personalised view of the learning experience. It allows the collection of learning experiences unique to the writer. All the activity suggested by Milliband can be accommodated by the use of an e-portfolio as a means of collection of experiences. The ability of the learner to record their own learning experience becomes critical to successful personalisation because the subtlety of experiences will be different for each learner and the tutor would be hard pressed to capture them all and be able to set work that captures it all.

Personalisation also stresses the ownership of content and style of portfolios and plays into the strengths recognised in content creation-rich environments.

It would also require a greater time commitment for the teacher in assessing experience meaning that successful personalisation requires the learner to be far more in control of mapping and recording their own learning experiences; developing the learner as the manager of their own learning, guided by the tutor. Older learners who come from an experience of managing themselves and their life choices better will understand the personalisation approach better than younger learners. However, many learners come to education with an expectation that the tutor provides not just the knowledge needed but also the pace, direction and method of learning. Consequently the successful uptake of e-portfolios relies on weaning learners away from tutor dependency to understanding the underlying concept of the independent learner as well as an understanding of the software that drives the e-portfolio. In the author's experience, learners see technology in supporting leisure and social activity and supporting life style choices, but need to develop the possibility of activity through technology as being also educational. There is scope for learners to be taught how to use technology to develop socialisation into social learning and ultimately social constructivist approach to learning.

Biggs<sup>xliv</sup> (1999) opines by way of warning in the pursuit of social learning that good pedagogical design is still needed and requires all aspects of the learning and teaching to be aligned. There should be no inconsistency between the curriculum, teaching methods, learning environments and assessment procedures if the learning outcomes are to be achieved. The danger with personalised learning is that it can lead to inconsistency caused by loosening tutor control of the learning processes and content in leading to a loss of alignment bordering on chaos for learner learning. One way to perhaps maintain alignment of learning activities is for frequent tutor intervention in the e-portfolio to respond to learner activity, guide and support the learners. Biggs reminds teachers that loosening tutor control and encouraging learner self-management should not lead to tutor abdication of responsibility to ensure purposeful learning takes place.



### **The e-portfolio in Personalised Learning and Social Software**

Owen M. et al.<sup>xlv</sup> (2006) have suggested that the personalisation of learning is facilitated by the development of technology that relies on mutual activity and collaboration of learners beyond simply completing set tasks towards developing their own learning journeys. They suggest that:

*We are witnessing the rapid proliferation of technologies which are less about 'narrowcasting' to individuals, than the creation of communities and resources in which individuals come together to learn, collaborate and build knowledge (social software)...we believe offers significant potential for the development of new approaches to education.*

In a sense this mirrors the development of the Web 2 or 2<sup>nd</sup>. Generation Internet users who are characterised as content creators rather than content recipients. Apart from the many repercussions this has for teaching in general it signals another development for the use of an e-portfolio as a place to collect, organise and share content created through social learning interaction. It further suggests that the content of a portfolio is as much a consequence of the company learners keeps and the interactions they share with their fellow learners influences how the portfolios are developed and populated with content. Social learning has been defined by Shirky<sup>xlvi</sup> (2003) as: 'software that supports group interaction'.

In 2006, Futurelab describe social learning thus:

*If learning to learn, if collaboration, and if the personalisation of educational experiences are at the core of current educational agendas, we need to find ways of enabling young people to come into contact with, collaborate with and learn from each other and other people. Social software is about bringing minds and ideas into contact with each other and is already in the world outside schools, creating ..... the Global Village.'*

It is interesting to note that in 3 years, the idea of social learning has moved from a definition that describes the enabling technology to a definition that describes the learner behaviour where the technology is secondary or supportive to the behaviour. Learner behaviour is seen as the dominant area of development and that technology remains subordinate to the business of learning. This may have profound implications for the way the use of technology is brought to bear on teaching and learning. Currently Virtual Learning Environments and college prescribed e-portfolio are designed and teachers who develop pedagogically based design skills primarily drive their use. Social learning suggests the design and track of teaching and learning resides in the group collectively. The teacher becomes the guide or question master as learning is steered rather than set around outcomes.

Perhaps the most significant thing in social learning is that the learners choose, within the confines of the agreed learning outcomes the place, time and method of learning, how they wish to conduct their learning and where they wish to dwell and explore further on their learning journey. The 'class' is defined by who

chooses to become part of the group and learning may appear as an informal but no less important by-product of the activity. For educators it marks a move away from mass customised content and activity provided for learners to experience to the learner providing the learning and merely seeking guidance and direction which may not even come from the teacher. The question is whether educational outcomes that are invariably overt, formal and measured can be accommodated and achieved.

The prevailing requirement of social learning is the creation of content that is created, stored, reflected on and shared with others and the Portfolio seems to be emerging as the tool of choice in achieving this. This view is strengthened by the degree in which future FE students are already engaged in this type of activity and will therefore, as they enrol on college courses see it as a standard way of involving methods of using technology with which they are comfortable into an educational setting.

**The Portfolio in lifelong learning**

Another theme of the current FE Bill is the imperative of learning occurring throughout life, referred to as 'lifelong learning'. Due to the demands of a global market place workers need to accept change as a constant and that learning continues as an ongoing task commensurate with wider changing world of work. Schon<sup>xlvii</sup> refers to the Learning Organisation as one that survives because it is in a state of constant renewal. The Workplace therefore becomes a learning workshop and new skills are always needed. The e-portfolio provides a place where new learning can be identified, discussed and recorded as it occurs. For some the e-portfolio will become the indispensable record of this continuing professional development. One might speak of a triangulation of interested parties (learner, tutor and employer) meeting in the text and activity of the e-portfolio, And it's purpose may become critical due to the complexity of change in the workplace that requires workers to be adaptable and creative in how they move between jobs. The place of an e-portfolio becomes important as a point of certainty and stability where the individual record can be stored. It gives workers a space to reflect and follow what is happening to them in terms of learning and work experience. The e-portfolio therefore can act as a point of reference in a tumultuous working world. Much work is still required to make sure learners have access to portfolios (or at least their contents) that can travel with them including those still in formal education who require a portfolio that can move with them between learning places.

## **The e-portfolio and the accumulation of new skills**

Despite the amount of literature available on the need to develop skills suitable for employment, there is little stated by the Department of Education & Skills by way of specifically defining these skills. The interim Leitch Report<sup>xlviii</sup> made clear that the lack of them in the workforce would become an increasing crisis in the future health of the British economy. In the final report, Leitch (2006)<sup>xlix</sup> describes the skills in two groups, specific skills, such as those required to undertake a job, role or craft and general skills required of all, such as team working, communication, IT and numeracy skills. The Confederation of British Industry (CBI) in their response referred to the importance of social skills such as creativity, entrepreneurialship and adaptability should be acquired in education such as reflect the world of work. They state that:

*Vocational education need not deliver workplace expertise – rather an understanding of the world of work<sup>l</sup>*

The question is how these skills may be recorded or claimed unless discrete assessments are devised to measure adaptability and creativity. It is more likely that these skills will emerge from using them in other tasks and in social situations so creativity will be shown in interpreting an assignment brief or solving a problem as an assignment task. It is interesting to note that learners who use social software already have the means to demonstrate the ability to create content, formulate and share ideas and take part in group action. The intriguing question is whether this ability to perform these skills in a social setting can be changed to demonstrate them in use in a learning or work setting, and if so, whether the employer, teacher will join the learner in this virtual space.

Perhaps the activity of writing in portfolios in a social learning setting and the resulting production is evidence itself of basic skills, captured by identifying process and outcome in reflective writing through the use of a portfolio. So e-portfolios may become the preferred tool to both capture achievement of basic skills and to demonstrate them in action too.

**The e-portfolio as a published list of accomplishments**

The Internet and some e-portfolio packages allow the selection of component parts to be marked for publication generally or to others behind a password access. This has particular value for assisting employment opportunities or in support of admission to Higher Education. However the assistance is only as good as the detail contained and the ease with which it can be accessed and thus understood. It is important that any prospective employer requires the information presented in a way that allows for a rapid assessment of the roundness of the applicant's application and suitability to the role advertised. Consequently there has to be content of sufficient quantity and quality and the data has to be seen as a reliable indicator of the learner in relation to the post sought. That requires a good deal of thinking in terms of the design of an e-portfolio that is able to do this easily. Further, it is important that the content and summary published can be altered to allow for different purposes. A learner applying for Higher Education will require a different approach to publication to a learner applying for a vocational apprenticeship. It is clear that learners will require a good deal of flexibility in how the e-portfolio will present and be configured to create outputs fit for the purpose required. Higher Education may want to see writing that shows understanding and development of ideas, whereas an employer may wish to read about experience and perhaps social achievements.

**The e-portfolio in supporting Qualified Status, teaching and learning.**

From September 2007, the Government through the DfES Standards Unit<sup>li</sup> plans to license FE tutors to teach on condition of their providing evidence, amongst other things, for a record of at least 30 hours of development activity that has been reflected upon and stored in a Portfolio that is available for scrutiny. The writing provides a record of any activity that can be defined as personal professional development that takes place in annual cycles once initial teacher training has been completed. The learning is personal and the choice of what activity to undertake is a personal choice dependant on the teacher's role and the requirements of the post held. The Department see a Portfolio used to collect the records necessary to establish successful continuing profession development (CPD)<sup>lii</sup>. The purpose is to raise the professional status of teachers working in FE to a par with teachers in schools. What is studied is a matter for agreement between the teacher and their manager. It will always involve the professional needs of the teacher, often described at the job profile. Reviewing current literature and thinking on the utilisation of e-portfolios, it is clear the portfolio can easily contain a personal record of reflective writing, a log of training completed and the aggregated hours spent on CPD. Reflective writing can be dictated directly into the Portfolio and it will be possible to share content with named supervisors and managers.

However it is likely that the Portfolio design will fit the model of a record of achievement and be used in a prescribed form. That reduces it's value to staff as a place for personal reflection and file storage unless the portfolio allows for complete privacy with a gateway provision where shared items can be placed for viewing by others.

Because staff are likely to move between teaching posts the Portfolio either needs a central server address that does not change or needs to be interoperable and transferable between servers to allow seamless transition between employers.

An advantage of using portfolios is the ease with which content can be seen and evaluated without the ensuing problem of transportation of quantities of papers with the attendant risk of loss and damage.

A further aspiration is that the Portfolio can be used to lodge learning objects and guidance allowing tutors to use the Portfolio to work in rather than simply used to store work<sup>liii</sup>.

There is a further aspiration to provide tutors with mentors to support CPD. Again the Portfolio could be used as the vehicle to support on line e-mentoring, keeping a record of discussion and support inside the Portfolio in a private space<sup>liiv</sup>. The process is to be overseen by the Institute for Learning (IFL) who will want to sample portfolios from college on whom the main burden of supervision will fall. Again the use of the Internet will remove the need for posting paper portfolios.

Bearing in mind the claims of literature for what is possible electronically, the portfolio could be used for so much more. The portfolio could also:

- record personal achievements to make available to prospective employers
- provide a blogging space for tutors to talk to each other about teaching issues
- maintain a register of all training undertaken and qualifications achieved.

## The costs

Some branded portfolios such as Pebble Pad will cost around £13 a year to maintain. Others are open source so are available free of charge. However the functionality of a portfolio can be very broad and open source versions (such as ELGG <http://elgg.net>) are in the early stages of development that are characterised by a limited range of functions that so far do not meet even the basic needs of wider CPD portfolio requirements. There would be further barriers of non-interoperability as tutors attempt to move the portfolio between different brand portfolios. A National portfolio would resolve this issue and there are discussions continuing between National suppliers and the IFL to achieve this. Teachers will be expected to pay towards the cost of their portfolio. Research shows that any action that strengthens the sense of personal ownership will increase the chances of it being used.

Paying for a personal portfolio may strengthen the sense of ownership of structure and content. Any cost would be tax deductible as a charge against the maintenance of professional status.

Paying for a Portfolio is likely to have a converse effect on learners. It is likely that any costs to learners of a portfolio would be drawn down from course fees. It is unlikely learners would voluntarily pay for a further portfolio when many are very active in at least one social software application already. It will also raise the question of ownership and learners may choose to remain active in other areas already established, using Portfolios only where they are required to do so.

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## Conclusions

There is a danger that e-portfolios are defined in terms of how they lead on from activity in VLEs. They are seen as storage space for activity rather than being assessed for what they might offer on their own. This is not to say that there is no relationship between the two. It is still possible to define an e-portfolio in terms of where it continues on from activity undertaken in a VLE. This is so in models where they are used as records of achievement and were strongly reported upon in American universities. These studies had the value of being very prescriptive about how they should be used and what should be place in them. Consequently compliance amongst learners was high. What is clear is that they can be much more than this. Firstly the fluency of use of portfolios by students who will be entering FE in the next few years will create an expectation for their use because learners are likely to use them in spite of colleges for their own learning purposes. Younger learners who make up the next generation of e-learners, typified by being younger than the internet, have used the technology to create portfolios that are social, interactive and occasionally collaborative, and personally owned.

Secondly there is a Government expectation that they will support lifelong learning and become a central feature of this initiative. They will at least become repositories of learning outcomes, stores for records of achievement and vehicle to transfer learning records from one institution to the next.

The question is whether these two drives for implementation will meet in one Portfolio or whether learners will expect to have several of them depending on the community in which they are shared.

Thirdly the Government are raising the need for all learners to develop standard set of skills based on numeracy, literacy and IT. They also want 'life skills' developed to prepare young people for a world of work where competitive globalisation will require a workforce with enabling skills.

Based on my conclusions of the literature reviewed:

1. Teachers should seek to find and engage with learners in their own learning spaces, by invitation of the learner rather in the ones created by the college. The literature acknowledges the skill and usage of portfolios by the web 2-generation users, but has not considered whether a teacher should work in the learner's space rather than a college space. An acceptable method of working in this way would provide immediate access to a learner's ready made domain that is already established and in which the learner is an accomplished operator
2. Teachers must consider how to give up some control of learning activity and the pace of learning to learners yet still find a method to hold responsibility for the impact of the learning. The literature I have considered suggests that this may become an irresistible force for change in the future.
3. Consideration should be given to learners having more than one portfolio where this serves the learners' interests. There is a drive nationally to devise a comprehensive portfolio capable of providing everything for all circumstances. For many this 'multi portfolio' position is already the case in



practice. A learner has a personal portfolio and a second given to them by their college or University. Where the purposes are clearly distinct between a personal portfolio that centres on social activity compared with a college portfolio that is a record of achievements that would suggest sufficient difference exists between the two to make this a rational choice. This is a workable solution worthy of consideration alongside other options being investigated (such as devising a comprehensive portfolio) that might avoid the danger of creating a Portfolio that is so complex in design or unclear in operation and purpose as to be unusable, or unwanted, or distrusted. This would appear to be a reasonable default position and movement towards a unified Portfolio should only be made where there is clear advantage.

4. For FE Tutors undertaking eCPD the situation is very different, and the challenges of e-portfolio use for college learners are very different to the needs of college tutors. The e-portfolio will be used to fulfil Departmental requirements that are very prescriptive. There should little concern that it will easily meet the requirements.

What is more interesting is how else the e-portfolio will develop in time to perform other functions. Perhaps there is an opportunity for tutors to learn from the younger learners how to use portfolios more effectively.

If all other achievements, record of valediction, qualifications received and references were added, the CPD portfolio could be used for prospective employment, perhaps as a tool to assist short listing and ultimately be valued as something more useful than a record of CPD.

5. Leadership must emerge within FE to meet the challenge is to find a way to effectively bring together into a coherent structure the following imperatives:
  - The working world with the desire to offer continuous lifelong education that is accurately recorded in a way that informs next development.
  - The College requirement to provide personalised training and education within a new culture made possible by the application of technology
  - Accommodate the way the prospective working population use technology, the so-called web 2 generation, which is arguable at odds with current practice.
  - Provide the necessary leadership in FE to help colleges remove the barriers to change that allow what some may see as educationally treasonable acts of sharing class leadership development of learning content and sharing responsibility for learner activity with the learners themselves.
6. That FE tutors adopt the use of an e-portfolio to collect evidence of training and personal development along with the records of hours spent in CPD and reflective accounts of how the training has aided personal development. The e-portfolio should be based on a record of achievement model and be common in design to all FE institutions to allow for transferability between colleges.
7. Once e-portfolios for tutor as have been established, further development work should be undertaken to see if other, personalised benefits could be added to the e-portfolio to exploit the wider range of functions possible.



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