The Enhancing Series Case Studies:  
Enhancing Learning through Assessment

Assessing Work-related Learning Using e-Portfolios

Ian Beattie  
Liverpool John Moores University

Introduction

To be effective, work-based learning (WBL) must involve not only acquiring knowledge and skills related to the world of work, but the development of a meta-competence of ‘learning to learn’. According to Lucas & Greany (200: 5) ‘learning to learn’ is

a process of discovery about learning. It involves a set of principles and skills which, if understood and used, help learners to learn more effectively and so become learners for life. At its heart is the belief that learning is learnable.

This statement comes from a schools context but learning for life is an important notion and this meta-competence has the opportunity to flourish in setting personal learning goals for work-based learning. Accordingly, assessment of and support given to recognise evidence of competence is vital. (Allin & Turnock, 2007).

JISC states that

the primary aim of an e-portfolio may be to collect evidence for summative assessment, to demonstrate achievement, record progress and set targets or to nurture a continuing process of personal development and reflective learning (2008, p.6).

The e-portfolio has the potential to allow the student to collate, in one place, goals and evidence for personal learning and achievement of assessment criteria.

E-portfolios can be a valuable assessment tool (Lorenzo and Ittleson, 2005) and we must remember when enhancing assessment practice that ‘there are important
considerations …’ (JISC, 2007b, p.8); certainly the approaches and methods used to support and assess WBL need to be robust.

Rationale

According to JISCinfoNET (2006) ideal assessment should be valid, reliable, practicable, fair, and useful to the student. It should demonstrate whether, and to what level, students have met the intended learning outcome(s) of the course, programme or module.

Increasingly, evidence indicates that a well-planned and well-installed diagnostic and formative assessment can foster more effective learning for a wider diversity of learners (Nicol, 2006; Sharpe, Benfield, Roberts and Francis, 2006; JISC, 2007b). At the most fundamental level the rationale for developing e-portfolios in assessing WBL and subsequently work-related learning (WRL) is the need for improved assessment methods.

Students are assessed in three stages at Level 5 of the Sport Development programme. Through the completion of these stages, students must identify key areas for their development and in doing so must identify individual learning requirements.

Stage 1
Pre-placement: the key question for students is ‘What do I want to get out of this placement?’ Before the end of Level 4 students must have completed relevant paperwork and had a meeting with their personal tutor. At this tutorial, students discuss the paperwork (a learning agreement containing their learning objectives, a SWOT and a Skill analysis of themselves, a curriculum vitae and an action plan for their WBL placement).

Stage 2
During placement: students are required, two weeks into placement, to e-mail their tutor with any adaptations and justifications for changes to their learning objectives/action plan. If no changes are to be made they must also justify this decision.

Stage 3
Post-placement: students have to answer the question ‘What did I get out of my placement?’ They present an informal, concise summary (lasting five minutes) to answer this question for their tutor and tutor group.

Finally, to complete the portfolio, they must complete all the elements described above from Stage 1 demonstrating development, undertake a reflection of the WBL experience and produce an action plan to feed forward into their final year. When carrying out their reflection students are asked to consider the following questions:

- What have I done?
- What did I achieve?
Where is the evidence?

The move to e-portfolios came about for three reasons. Firstly, there was an argument that conventional portfolios are just a collection of documents relating to learner progress, development and achievement and whilst it may be reasoned that an e-portfolio is just a similar collection of electronic documents, it is the connectivity and usability of the electronic portfolio that gives it added value (Beetham, 2005). The ability afforded the student to interact with the collection of documents furthermore gives it a certain distinctiveness. The second point relates to the reduction of paper waste. Thirdly, the move to electronic submission came as an acknowledgement that the development of IT skills is an important graduate attribute.

The third and final point is important if one accepts that amongst the key education challenges for the UK is the need to develop a more highly skilled workforce to compete in an increasingly competitive global market (Leitch, 2006). This is as relevant in today’s economic climate as it was when first published and is unlikely to change.

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JISC contend that the introduction of e-assessment can enhance the quality of the learner’s experience when developed alongside the pedagogic approach used, and indeed that “e-Assessment can play a significant part in a more flexible and personalised environment for learning…” (2007b: 10)

The robust assessment of WBL and WRL, along with a student-centred approach to learning, is integral to the programmes delivered by the Sport team in the Centre for Sport, Dance and Outdoor Education at LJMU. The added value and importance are embedded in the ethos of the Centre staff. This philosophy has been implicitly and explicitly developed since the programme’s inception in 1999 and in subsequent programme reviews and validations. The enhancement of learning, teaching and assessment is the focal point for each member of staff, through staff development days, planning days or away days.

Furthermore, the ability to capture and demonstrate ‘a set of achievements …that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy’ (Yorke & Knight, 2006 p.3) whilst not the exclusive rationale for developing e-assessment, lent weight to the argument for it.

Employability is introduced and explained to students in their programme and module handbooks, in personal tutor sessions and through personal development planning (PDP) at all levels of the programme. This process begins as soon as the students start Level 4. In fact, even before joining the university potential students are made aware of the importance of employability in the programme and the university. This happens during interview days at which the Admissions Officer welcomes the candidates to the day’s proceedings and gives them an overview of the institution, the programme of study, the WBL and WRL during their
undergraduate studies and the importance of preparing themselves effectively as graduates entering the world of work.

The Centre for Excellence in Teaching and Learning (CETL) in Leadership and Professional Learning is hosted at LJMU and the programme team subscribe to and advocate the overarching aim of the CETL. This is to develop existing innovative approaches to WRL and in doing so, to enhance students’ vocational, leadership and entrepreneurial skills.

The Sport Development programme has work-based and related learning at all levels with a current intake of 100 students into Level 4 of the programme. PDP is an integral component and the students undertake a year-long PDP module at Level 4 which leads into PDP throughout Levels 5, 6 and beyond. The PDP module at Level 4 includes assessment tasks which require the students to create a personal website and an e-portfolio.

Over the years the team have used a variety of resources to support or assess students while they are on placement, as a part of PDP and through the work-related elements of the programme. These include Blackboard Discussion Boards, the Blog tool in Blackboard, e-portfolios and Facebook.

The use of e-learning resources in the sport portfolio in the Centre for Sport, Dance and Outdoor Education at Liverpool John Moores University had humble beginnings in 2004 with a group of nine Level 5 students using the discussion boards during their placement. This led to the integration of a variety of methods into learning, teaching and assessment (LTA) as a consequence of institutional policy and guidelines (such as the ‘Blue Book’ – LJMU’s guide to effective assessment practice, LJMU Plus – the University’s initiative to add value to the student experience and the LTA Strategy and implementation guide). The programme team continually review the relevance and currency of the programme in Annual Monitoring Reviews, the feedback from National Student Surveys or in informal debates. The developments across the CETL have also led to numerous initiatives and new practices. All of these are driven by a focus on student employability.

After receiving a Teaching and Learning award in 2008, a project was implemented to develop an e-portfolio for a pilot group of Level 5 WBL students. This was a part of a bigger scoping exercise looking at the development of continuity in the use and application of a variety of e-learning resources across the cohort. The use of e-portfolios to assess Level 5 WBL became a key driver in this and led to the inclusion of the WBL module in a university-wide project on the online submission of coursework.

The e-portfolio is an attractive means for assessing WBL because it can be used ‘to collect evidence for summative assessment, to demonstrate achievement, record progress and set targets’ or ‘to nurture a continuing process of personal development and reflective learning’. (JISC, 2008: 6). For the purposes of the WBL module, we decided that all these options were appropriate, in keeping with the range of purposes that e-portfolios might serve across a lifetime of learning (JISC, 2007a). Remember, the meta-competence of ‘learning to learn’ has been regarded as being important in achieving effective work-based learning. It can also be said...
that the PDP activities from Level 4 through to WRL in Level 6 and beyond lend themselves easily to adopting and embracing e-portfolios.

We evaluated a number of e-learning resources and found that they were effective and useful for understanding, reflecting upon and evidencing personal learning and development via WBL at Level 5. PDP is not the sole property of WRL. Students undertake PDP across all levels; partly, this follows from work carried out by the team to embed PDP and partly from institutional-level requirements for PDP.

While we acknowledge that the ‘variety of applications of e-assessment reported and their innovation and general effectiveness indicate the potential of e-assessment … and the ability for e-assessment …to significantly enhance the learning environment and the outcomes for students…’ (Open University, 2006: 4), it is crucial to be aware that embracing e-learning leads to possible information overload. It was felt that the use of resources was largely on an ad hoc basis; and so this project aimed at a systematic approach for the use of e-learning across the sport portfolio. By developing a framework for Level 5 WBL assessment and linking this to other levels and modules, we hoped to develop consistency and clarity for the students.

**What is the activity/practice trying to achieve and why?**

Through this practice we aim to provide an effective means for the auditing and evidencing of graduate skills. In the past, students have presented their WBL portfolios in a paper-based file which at best allowed them to provide creative evidence (by using supporting appendices) on their placement but, at worst, required a forklift truck to collect the work for marking.

WBL assessment requires reflection, and this is enhanced by the effective use of e-learning resources. The ability to hyperlink to provide evidence, external links, audio and video clips to support the reflections required in assessing WBL all offer students the opportunity to develop efficient and coherent e-portfolios.

**What are the main features of the approach taken?**

While the use of Blackboard to provide ways and means of assessment of WBL and WRL has been developed in a variety ways at LJMU, it is the e-portfolio for Level 5 WBL which is the focus of this chapter.

The Level 5 WBL e-portfolio built on the framework that was designed following the pilot project with the Level 5 group in 2008. The design of the framework enabled the students to develop their e-portfolio of evidence for the WBL module undertaken at the start of Level 5. The module requires students to carry out a minimum of 20 days in a placement of their choice and is assessed through three explicit stages, with tasks undertaken at each stage as shown in Figure 1. The move from Stage 1 to 3 allows the students to reach a point where reflection on their practice is supported by the evidence they collect at each stage.
Figure 1 – The process of completing the WBL section of your PDP portfolio.

**STAGE 1**
*Consider – “What do I want to get out of this placement?”*

- Undertake Key Skill Audit & Self SWOT and write CV
- Write Overview of Placement
- Complete Learning Agreement/Objectives
- Create Action Plan for WBL
- Have tutorial to have Stage 1 signed off.

**STAGE 2**
*Send e-mail to Tutor at midway point. Include amended Action Plan (if applicable) and justifications for choices made. You must justify why you have or have not amended your plan.*

**STAGE 3**
*Ask yourself – “What did I get out of my placement?”*

- Deliver 5 minute presentation to Tutor & Group
- Update paperwork from Stage 1
- Complete reflection of WBL experience
- Create Action Plan for Level 3

Finally build relevant section (including appendices) in PDP Portfolio.

By using the process diagram illustrated in Figure 1 we designed a framework of templates to allow students to create and develop their e-portfolio using the three stages. Additionally, blank templates were created for the various elements of required paperwork. These templates were developed as a part of the pilot project and were subsequently developed and amended for the following academic year. Before the submission of e-portfolios, copies of paperwork were made available as
Microsoft Word documents and added to the Module Content folder in Blackboard along with the module handbook. These Word documents are still included and give the students the choice to use the templates designed in the e-portfolio or use the Word documentation in creating and developing their own e-portfolio.

When the students return to university on completing their WBL, they attend a lecture on developing their e-portfolio in Blackboard and then use the dedicated tutorial support given through the tutor system. It is in the first of these tutorials that students begin the process of completing Stage 3 by presenting an informal overview of their WBL to their tutor and peer group. Discussions take place at this time relating to the development of the e-portfolio and students can use tutor support prior to submission of work as they can with other assessment tasks.

On completion of the e-portfolio, students share their work with the Module Leader and their tutor. This enables moderation to take place and it also enables the External Examiners to be able to view and comment on the e-portfolios easily and efficiently.

**How effective and appropriate are the e-portfolios?**

Evidence to date is encouraging. The student feedback received from the pilot group was positive. When asked “What did you like about the e-portfolio?” responses ranged from

- the e-portfolio is neater and tidier and allows for further development of ICT skills

  to

- liked the outline of the whole thing, the colours and so on...it makes it look very professional.

When asked what was disliked about using the e-portfolio, one student commented that

  Uploading data and media was frustrating at times as it didn’t always work. It did take a while to get used to and make sure that everything was appearing when I opened the e-portfolio.

However, students who made broadly similar points to these consistently added: ‘...but other than that I had no problems’. Every student stated they would use the e-portfolio again and all the pilot group are using an e-portfolio within Level 6 modules where appropriate.

Marks for those using the e-portfolio in this module were very good compared to those who submitted paper-based versions (an average mark of 80% as opposed to 60%) although as the pilot project consisted of less than 20% of the overall cohort, we should avoid reading too much into this. The portfolio (in either of the formats) was worth 100% of the module mark and the completion of the three stages and required number of days is the prerequisite for the portfolio. Students are given a
module-specific handbook which offers guidance on these requirements, and the tutor support system allows discussions and negotiation to take place to ensure that the learning outcomes of the module are met. Whilst caution is advised, the average mark and standard of work alongside the comments of the students was heartening.

The entire pilot group used e-portfolios in other modules to evidence practice where appropriate and anecdotally said that having used the e-portfolio framework for WBL helped them be more confident in approaching and using other e-portfolios. The use of e-portfolios was not new to the cohort but the developments in terms of a framework for assessment of WBL were, and all the initial signs are encouraging. The students embraced e-portfolios as a valid method of evidencing their knowledge, skills and understanding across a variety of modules. The students from the cohort who used the e-portfolios have become advocates for the adoption of this method as a valid means to provide evidence for assessment in other modules.

Two Level 6 students who had used e-portfolios the previous year assisted in the work undertaken with the Level 5 pilot group. They provided support to the students during pre- and post-WBL sessions. Their input was invaluable. It should be noted that the staff from the Learning Development Unit (LDU) and CETL ICT staff at I. M. Marsh Campus provided support to students and created the initial templates which mirrored stages one through to three, as seen in the process model in Figure 1.

There are two points to acknowledge here. Firstly, the development of these innovative approaches to assessment required investment, be that of staff or financial resources. Secondly, by engaging the students in the process of developing the assessment method, the students acquired a sense of ownership which led to wider adoption by the students of the programme.

A further point to consider when analysing the appropriateness of the e-portfolio in assessing the students can be seen in the standard of reflection in the e-portfolios. The evidence provided to support the e-portfolios was also very good and demonstrated the usability of the e-portfolio to hyperlink and be interactive. Figure 2 shows a screenshot from one e-portfolio to illustrate this.
There was an unexpected outcome for academic staff relating to the marking of the e-portfolio: it was an easier process than before. Consequently, the decision was made that all Level 5 students would, in future, submit their work in this form. A final point of note is that the Level 5 cohort for academic year 2009-2010 achieved 61% average for the module with 20% of the students achieving a mark above 70%.

What enabled the practice to work and what lessons were learned?

The pilot group of Level 5 students consisted of nine students from one tutor group but a further five students joined the initial group. When asked why they wanted to submit an e-portfolio, all the additional students said that they had seen how the pilot group were progressing with their e-portfolios and they wanted to do the same. One student commented that having seen his housemates developing their e-portfolios, ‘I realise that the evidence I have collected can be presented much more effectively in an e-portfolio’.

Above all, it was the drive and focus of this group of students, in allowing the examination and exploration of the templates and framework in the pilot project, which enabled the project to work. This allowed the 2009-10 Level 5 cohort to use the e-portfolio to submit their assessment task for WBL.

The barriers and challenges faced were, as always, time constraints and occasionally, there were technological errors (although these were quickly remedied with support from colleagues).
Assessing Work-related Learning Using e-Portfolios

We would strongly recommend that colleagues interested in this approach embrace the potential of e-portfolios, perhaps initially for work-based learning if not for PDP as a whole.

- Don’t be afraid of the technology.
- Innovative practice is not without its challenges but in embracing these encounters there can be interesting rewards.
- Encourage the students to be creative by keeping in mind the meta-competence of ‘learning to learn’.
- Lead them to explore the boundaries beyond which that sought-after independent learner might appear.
- Finally, use students to support students where appropriate.

References


Biography

Ian Beattie is a Programme Coordinator for Sport Development at Liverpool John Moores University. He is a year tutor and is also the Work-Related Learning Coordinator and the creator of a management group made up of industry professionals and academic colleagues brought together to enhance the curriculum. Before taking up his post at Liverpool John Moores University, Ian worked in the health and sports management industry for over 12 years in both the public and private sector, and was Club Coach for MerseyTri triathlon club.

Ian is an alumnus of the BA (Hons) Sport Development with PE course, and is currently undertaking an MSc in Sociology of Sport and Exercise. He has research interests in the use of sport development processes and initiatives within private/public sector leisure/sport and health provision and also Management Processes and their use within health, fitness and sport. Ian is the Chair of the North West Health and Physical Activity Forum and a member of the Wirral Physical Activity Board.

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