Evaluating Online Personal Development Planning Tools for Use in an Art and Design Context

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Abstract

Personal development planning (PDP) is a phrase that encompasses a number of activities including reflecting on learning, recording of achievement and career planning. Embedding these activities is a goal widely shared across HE, but strategies for achieving it vary widely. This paper provides an overview of some of these strategies including online web-based tools developed to facilitate the PDP process.

The paper describes an ADC-LTSN funded research project which evaluated a PDP system embedded within a managed learning environment specifically developed to support teaching and learning in an art and design context.

The evaluation has resulted in a reappraisal of the way in which PDP can be supported online and makes recommendations for future developments in this rapidly developing field.

Introduction and Rationale

In 1997 the Dearing Report made recommendations for the introduction of Personal Development Planning (PDP) into Higher Education. The report called for Higher Education Institutions to introduce 'progress files' which should consist of a transcript to record student achievement and a method where students could "…monitor, build and reflect upon the personal development." There have been a variety of responses to these directives ranging from the introduction of face to face taught modules integrated with existing courses, to web-based PDP tools accessed through university intranets. This paper describes an ADC-LTSN funded evaluation project, which set out to examine the various models of PDP systems and to review GraysNet, a managed learning environment (MLE) developed at Gray's School of Art.

The specific objectives of the research project were as follows:

1. To critically evaluate relevant research in assessment /profiling.
2. To evaluate the effectiveness of an on-line PDP and assessment tool, which acknowledges the experiential nature of learning in Art and Design.
3. To explore the usability of this online tool for self/peer appraisal and assessment in situations requiring collaborative group learning.

The research was conducted in three main areas: a literature and web review, an evaluation of GraysNet and face to face workshops with students.

The literature and web review aimed to look at PDP and web-based PDP tools and to investigate the literature in related areas such as reflection, assessment, and personal and professional development. Our rationale for doing this was to identify research areas related to PDP, PDP resource sites, to gain an understanding of other institutions experiences of implementing PDP processes, to review existing on-line PDP tools to identify issues concerning best practice, and to decide which features of an on-line tool appear to be most effective in supporting students. Issues investigated as part of this review included how reflection can improve learning, reflection and professional development, how technology can support the learning process, assessment issues in higher education, and whether reflection should be assessed.

The evaluation of GraysNet aimed to consider the usability of the system and to understand students' experiences of being asked to reflect on their learning on-line in an art and design

context. The workshops with students were intended to provide a greater understanding of what PDP support a student may need throughout a course.

In order to provide a more transparent and reliable approach to learning, it is essential to make explicit to the students the learning outcomes and assessment criteria. An on-line system that can be used in studio-based work can help to provide a robust and fair assessment procedure for students and staff by providing easy access to relevant learning resources. In designing such a system, GraysNet, we took a constructivist approach to learning (Dalgarno, 1996; Grabinger & Dunlap, 1995). There is an increasing recognition that there needs to be a shift from passive, transmissive learning towards an active engagement in learning – an approach referred to as constructivism (McFarlane, 1997; Jonassen, 1996). Constructivism involves the individual in the construction of knowledge, making of meaning and modification of own representations of reality through experience and negotiations in social interactions and discourse:

- *Students should be assessed formatively, serving to inform future learning experiences;*
- *Students should be encouraged to become self-regulatory, self-mediated, and self-aware;*
- *Teachers serve primarily as guides and facilitators of learning, not instructors;*
- *Teachers should provide for and encourage multiple perspectives and representations of content.* (Doolittle, 1998)

This research is directly relevant to the assessment process in a studio-based context and it is hoped that it will lead to improved clarity between what is expected of students and how that work is being assessed. The template within the system is adapted from models put forward by Race and Brown (Race *et al* 1993; Brown & Knight, 1994).

PDP has the potential to provide a framework for:
- identifying gaps in understanding and negotiating a 'route-map' for progression
- ensuring that staff and students work from the same premise and aim for the same learning goals
- exchanging information and resources in relation to individual needs
- enhancing motivation and reflective learning in relation to individual needs
- the exchange of feedback about what is required of the student and how it can be achieved

The information from the PDP process can be digitally archived and can therefore generate statistical information for the purpose of quality assurance (QAA for HE http://www.qaa.ac.uk/COPaosfinal/genprint.htm).

PDP: Key research themes

The review of the literature concentrated on two main areas that appeared to be the most useful to this research, that of reflection and assessment in the higher education context.

Boud et al. (1985) consider that reflection is not a single entity, but a term that encompasses the many thoughts and actions which may transpire during the reflection process. They view this process as comprising three stages: a preparatory stage, the actual experience, and a consolidation stage. Each of these stages requires reflection which is viewed as a conscious activity, looking for associations within the learning material.

Similarly, Rawson (2000) views the acquisition of meta-skills, such as learning to learn, as a process rather than just a skill. He proposes a three level process whereby there is a change from making decisions based on a fixed set of alternatives where critical thinking is limited, to a conscious understanding and awareness of the reasoning behind concepts and how they could be changed. He proposes the link between learning and personal development is vital and that

society should comprise self-managed learners. Fazey and Fazey (2001) suggest that research shows autonomous students have attributes such as being in control of decision making, taking responsibility for their actions and being confident, and that such attributes require meta-skills such as reflection and self-appraisal in order to translate them into behaviours. However, they state that while the potential for autonomy is there, students need to be supported in developing and demonstrating these skills. In order to do so, there must be opportunities within the learning situation for students to practise these skills.

There can often be misunderstandings concerning reflection that may lead to a prevalence of approaches based on following prescribed stages and requiring students to apply reflection when expected to (Boud, 1998). Providing time at the end of a seminar, for example, to reflect may not be used in a productive manner, especially when it is *required* of a student. Boud argues the dangers of turning reflection into a process that can be applied without thinking, leading to reflection without learning. He further points out that reflection can also lead to a number of problematic issues, such as, can the areas brought up during reflection be contained so that they can be dealt adequately by the tutor so the tutor does not feel they are being challenged; how is a reflective journal assessed – is it for someone's reflective ability or subject knowledge; how to deal with sensitive issues raised by the process. Reflection should be done in context and within a supportive environment where there will be no negative consequences.

The implications of providing assessment is looked at by Boud (1995) who suggests that while one can get away from the effects of bad teaching, the effects of bad assessment can be more pervasive. He points out that bad assessment can lead to low self-esteem and can put someone off a subject and that assessment can even get in the way of trying to improve teaching. The language used in assessment is all too often directed at the student rather than their work, therefore, the student considers themselves to be judged. Often the language provides no room for improvement and suggests a point is either right or wrong. End of course assessment provides little room for dialogue. The formative/summative dichotomy is at the heart of his discussions and he argues that the predominance of summative assessment influences the approaches to studying that a student takes. For example, the need to gain a high mark on an end of course assessment may lead the student to taking a surface approach. Rawson (2000) agrees with this view and points out that it can lead to the student separating learning from their personal development and to a surface learning approach.

The number of assessments in any given time period is also a concern for Boud who questions whether enough is known about the compounding effects of multiple assessment. Providing assessment also encourages dependence and Boud queries how this can help the student learn how to assess themselves when they are learning about assessment through attempting to guess the criteria for marking. Given the trend within higher education towards outcome-based assessment where outcomes can be rigidly and behaviourally specified (Ecclestone, 1999), it is likely that these issues will be increasingly important. Rawson (2000) challenges educators to move away from the emphasis on assessing outcomes and move toward assessing the process. However, in a review of assessment in universities, Elton and Johnston (2002) found that assessment practice is largely influenced by non-reflective traditional attitudes, so the challenge may be great.

In providing structures within higher education to support the personal development planning process, there are fundamental issues that go far beyond simply implementing systems. This brief overview of key research themes emerging from the literature has highlighted just a few which are worth considering.

PDP: Web-based systems

A review of existing online systems revealed a number of relevant sites that can be broadly categorised as those describing an institute's own PDP process or web-based PDP tools and

sites of organisations providing resources in this area, such as case studies, discussion papers and journal articles. A number of web-based PDP systems will now be reviewed.

Drama@Edgehill (Developed by Edgehill) was one of the most advanced systems revealed by the review. This PDP was developed to help a student build and analyse a record of their work and development through their course. First year students are required to participate in the process in order to progress to the second year and must maintain the record throughout their degree. Introductory support sessions are provided as well as continuing support throughout the year.

The PDP component is integrated into the web site and largely comprises feedback sheets for each module. These provide an opportunity for both tutor and student to record pre and post assessment comments in response to the stated learning outcomes. Resources for additional support are also provided, such as a skills audit, learning styles audit and CV writing tips. As the PDP component is integrated in the web site the student also has access to the course noticeboard, course descriptions, timetable and FAQs.

InternetPars (Developed by the University of Newcastle and the University of Nottingham) was developed in response to the QAA guidelines. An introductory support session is provided though use of the system is not a requirement. The system provides details of the student, email facilities, a timechart, and notebook. The body of the system is divided into 3 main sections: Academic Support and Guidance which gives a list of tutorials and agenda, follow up details and information on the tutorial system; Progress Review which gives the student the opportunity to reflect on their tutorials, provide a statement for their tutor, compare feedback across modules, and review their skills development; Development Planning where students can plan their skills development and plan the courses they wish to take. It is accessed via a link on the university's web site.

ePars - Electronic Personal & Academic Records (Developed by the University of Nottingham) was also in response to the QAA guidelines and also from a commitment to provide students with a personal and academic records system. Support is provided through the personal tutorial system and help is offered via FAQs. Functions provided include a profile of the student, including personal details, preferences, modules and CV; tutorial facility enabling the student to email the tutor, create a meeting, store notes; and a log book. ePars is accessed through a link on the university's web site.

LUSID (Liverpool University Student Interactive Database) (Developed by Liverpool University) was derived at largely from the QAA requirements, but began as a 'Record of Achievement' under a previous Enterprise in Higher Education Initiative. Students are required to use the system and support is provided throughout. The systems allows the student to record their experiences and achievement, provides a place to think about their skills and complete a skills audit, a place to plan activities and skills, and the ability to create their CV. LUSID is accessed through a link on the university's web site.

PESCA - Personal Employment Social Career & Academic (Developed by the University of Exeter) was derived from a long line of previous initiatives. Although accessed from the university's web site, there are additional links to information on employment and academic skills. The requirement to use PESCA varies according to each course. Students are given support through the tutorial system and a weekly help desk. Each of the five sections enables a student to input appropriate details. The Personal section stores information such as name, date of birth and a picture; Employment provides space for action planning, place of work, goals; Social records clubs and societies; Career stores goals, qualifications, skills, match to life ambition; Academic looks at skills, strengths and areas to develop. The system also provides the ability to generate a variety of reports including CV, action plan, and career plan.

We looked at the features in each of these systems, and the features of GraysNet, and grouped them according to whether they were considered to be essential or desirable in a PDP system. Figure 1 shows a matrix which allows comparison of the various features offered by the systems reviewed. The comparison shows that the GraysNet system contains many of the features in the essential category. Since undertaking the review, it may be that since these systems are constantly in development that this information may already be superseded. The authors would like to apologise to any of the developers whose systems have been described, if we have failed to indicate the most up to date features.

Insert Figure 1 here

These case studies raised a number of issues related to the use and implementation of PDP processes, which can serve as a useful 'checklist' when considering best practice.

- **What level of support during the PDP process should be given to the student?**
  Varying levels of support from the PDP tools and elsewhere, for example, whether introductory sessions were provided.

- **Should using the PDP system be a requirement?**
  Some universities required students to participate as a course requirement and some assessed aspects of a student's input.

- **To what extent are the processes embedded in the course?**
  The PDP tools were either embedded into the course with links to course specific information or were presented as stand-alone systems.

- **Can the system be customised for different departments?**
  Many of the systems could be customised in a number of ways, for example, for different courses/departments.

- **What are the potential issues regarding delivering PDP on-line?**
  There are many issues regarding using an on-line delivery mechanisms, however, three main issues arose from the case studies. The first being that the on-line aspect can engage more IT-minded students with the learning process, though conversely, it could also isolate some students. The second issue concerned the design of one of the systems which was so large that novice users found it daunting and a users guide for novices had to be introduced. The last issue concerned the impact of technical problems with the system which resulted in the students distancing themselves from the process.

- **To what extent are students and staff willing to be involved and support the process?**
  It was found that if tutors were not supportive of the process then this produced a negative response to the process from the students.

GraysNet evaluation

We asked students from three subject areas – Visual Communication, Textiles and 3D Design – to participate in the evaluation survey. Students were introduced to the concept of PDP as part of an interdisciplinary project.

This particular group of students had not used the MLE before. Evaluation was carried out using post activity questionnaires and we observed students as they filled in the PDP section of GraysNet so we could deal with any queries the students had regarding the process. Students were asked to log in to the university's Intranet (iNet) to access GraysNet and to explore the features of the system before filling in the PDP section. Once the students had completed this they were asked to fill in a short on-line evaluation questionnaire.

The PDP section (see Figure 2) re-presented the module's learning outcomes and asked the students to rate themselves between 1 and 6 (corresponding to the University's grading scheme – 1 being fail and 6 being distinction) according to how well they think they performed each task. They were then asked to reflect on their learning experience and to write down their strengths and weaknesses as raised by the module they had just completed and to create an action plan to address these issues. Once students submit this information, it can be seen by the tutor who can also rate the student's performance and add comments to the student's strengths, weaknesses and action plan section. The tutor's responses can then be viewed by the student.

The evaluation questionnaire covered three main areas: background details on the students covering their computing skills: the usability of GraysNet; and students' experience of being asked to reflect on their learning in this manner.

Insert Figure 2 here

Summary of the findings

The students were quite confident in their computer skills and few had problems when using GraysNet. The students had to log into the University's Faculty Intranet (iNet) prior to accessing GraysNet and some students saw the two systems as being the same and reported having problems with GraysNet when it was problems they were experiencing on the iNet system. Seeing both environments as one, or distinct, could have a number of advantages or disadvantages. Firstly, seeing them as the same provides coherence as students are increasingly being asked to use many different on-line resources, many with their own username/passwords. However, any technical/usability problems with one will reflect on the other. Secondly, seeing them as distinct enables them to see GraysNet as a resource specifically designed for their use as Art and Design students and one which they can take ownership of.

Overall, students found the system easy to use and found the menu options clear. Most students did not find themselves being limited by only using text, though a small number stated they felt limited due to not being a good typist, they wanted to attach a document or because they found using words difficult.

As stated previously, problems can arise from a system that is not robust, leading to students not wishing to continue using the system. We looked at this issue by asking the students whether experiencing problems when using the system would put them off and just over three-quarters felt that it would. The acceptance of a new system is always a difficult barrier to cross, so ensuring a functioning system (not just a usable one) should always be a priority.

Students were given a list of features and asked to rate them on a four point scale from very useful (4) to not useful at all (1). As can be seen from Figure 3, the most highly rated features related to forms of feedback. Students did suggest some features, though these were mainly features which were already included in the system, for example, timetable and project briefs.

Insert Figure 3 here

Most students stated that they had previously been asked to reflect on their strengths and weaknesses in a learning context, though not to create an action plan. This corresponded with their definitions of reflecting on learning where most saw reflecting on learning as being merely reviewing and identifying strengths and weaknesses, rather than creating and carrying out a plan for change to help them improve their learning. Students' definitions fell into one of three categories, which can be seen as corresponding to the depth at which they engaged in the reflective process:-

- **Level 1: A review**
  Looking back at what they did and what they had learnt.

- **Level 2: Areas for change**
  How they could have done things differently in that particular context.

- **Level 3: Planning for change**
  How they could improve on this for future situations.

However, when asked to state ways in which being asked to reflect on learning had been helpful, most comments did include aspects of forward planning to improve their skills. These three levels show some similarity with Rawson's (2000) three level process whereby the levels represent an increased ability in how to constructively apply outcomes of critical thought.

By providing appropriate processes for reflection, not only could students be assisted in reviewing their learning, but in identifying areas for improvement together with a plan for doing so. Providing a structure for reflection may enable those who find reflection difficult to engage more easily with the process, and perhaps facilitate the skills needed for independent reflection. In fact, some students stated that the format of the process (questionnaire/form filling style) made reflecting on their learning easier. However, any structure needs a degree of flexibility to enable students to reflect in the individual ways they find most useful. Providing too rigid a structure could result in a surface approach to reflection.

Although most found reflecting on their learning helpful and could clearly identify the benefits of reflection, most stated they did not know whether they would, or would not, reflect on their learning unless asked to do so. Again, this ties in with the above point that perhaps providing appropriate processes for reflection would be a positive move. Overall, students found reflecting on their learning easy and only a few stated that they felt they couldn't find the right words to describe their thoughts.

A number of additional issues were raised by students during the evaluation. Some were unsure who the PDP information was for and who would be able to see the information – their tutor, the rest of their group, or just themselves - and how they would obtain feedback on what they had written. There was also some uncertainty regarding what they were meant to put in the strengths/weaknesses section. Some students filled in the sections from a group perspective rather than from an individual perspective. A number of students did not understand the term 'action plan' and this had to be explained to them. Using terminology the students understand is important so the process is facilitated, not hindered.

Description of Face to Face Workshops

Dr Michael Brown of Ulster University has developed a Visual Communications module that aims to embed PDP by encouraging self-identity, identification of personal aspirations and reviewing and evaluating personal achievements. The students develop a personal learning log, which is assessed as part of the module, and they are encouraged to visualise aspects of their reflective process through mind maps.

This approach to PDP provides a number of useful features, which point the way to possible future developments in online systems. These might include facilities to support a student's development of a personal learning portfolio and tools to enable them to visualise their personal development and assist with reflection. The example provided by Ulster University shows how PDP can be integrated into the teaching process. It does however rely on an expert facilitator to ensure the system is effective. Developing on-line facilities that can be used in conjunction with a facilitated process might provide a robust approach less dependant on an individual's skills.

The workshops we conducted were divided into two main components. The first involved group discussions around a number of questions regarding the students' thoughts about the module they were currently studying. The second involved a number of PDP exercises derived from Brown's PDP module.

We found that the students had a high level of motivation concerning their work and were keen to develop a portfolio of high quality work. However, they found that since previous modules had concentrated on the development of other skills, such as learning software, this had resulted in a negative impact on the quality of their portfolio work. They were looking to develop the skills they felt they needed in the workplace, such as project planning and team work, and were hoping to apply and develop those skills on the current module. However, they were unsure about the extent to which they were currently proficient in these skills and felt that perhaps more support could have been provided with these skills during previous modules.

The PDP exercises reinforced a lot of the discussions. Exercises looking at students' 'mission statements' and career planning showed that most aspired to be successful, respected and sought after designers who were happy in their personal and professional lives and that their time at University was crucial in achieving this. Students engaged with the exercises which produced a lot of discussion. In some cases students had previously taken part in similar exercises at school, which had not been a positive experience for them, so they were reluctant to go through them again, viewing them as something you did at school rather than at University level as an adult. This negative transfer could have implications for the successful implementation of PDP if such process are introduced at a stage of the student's life where they are not able to fully appreciate their usefulness and purpose.

Discussion and Future Developments

Overall, this evaluation has demonstrated that students in an art and design context were able to actively engage in the process of assessing, and reflecting on, their own learning experience using an on-line PDP tool. The process provided to students was successful and students gained from the experience.

Students varied in the extent to which they were self-managed learners, however, the evaluation has shown that providing the appropriate structures for assessment and reflection can support the student in being more active, and being more deeply engaged, with this process. This is in keeping with the constructivist approach to learning taken in the development of GraysNet. However, as Boud (1998) states, it is all to easy to provide processes that can be applied without thinking, so future developments to the PDP tools must guard against this. We wish to produce tools that support students in becoming independent and self-aware learners, rather than tools that encourage a surface approach to learning.

Providing tools to promote the development of self-assessment skills can bridge the gap between the student receiving informal formative assessment and the formal end of course/module summative assessment. This addresses issues raised by Boud (1995), that clear criteria for assessment avoids students having to guess what the tutors are looking for in their work. Using the tool throughout the module, not just at the end, could go some way to addressing Rawson's (2000) call for more emphasis on the assessment of the process rather than outcomes. The

information recorded by the on-line PDP tool can also enhance the dialogue between student and tutor since both have access to each other's comments, thus the student can gain additional valuable feedback in the areas they are reflecting on either through the on-line tool or the tutorial system.

Using on-line systems is not a panacea to the introduction of PDP into higher education. We propose that appropriately constructed on-line processes can support PDP, just as properly facilitated paper-based methods and exercises can. The skill is in getting the balance right.

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Features	Drama @Edgehill	Internet Pars	ePars	LUSID	PESCA	GraysNet
Essential:-						
Personal details	●	●	●	●	●	●
Message board	●		●			●
Course descriptions	●	●				●
Timetable	●	●				●
Courses taken		●	●			
Action planning		●		●	●	●
Skills audit/resources	●	●		●	●	
Feedback from tutor	●					●
Self-appraisal/reflection	●	●		●	●	●
Goals				●	●	
Learning objectives specified	●					●
Information/support on PDP	●					
Desirable:-						
Integrate with website	●				●	●
CV information	●			●		
CV building within system		●	●	●	●	
Links to other resources	●				●	
Record previous experience				●		
Tutor details		●	●			●
Tutorials		●	●			
Plan course of study		●				
Personal development					●	
Career development					●	
Social development					●	
Timechart		●		●		
Help function/FAQs			●	●	●	
Password tools		●	●	●		●
Email links		●	●	●		
Other:-						
Notebook		●	●	●		
Reporting				●	●	

Figure 1
Matrix of Features

Figure 2
GraysNet PDP Section

Project Evaluation Screen
Project Title: Core Studies 3.1 (Multi Disc Project)

You can use this screen to give your tutor information about your performance on this project, and read the tutor's comments on their perception of your performance. Use the text fields below to comment on strengths and weaknesses, and add suggestions for future action. Your tutor may also have suggested appropriate additional learning resources for you to use.

For reference, the learning outcomes being addressed by this project are listed at the bottom of the screen.

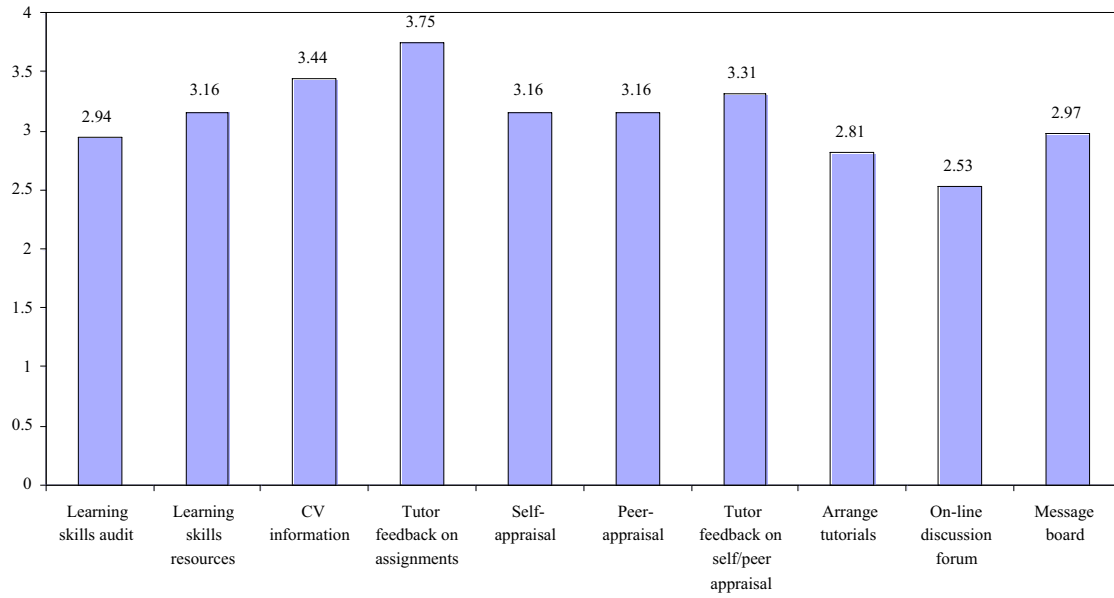Strengths

Your comments:

Tutors Comments:
None

Mean scores of features

Figure 3
Mean scores of features