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ALPS ePortfolio Project Report

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**Assessment & Learning
in Practice Settings**

ALPS ePortfolio Project Report

January 2011

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www.alps-cetl.ac.uk

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1 Summary

The ALPS ePortfolio project was funded by the Yorkshire and Humber Strategic Health Authority (SHA) to involve students in investigating the use, benefits and requirements of ePortfolios in health and social care education. It was undertaken by the ALPS CETL (www.alps-cetl.ac.uk), which involved 5 universities and 16 health and social-care professions. Sixteen students were employed to work on the project, reviewing ePortfolio use and designing an ideal ePortfolio for health and social care education.

The main project objectives were achieved; the project team identified benefits that could be achieved through ePortfolio use, wrote guidelines for the effective introduction of ePortfolios and agreed on the specification (a list of desired functionalities) for an ideal ePortfolio. In addition, the use of ePortfolios and reflective diaries increased within the student group and various approaches to championing ePortfolios (to both students and staff) were explored. The students enjoyed working as part of a project team alongside the academic staff; feeling that their work was valued and that they gained important skills and experiences from their involvement. The skills reported as being enhanced were in the common competency areas (teamworking, communication and interprofessional working) that the wider ALPS programme has been supporting.

The students identified two key pieces of further work they thought was needed in this area:

- To build the improved ePortfolio based on their specification.¹
- To integrate ePortfolios more effectively into courses and the professions

Suggestions for integrating ePortfolios more effectively into their courses included:

- linking it to other key university systems (email and submissions) to encourage daily use
- ensuring that it provided a place where students could save and manage their own material as well as course reflections
- better support and use by staff so that the ePortfolio acted as an interface between students and staff and
- better links between HE and the professions' use of ePortfolios to ease the transition from education to the workplace

Improved linking between the HE and professional use of ePortfolios is an area that the ALPS CETL is in a good position to investigate further, as the CETL has involved collaboration between the universities and 16 health and social care professions. Work in this area could be taken forward by the ALPS ePortfolio network (ALPS 2010) which was set up in Autumn 2010.

¹ Work is in progress on this. The students' specification has been shared with key ePortfolio developers, who have responded indicating to what extent they feel their current system matches the specification and what plans they have for implementing new functionality where there are currently gaps. The responses we have received are included in Appendix 2

2 Introduction

2.1 Project Objectives

There were 3 main objectives to the project:

- Increase and improve the use that students make of ePortfolios. Note this was *any* ePortfolio system – the project was not tied into the use of any particular package.
- Produce a model (developed by students) for an ePortfolio system that meets the requirements of students in health and social care and exploits new (and anticipated) technology developments.
- Share information with developers to enable them to improve their ePortfolio systems to address the issues raised by this model.

The project also provided a way of enhancing student involvement within the ALPS programme and fostering inter-professional education and working.

2.2 Project Approach

The project tried a new approach: paying students to work on a project reviewing ePortfolios and their use. The aim was to empower students through treating them as members of a project team, working alongside academic staff to jointly undertake the project work. It was hoped that this approach would lead to more radical and creative ideas, as students would be given room to take the initiative, come up with their own ideas and lead on them. The features of the approach were that we:

- defined students as members of the project team, rather than a focus group whose views were being sought.
- paid the students a competitive wage – compared favourably to bar work etc.
- provided students with a flexible way of undertaking the work in their own time, by allowing them to submit timesheets rather than being committed to a certain number of hours at defined times.
- managed the project's financial liability by putting a cap on the number of hours per week that students could claim. The figure chosen (5 hours) was based on discussions with students prior to the start of the project, to establish the maximum number of hours they would feel able to devote to the project in a week, without it having a negative impact on their course work.
- recruited students from across 5 universities and a wide range of health care professions. Used a recruitment approach intended to ensure that all 5 universities and as wide as possible a range of courses were represented in the project team.
- held an initial workshop to introduce the students to the project and outline the project aims and the outputs that we hoped to achieve.
- provided students with a mix of structured and open tasks / activities to

complete in their own time. These tasks were intended as starters (catalysts) that would give the students a bit of initial structure but from which they could develop their own ideas and approaches to tackling the main project work. The tasks were related to the aims of the project or issues raised by the students.

- offered support (from the staff who took on the academic support roles) to students in undertaking these activities.
- brought students together at regular Saturday workshops where they engaged in discussions and activities aimed at working towards achieving the project outputs.
- offered students the opportunity to write up and present their work at conferences through either poster presentations or workshops.

2.2.1 The students

The students were recruited from the existing 5 universities (Bradford, Huddersfield, Leeds, LeedsMet and York St John) involved in the ALPS CETL. Students on courses linked to the 16 ALPS professions were invited to apply to join the project. The aim was to consider different perspectives and synthesise these to provide a model for an ideal ePortfolio for both individual and collaborative work across this range of courses. The initial group consisted of 16 students recruited from over 40 applicants, representing medicine, nursing, occupational therapy, podiatry, social work, and midwifery. These students were chosen to try to cover as wide a demographic range as possible (including students who regularly used ePortfolios, those who had never used an ePortfolio and representing a mix of views towards technology in general). They also all demonstrated commitment, enthusiasm and problem solving abilities in their group interviews. Participation varied over the duration of the project, but a core group of around 8 students was maintained to the conclusion of the project.

2.2.2 The ePortfolios

The project did not use a strict definition of ePortfolios, nor did it require all the students to use any particular ePortfolio or set of ePortfolios. The thinking behind this was that we wanted students to use the tools that were provided by their own institution, or those that were readily available online. We did not want the project to become a review of one particular ePortfolio system.

Students were provided with the JISC report into effective ePortfolio use (JISC 2008) and were encouraged to consider the ePortfolio term broadly, as in the general definition provided by [Cotterill 2007] – “*an ePortfolio is a purposeful collection of information and digital artifacts that demonstrates development or evidences learning outcomes, skills or competencies*” and to recognise that, as [Cotterill 2007] also notes, ePortfolios can be used for many different purposes including “*presentation, application, reflection, assessment and personal development planning*”. Such a broad definition means that numerous tools can be seen as fulfilling ePortfolio requirements – not only specialist ePortfolio software but also more general presentational or file management software or social networking tools. In practice the tools that the students chose to consider during this project did tend to be those provided by their institution including Pebblepad (a specialist ePortfolio system), Blackboard (a Virtual Learning Environment), the ALPS Assessment Suite (software designed to support assessment and feedback gathering in practice settings), the

student progress file (an ePortfolio system in use at Leeds to support medical students Personal Development Planning) and Facebook (the social networking site, which was considered for the communication facilities it offers, rather than as a serious contender as a usable ePortfolio).

3 Project outputs and outcomes

The project produced outputs in three areas: understanding ePortfolio use (identification of benefits, barriers and guidelines for the introduction of ePortfolios), a specification for an ideal ePortfolio and the exploration of different ways of championing ePortfolio use to students and staff. The work and outputs in each of these areas is described in the following sections.

3.1 Understanding ePortfolio Use

Over the first few months of the project the students investigated ePortfolios, discussed their use with their fellow students and staff and completed the project tasks, all with the aim of gaining a greater understanding of ePortfolios and how they could be used most effectively. The outputs from this were an agreed list of the potential benefits to staff and students from using ePortfolios, an identification of the barriers to ePortfolio use and some guidelines on how best to introduce ePortfolios to students. These formed the basis of a poster presentation at the Leeds Learning & Teaching Conference 2010 (Dew et al 2010) and are summarised below:

3.1.1 Potential benefits to staff of using ePortfolios

Based on their experience and discussions the project team felt that staff could gain benefits from ePortfolios in a number of areas including:

- Student assessment
- Student skills development
- Communication with students
- Student support

Within these areas the team felt that ePortfolio use could support staff both in terms of *simplifying administrative tasks* and through *enriching the teaching/learning activities* they would be able to provide to students. For example administrative benefits can be seen when ePortfolios reduce the amount of paperwork that staff have to deal with, allow easier analysis of the students' assessments and provide an easy way of communicating with students whilst they are on practice placements. The team felt that teaching and learning activities would be enriched where ePortfolios were used to allow students to provide rich multi-media material to evidence their learning, to support students in developing their reflective skills and to provide students with timely and relevant feedback. This last point refers to situations where regular use of an ePortfolio by both students and staff allows the tutor to use the entries that the student is posting in their ePortfolio to identify support needs or learning opportunities whilst the student is out in practice. Support and guidance can then be provided at the time when it will be most effective, because any changes to practice can be implemented immediately, thus maximising the opportunity for learning.

3.1.2 Potential benefits to students of using ePortfolios

The benefits that the project team saw for students in using ePortfolios were in three main areas:

- Learning support
- Skills development – particularly reflection
- Presentation / evidencing of skills – curriculum vitae

ePortfolios were seen as being a useful interface between the students and the academic staff: providing a space in which support could be sought, questions asked and experiences shared. The helpful ways in which the ePortfolio could be used included one-to-one support between an individual student and a tutor, as well as more widespread sharing of concerns and experiences between groups of students and staff.

The team believed that ePortfolios very clearly had the potential to help support the development of the students' reflective skills. ePortfolios can (where mobile access is supported) support instant recording of reflections (in task reflection – first order reflection) as well as providing students with tools and a structure for organising their thought processes and reflecting on learning experiences afterwards (on task reflection – second order reflection).

Finally the team felt that students could benefit from the ePortfolios' ability to record skills development and thus present a summary of the skills that the student has developed linked to the evidence to support this. This could be very helpful to students when applying for jobs or demonstrating that they meet the CPD requirements of their professional bodies.

3.1.3 Barriers to using ePortfolios

Whilst there were seen to be many potential benefits to using ePortfolios, the project team also recognised that often these were not achieved. Based on their experiences and discussions the team highlighted a number of barriers that could prevent effective use being made of ePortfolios. Broadly these divided into barriers that were a result of the teaching/support processes used and barriers that were a result of the technology chosen.

The timing of when an ePortfolio was introduced was felt to be critical. When the ePortfolios were introduced very early in a course, students felt that they were overwhelmed. Generally it was felt that the second semester was the best time to introduce them. When the purpose and benefits of the ePortfolio were not explained clearly, then students also felt disinclined to use them. Even if the *expected* benefits were clearly understood then if these benefits were not seen early on (for example, if tutors were not active in the system themselves providing regular, specific and encouraging feedback) then it was felt that students would stop using the systems.

Finally not all of the ePortfolios provide the functionality to support all of the benefits listed in the previous sections. For example if a student has to be logged onto a PC to access the ePortfolio (rather than having mobile access) then the system is not able to

fully support immediate in-task reflection. Additionally not all ePortfolio systems provide an easy way of presenting information in a CV form or sharing information with peers/colleagues as well as a known tutor.

3.1.4 Guidelines for effective introduction and use of ePortfolios:

Based on the identified potential benefits from and barriers to ePortfolio use, the project team put together a list of points to consider when introducing ePortfolios into a course. These are:

Provide a clear introduction

- Introduce at a time (in the course) when students are likely to be receptive
- Make sure the purpose of using an ePortfolio and the benefits the students should see are explained clearly. It is not enough to tell students what is required: it needs to be demonstrated to them (perhaps by previous students). It could be useful to provide review sessions later in the year when students can demonstrate how they are using their ePortfolios to each other and the tutor.
- Consider having rules of engagement so that students know how often they are expected to post assessments/reflections and how regularly tutors will provide feedback.

Provide structured support

- Consider using a scaffolding and fading approach to support the students use of ePortfolios. Scaffolding involves providing a clearly structured approach early on, and fading involves reducing this layer of structure and support in order to foster independent learning and promote individual creativity, as the confidence of an individual student grows.
- This could be taken as far as building in a clear structure to the ePortfolio that will guide students in moving from being a novice to expert in their field.

Ensure that tutors are engaged and enthusiastic

- Consider how much time the tutor can devote to the ePortfolio. Time spent at the beginning is likely to pay dividends. Students reported that enthusiastic, approachable tutors who have a strong online presence would motivate the students to engage as well.
- Provide prompt, high quality and specific feedback (following the rules of engagement).

Choose software that can support the benefits you want your students to gain

- Ensure that the benefits you have outlined to students can be achieved through the software that you have chosen.
- Ensure that students understand how to use the software to gain these benefits. Perhaps link this to the potential review sessions when students can describe how they have used the ePortfolio.

3.2 ePortfolio specification – a model that meets the requirements of students

The second project objective was to produce a specification, developed by students, for an ePortfolio system that meets the requirements of students in health and social care and exploits new, and anticipated, technology developments. The work is described in the following section.

3.2.1 Process of reaching the specification:

In order to develop the specification a grounded theory approach was used (Glaser, 1998). This was chosen as we were keen not to influence or manipulate the students regarding their elected approach or ePortfolio. Grounded theory approach allows for analysis, which distinguishes and links levels of conditions and consequences through an iterative process (Scot, 2000). From the outset, the project group acknowledged that the numbers involved would not produce statistically significant results and thus used a qualitative approach: focussing on the narratives the students produced through workshops, ALPS assessment suite, discussion boards and a google group – broadly, a discourse analysis.

Workshops

Workshops were held at various stages throughout the project and enabled students and staff to refine their notion of an ideal ePortfolio. These were the primary source of gathering qualitative data in relation to ranking agreed areas of specification regarding an ideal ePortfolio.

Google group

This was used in between workshops to refine the various categories devised by the students during previous interactions.

Once the list of requirements was agreed then it was ranked by the students. This ranked list of components/functions that the students would like to see in an ePortfolio is the specification produced by the project.

3.2.2 The specification:

The students produced a list of 25 components for an ePortfolio. In rank order these are as follows:

Table 1. Student Ranking Preference

Function	Rank
Portal Access	1
Initial upload private then distributable as student wants	2 =
Reflective elements	2 =
Easy to use, but with power options	4
Import and export functions	5
CPD	6

Performance/Progress management	7
Easy to navigate	8
Upload formal as well as informal meeting notes	9
Linkability	10
Ability to format text	11
Printable	12
Discussion board	13
Social academic networking	14
Managable entry boxes	15
Multimedia embedding	15
Peer Support	15
Ability to customise front page and create other tabbed pages	18
Flagable items	19
Customisable with apps	20
mPortfolio	21
Offline access	21
Cheap to buy	23
Time logging	24
Wiki	25

The above table uses the students' terminology. Explanation of the terms is given below.

Portal access: students wanted to be able to access their ePortfolio from a standard university access point with the same password they access other university systems e.g., their results, VLE and library information. They believe an ePortfolio should be embedded in University systems and work alongside their other resources.

Initial upload private then distributable as student wants: follows on from the first point and demonstrates how students view their ePortfolio - they accept it as University led, but want control over what is seen by others. It also provides a way to edit content for different audiences: personal tutors, for exams, for personal reflections, for employers, and for professional body monitoring/CPD.

Reflective elements/wiki: primary function of ePortfolios deemed to be reflection, not only for practice, but for personal use; wiki an additional way to demonstrate that they have built on and developed knowledge.

Easy to use, but with power options/ability to customise front page and other tabbed pages/customisable with apps/add-ons: this was an acknowledgement of the wide variety of starting points and progression of use required of ePortfolios based on demographic and technical skills. Students believed that the ePortfolio should be easy to use and intuitive "out of the box", but also customisable to accommodate advanced skills or usage.

Import and export functions/CPD/cheap to buy: the ability to import items that are created outside of the ePortfolio (e.g. text documents and various media files) and also the ability to export data. One concern was that the ePortfolio might only be

available whilst they were studying at university and should they want to continue to use it afterwards (e.g., for professional or developmental activities - CPD) then the data may need to be transferred to another system.

Progress and performance management: students saw the ePortfolio as a mechanism where academic staff, practice colleagues and they themselves could monitor their progress. This may be done through reflections, exam results, and formative exercises for example. Part of this was also about uploading formal and informal meeting notes and links with the ability to import materials.

Linkability: students described this as the ability to link components within their ePortfolios to other parts of the ePortfolio. For example an essay, grade and academic feedback could be linked to the students' reflection, or advice they have received from support services/lecturers.

Ability to format text/manageable entry boxes: some ePortfolios the students used or accessed had only basic word-processing features that they felt held back their creativity.

Printable: although students were aware that this might defeat the idea of an *electronic* portfolio, some staff in their institutions and on external placements might "respond" better to a printed format; it might also be required for a job application.

Discussion board/social academic networking/peer support: students wanted to see a facility embedded within the ePortfolio where they could use social networking to support their learning. They did not necessarily see it as being closed to particular students and staff, but as an expanded opportunity to discuss issues and build on existing skills many had in using these outside their academic studies.

Flagable items: the ability to put a marker on items that needed attention. This could be done either by the student, or a member of the academic or clinical staff.

mPortfolio/offline access: being able to add to their ePortfolio remotely e.g., in practice or when they have a spare few minutes when travelling etc. Also facility to use this whilst not connected to the internet.

Time logging: useful for students and staff to monitor the time spent accessing the ePortfolio.

This specification and our initial judgements on how well existing systems meet it (see section 3.2.3) have been shared with some key ePortfolio developers, who have been asked to comment on how well their ePortfolio fulfills the list of requirements. The responses we have received are included in Appendix 2. We hope to follow this up over the next year (as part of the ALPS Collaborative Network on ePortfolios), remaining in contact with the software companies, keeping them informed of our requirements and thus influencing the development of their systems. The specification from this report was sent to the developers of the ALPS Assessment Suite, Blackboard, Mahara and Pebblepad.

3.2.3 How well do existing ePortfolios meet this specification?

In the time available, the project was only able to answer this question through comparing the developers' promotional/marketing material for their ePortfolio against the students' specification. It was not possible to gain access to all the ePortfolios we wanted to include in the comparison and base the match against the specification on hands-on use.

We also focussed on a small group of ePortfolios. These were chosen as we considered them to be the most common ePortfolios used within the health and social care courses in the ALPS institutions at the time. The systems included in this comparison are Blackboard, Mahara, Pebblepad, and the ALPS Assessment Suite.

There have also been a number of difficulties when applying the terminology of the students to the analysis of the ePortfolios.

Finally, without hands-on experience of all the ePortfolios and only the academic and vendor literature it may be that some of the claims may have been "lost in translation" or indeed by the time this was compiled - outdated. Therefore it should be noted that this comparison of the systems to the students' specification was done in Summer 2010 based on the promotional material available at the time. We also contacted all 4 developers to share our analysis with them and to give them the opportunity to correct it or add comments where they felt we had mismatched them against the specification. The developers' responses are shown in Appendix 2.

Table 2 shows that there are several features that all of the portfolios have in common that meet the requirements of the students:

- Reflective elements
- Import and export functions
- CPD (the eportfolios can be used for recording CPD activities)
- Uploading of notes
- Printing
- Multi-media embedding

Portal access, identified as the top feature by the students, was taken to mean that the ePortfolio could either be used alongside LDAP (login using standard university username and password) or could be embedded within a Virtual Learning Environment (VLE), such that once you had logged into the VLE then you were seamlessly logged into the ePortfolio. This functionality was available in all systems except the ALPS Assessment Suite (though even there it was "work in development").

The items that were not well supported were performance and progress management i.e., a way to monitor their progress in relation to achieving professional competencies. The notable exception appears to be the ALPS suite where there are some rudimentary measures of this.

Another area where ePortfolios did not seem to support the students' wishes was offline access. Ideally, there would be a standalone desktop application where they could compose and edit entries for later upload.

Whilst all the ePortfolios had the ability to embed multi-media, there appeared to be little support in the ability to link the different areas within the ePortfolio. The only way to approach this was to create a new page for area of content.

Low on the list was the ability for students to time their activities; unsurprisingly this was not supported by any of the ePortfolios we looked at.

<u>Ranked Functions</u>	<u>PebblePad</u>	<u>Mahara</u>	<u>BlackBoard Content Collection</u>	<u>ALPS Assessment Suite</u>
Portal Access (LDAP)	Y	Y	Y	Work in progress
Initial upload private then distributable as student wants	Y	Y	Y	Work in progress
Reflective elements	Y	Y	Y	Y
Easy to use, but with power options (could not judge)				
Import and export functions	Y ¹	Y ¹	Y	Y ¹
Supports CPD use	Y	Y	Y	Y
Performance/Progress management	N	N	N	Y
Easy to navigate (could not judge)				
Upload formal as well as informal meeting notes	Y	Y	Y	Y
Linkability (e.g. hyperlink to other sections of ePortfolio)	Y	N	N	N
Ability to format text	Y ²	Y	Y	Y
Printable	Y	Y	Y	Y
Discussion board	N	Y	Y	N
Social academic networking	N	Y	Y	N
Manageable entry boxes	Y ²	Y	Y	Y
Multimedia embedding	Y	Y	Y	Y
Peer Support	Y ³	Y	Y	N
Ability to customise front page and create other tabbed pages	Y	Y	Y	N
Flagable items	N	Y ⁴	N	? ⁷
Customisable with apps	N	Y ⁵	? ⁶	N
mPortfolio	Y	N	Y	Y
Offline access	N	N	N	Y
Cheap to buy (could not judge)	?	Y?	N	?
Time logging	N	N	N	N

Table 2 – Specification matched against common ePortfolio systems

1 Using Leap2a Standard 2 Using webfolio 3 Through sharing 4 Cannot get clear indication of this through documentation 5 Limited plugins available 6 Blackboard has extensions and add-ons but this is for the institution to add not the students 7 Items needing attention are automatically highlighted

Recommendation:

Whilst very difficult to make an objective decision in relation to recommending an ePortfolio, it does seem that for those institutions already using BlackBoard, it meets most of the students' needs and has obvious advantages as it is integrated with many institutional IT infrastructures.

However, anecdotal feedback and a limited research base suggests that students find BlackBoard a less intuitive and "clunky" ePortfolio, much preferring the features in Mahara (Balaban et al., 2010; Himpsl and Baumgartner, 2008).

Mahara also has a number of closed "social networking" elements that users, and some of the students in this project had requested; these were thought to be better integrated into Mahara than BlackBoard.

PebblePad was the most widely used and understood ePortfolio within the project. It is therefore possible that many of the items that made it onto the students' wishlist were a result of spotting enhancements that could be made to this system. Indeed the forthcoming updates recently announced by PebblePad (PebblePad Conference, 2010) address most of the students' wishes.

For the ALPS Assessment Suite it is worth noting that the key driver behind the development of this system was the requirement that the students should be able to complete mobile assessments and reflective feedback in locations where they had no mobile signal, but that these entries would automatically load up to the ePortfolio when they did next have a mobile connection. It is the only ePortfolio that ticks both the mPortfolio and offline access requirement in this comparison.

3.2.4 Recommendations for further ePortfolio research work

As a result of the work on the specification, we suggest a number of areas that would be suitable for future work.

Perhaps the most important, would be work that addresses generalisability. What became obvious fairly early on were the differences in the cultures of the various professional groups and the impact this had on their beliefs and potential use of the ePortfolio. This observation is based on the various methods of data collection listed previously and as such is limited by the numbers involved.

Asking students to use a selection of ePortfolios for a given period and subsequently mapping student preferences against the functionality in the existing ePortfolios (e.g. PebblePad, Mahara, ALPS Assessment Suite and BlackBoard) could be worthwhile. The suggested ePortfolios are thought to be the most useful because they cover a number of options (open source, commercial and VLE based) used within the professions in the ALPS project.

In retrospect, trialling a range of ePortfolios with all of the students (rather than just asking them to use what their institution provided) would have given them further insight into what functionality would be useful and enhanced their competence and confidence in championing. This would also have given students a broad base of

experience regarding a range of ePortfolios and provided a commonality, from which it would be more acceptable to make generalisations in relation to demographics, ease of use and uptake of ePortfolios.

Two issues raised in the specification are worthy of further investigation: CPD and reflective elements. Perhaps because some of the students were coming to the end of their courses (or as a result of discussions we had) they were highly aware of issues regarding what would happen at the end of the course. Could the ePortfolio (or the material in it) be taken out of the university and used in their professional and self development once they qualified? For those engaged in professions where ePortfolios were used to demonstrate CPD and professional development: were the ePortfolios in university the same or compatible with those they would encounter in their professional life? Did the ePortfolios reflect or support any induction or preceptorship of the students once they qualified? More work is suggested to explore these concerns and to inform universities and professional bodies of implications regarding future development and use of ePortfolios.

Students considered reflection to be a fundamental aspect of ePortfolio use. Further research into guidance regarding the development of critical judgement in relation to reflection would be beneficial, because many students remain confused about its purpose. There is a large amount of work being done in this area, but given the complexity of the subject matter and the difficulty that some students have in understanding or appreciating the benefits of reflection, this indicates that more research is needed to demonstrate how ePortfolios can best be used to address this.

3.3 Exploring ways of championing ePortfolios

The final area that the students worked on was to explore how they could champion ePortfolio use to their fellow students and staff.

3.3.1 The workshop approach to championing to students

The project team discussed various approaches to championing: rewards for making entries into the ePortfolio, online user groups and lunchtime workshops. The approach that the students chose to explore was using lunchtime workshops run by senior students (those further ahead in the course) to explain the benefits of ePortfolios to more junior students. Building on the previous work that had been done on identifying the potential benefits of using an ePortfolio, the students used the workshop to highlight some of these benefits, focusing particularly on those students who had not chosen so far to use an ePortfolio.

In February 2010 a group of first year medical students at Leeds were invited to a voluntary lunchtime workshop. An ePortfolio had been introduced to this group in October, 2009 with a 30 minute lecture. The tutor had reinforced its usefulness referring to CPD in the future and asked the students to contribute for the first term as and when they wished.

The February 22nd workshop was one hour prior to a timetabled teaching session. The 15 first year students were informed that a year 4 student (one of the students working

on the ePortfolio project) would be present to explain how she had found ePortfolios useful during her course. All 15 students attended.

At the workshop the year 4 student and the tutor had a 20 minute discussion with the first year students explaining the benefits of the ePortfolio for CPD, the requirement for an ePortfolio to be kept post-qualification, and the belief that regular use of an ePortfolio can lead to improved grades, plus the benefits of using it to have a record of progress.

Prior to this, they had asked the first years what they thought of the ePortfolio. Interestingly, most of the non-users were sitting together. Student A (highest user) said that he felt that there was no meaningful end product. Student E felt that it was low priority: he did it, but felt one step removed from the process. Student H said: “*It’s cringey...self analysis*”. They thought that it would have been better to introduce it in the second term, because many of the students were ‘*straight from school*’ and needed a ‘*warm-up period to university life*’ (a reflection-free zone) with as few encumbrances as possible. This ties in with the recommendation that the project team had made in their guidelines for introducing ePortfolios (Section 3.1.4).

At the time when the students attended this lunchtime workshop, 7 of them had not engaged with the ePortfolio at all (despite it having been available to them for 5 months). Two months later, 4 of these 7 students had posted entries on the ePortfolio; all of these were blog entries. A, B,C and E, who were among the highest users previously, had all increased their activity. Whereas D had not been active online since the 22nd February. This change in activity may, or may not have been affected by the workshop.

Table 3: Record of ePortfolio Use

Student	22/02/10 Responses to set exercises	22/02/10 Blog Entries	22/04/10 Responses to set exercises	22/04/10 Blog Entries
A	26	0	37	0
B	19	2	30	3
C	17	0	26	0
D	14	2	14	2
E	8	0	15	0
F	2	3	3	3
G	3	0	6	0
H	0	2	0	2
I	0	0	0	2
J	0	0	0	0
K	0	0	0	0
L	0	0	0	2
M	0	0	0	0
N	0	0	0	0
O	0	0	0	3

*These figures relate to ‘published’ entries; the first column for each date relates to engagement with voluntary set exercises; the second column relates to a blog.

Elements contributing to the success of workshops

Following the workshop, the tutor and student discussed what they thought had worked and why. They identified the following as elements that contributed to the success of the workshop.

1. Schedule the workshop prior to a timetabled event in order to get good attendance.
2. Choose a member of staff, or student the audience is likely to be receptive to e.g., a student from further along in the course will probably be more of a draw than a peer.
3. Given that a common, initial view held by students is that using an ePortfolio is 'a lot of hard work for nothing', then the workshop needs to make the advantages clear to the targeted group (e.g. provide a chance to hear what a student higher up the course feels helped them progress).
4. As reflection is a key activity associated with ePortfolio use, then the workshop should also address the benefits of reflection itself and give some guidance to students on how to reflect. For example 'being real' about reflection and pointing out that there needs to be a focus (e.g. how they can use their experience on placements as the basis for reflections).

3.3.2 Exploring ways of championing ePortfolios to staff

The project also involved students in promoting and championing ePortfolio use to staff in a range of different ways. This included running a workshop at Huddersfield, having individual meetings with staff at Leeds and presentations at conferences. Each of these approaches is briefly described below.

University of Huddersfield Workshop: On 17th March 2010, the School of Human and Health Sciences at Huddersfield University held a research conference to facilitate the sharing of progress and findings from research conducted within the school, amongst staff and students. Two members of the SHA/ALPS ePortfolio Project Team (Clare Thorpe - Adult Student Nurse and Niall Dew - Joint Divisional Head, Learning Disability Nursing and Child Nursing and) presented a session at this conference that aimed to detail what students would like to see incorporated in an ePortfolio. This was also intended to be an opportunity for the audience to explore any concerns or questions they had about introducing ePortfolios. The material delivered was based on the output of a number of workshops held by the SHA/ALPS ePortfolio Project Team, plus the personal experiences of both presenters.

The presentation began with an overview of the project: its aims and progress to date. This was followed by a brief investigation of current experience relating to non-electronic portfolios of Adult Student Nurses in Huddersfield, focussing on the limitations, inconvenience and inaccessibility of hard copy formatting. The material detailed the range of functions that the project team believed should be included in a comprehensive ePortfolio system and finished with an exploration of benefits to both academic staff and students of using such a system. Opportunities to ask questions and develop points further were provided throughout the session.

Feedback from participants was generally very positive indeed. However, it should be noted that those who attended had done so mainly due to an existing interest in the subject area. That said, most were surprised by the comprehensive nature of the ideal system described and the mutual benefits this offered to both staff and students. The only negative feedback was regarding terminology: 'Academic Facebook' to describe the tools to facilitate networking and peer-support between students and also encourage staff/student communication. Overall, this session served to expand attendees' understanding of what functions an ePortfolio could provide and what teaching/learning activities they could support and to initiate discussion about implementation and benefits.

Building on this work, Niall Dew is now involved in an ongoing institution-wide strategic project at the University, which is investigating ePortfolios and ePDP. Niall is also the Deputy Lead of the ALPS ePortfolio Network and so this Huddersfield project will help inform and guide the network's work over the coming year.

University of Leeds

A student and member of staff from the ePortfolio team met with a Senior Lecturer (Social Work) on 5th March 2010. Currently, this department is using a paper portfolio and is considering the pluses and minuses of introducing an ePortfolio. The following issues were discussed:

- 1) The need to be clear about the purpose you want the ePortfolio to serve.
- 2) Identifying the drivers behind your introduction of an ePortfolio (CPD, Professional validation, Assessment) as this is likely to influence which ePortfolio system will best meet your needs.
- 3) Identifying what technological expertise and support is needed. This should help both with the initial decision about which ePortfolio to use and also should ensure that good support is provided to tutors and students once the ePortfolio is in place.
- 4) Identifying enthusiastic tutors and ensuring that they are well trained and signed off as competent before the ePortfolio is introduced to students.
- 5) Ensuring that there is sufficient funding and time to run the project.
- 6) Setting up rules of engagement for staff and students so that everyone is clear about what is expected regarding ePortfolio use.
- 7) Training students:
 - a. Ensure purpose is clear
 - b. Demo, then students replicate this in a computer cluster and are signed off as competent (especially important that mature students with little experience are well supported e.g., a previous mature student who struggled, but is now 'converted' could both champion and buddy students in a following year).
- 8) Things to consider:
 - a. The motivations for using an ePortfolio and the perceived benefits change throughout a course. For example linking the ePortfolio to 'future employment' may work better as a driver later in the course.
 - b. Students become dis-heartened if there is a discrepancy between the verbal feedback and written feedback that they are given. For example

if they are praised highly face to face and then receive rather tame written feedback, which doesn't contain everything that they feel they did well.

Following this up in January 2011, we can report that the tutor is still seriously considering the introduction of an ePortfolio system to the course and hopes to include this as part of the planned curriculum review. The view is that the two changes would be best done together, enabling the ePortfolio to be mapped to the new curriculum and for everything to be validated at the same time.

Posters and presentations

The students were involved in a poster presentation of the project work (focusing on the benefits of ePortfolio use and guidelines for their introduction) at the 2010 University of Leeds Learning and Teaching Conference (Dew et. al. 2010). They also jointly led a presentation of the later work (focusing on the ideal ePortfolio specification) at the ALPS Conference in March 2010 (Howes et. al. 2010). Both presentations gave the students the opportunity to discuss their work and views on ePortfolios with academic staff.

The students also played a role in the ongoing institutional ePortfolio review taking place at LeedsMet University. The students on the project team were invited to contribute to a workshop in March 2010 at which students and staff discussed the requirements of an institutional ePortfolio. The workshop discussions fed into the review process influencing the recommendations that were put to the University's Senior Management.

3.3.2 Championing Outcomes

Within the life of the project, we have not been able to effectively evaluate the impact of all the work the students did on championing the ePortfolios to students and staff. The easiest way to have done this for the championing to staff would have been to be able to show that a tutor, course or university took the decision to adopt an ePortfolio following engagement with our students. However, the adoption of an ePortfolio is not a quick decision, but tends to be something that requires wide consultation. For example both Huddersfield and LeedsMET universities are currently undertaking institution-wide reviews to establish whether there is a business case for investing in ePortfolios and if so which ePortfolio best meets the institution's requirements. These reviews typically would take at least a year to complete. We are confident that the input from our students will have had an influence on these consultations. However no decisions have yet been made and we realise it would be impossible to attribute any decision solely to our project activities. ALPS itself will continue to play a key role in the shaping the thinking about ePortfolio use in HE through the ALPS ePortfolio Network. This network was one of 6 that were set up in October 2010. That it was chosen as one of the 6 key areas of the ALPS CETL work that will be taken forward is an indication of the value that the ALPS Partnership place on investigating ePortfolio use.

4 Evaluating the project approach

The previous sections have described the work undertaken and the outputs from the project. However, we also wanted to evaluate whether the different approach that we had used to engaging students had had the impact we anticipated. When evaluating whether this approach had achieved what we set out to do we considered the following questions:

1. Did the project team (students and staff) judge that the objectives were achieved?
2. Was there any evidence that the outputs were more creative or radical than we might have achieved through a focus group approach?
3. Did the students take the initiative?
4. Did the students feel that they were genuinely working *alongside* the staff as a team?
5. What could we have done differently (within this general approach) that might have led to more of these aims being achieved?

Other issues that we decided to look at included:

1. Did the students feel that they gained anything-else from their involvement with the project?
2. How many hours work did students claim for? Did the timesheet approach work and was it felt that it was robust?

Two approaches were used to gather answers to these questions. The first was a feedback questionnaire sent to students (*Appendix 3*) and the second was a discussion of these issues by the academic staff involved in the project. Feedback was received from 5 students.

4.1 *Did the students believe we had met our objectives?*

The students were asked to what extent they felt the project had achieved each of the three main objectives set for them:

1. To increase student use of ePortfolios (where available)
2. To build a specification of an ideal ePortfolio
3. To try out different ways of championing ePortfolios to students and staff

The overwhelming response from the students was that they felt we had certainly achieved objective 2 (the specification); in their words “*our biggest triumph*”, “*distilled this quite well*”, “*have a good idea of this*”, “*ended up having a good image in my head of how I want my ideal ePortfolio to look*”.

They believed that we had done some good work on objective 3 (championing ePortfolio use), citing the posters and presentations (which arguably worked best as a way of promoting ePortfolios to staff) and also the lunchtime workshops that some of them had run with their fellow students.

However, they were less convinced that the work we had done on objective 3 had led to an increased use of ePortfolios by students (objective 1). There was some feeling that we had achieved this within the group (where they had access to a good ePortfolio), but they felt that it was less clear whether we had achieved this outside the project team. The reasons given for this included the poor quality of some of the ePortfolios that students had to use and that students regarded ePortfolio use as an extra demand on their time: they would not do it unless it was compulsory. Set against this, one of the students gave a clear example of how he had personally seen the benefits of using a reflective diary with a first/second order thinking model “*jotting down stuff briefly and however it comes into my head... then editing and making sense of it at a later (not too distant) date.*” as a way of collecting examples of practice and then relating them to theory. He had observed fellow students failing placement modules as they had failed to link theory to practice and he believed that they would not have had this problem, and would have been better reflective practitioners, if they had kept a reflective diary (one of the ways in which an ePortfolio can be used). Another student commented that she herself had not fully understood ePortfolios until another student had demonstrated them to her using her own ePortfolio. This suggests some possible approaches to future work on promoting the use of ePortfolios:

1. Get students to demonstrate their own ePortfolio to new students and explain the benefits they have found in using one.
2. Provide training to students on using ePortfolios – not just the functionality, but on how they should use them effectively to improve their learning, practice and grades – using them “properly”.
3. Make the use of an ePortfolio compulsory at the beginning, so that students get into the habit of using them and are likely to personally see the benefits.
4. Set up teaching/assessment so that students who use ePortfolios well will see early benefits in terms of useful tutor feedback, easier completion of assessments and higher grades.
5. Providing individual feedback to the students on their actual *use* of the ePortfolios (not just on the content) – pointing out how they can use material in different ways in relation to personal and professional development.

4.2 Was there evidence that the outputs were creative or radical?

Overall there was nothing in the students' feedback that suggested that they thought this particular approach had led to the project outcomes being more creative or radical than they might have been from a more traditional focus group approach. As will be described below, they did see benefits to the project team approach in that it made

them feel their ideas were valued, but there is nothing to suggest that they felt this led to more creative solutions being proposed.

This concurs with what the staff thought and is probably linked to the fact that the students did not really take ownership of the project work in terms of setting their own tasks and coming up with their own ways of approaching the problem. As is described below, students preferred to be given a clear task and instructions on how to go about doing it. This of course meant that the staff ended up structuring most of the work and the ambition of passing more control over to the students and facilitating inventive, new ways of looking at the problem, which had not been previously considered by staff, was not really achieved.

4.3 Did the students take the initiative?

The hope had been that by letting the students lead on the work then their viewpoint would be prioritised and the project would develop student-centric techniques for encouraging ePortfolio use. It was felt that more common ways of getting student involvement (e.g. focus group or questionnaire) - were still staff-led and therefore risked producing solutions that were shaped by the staff/institution's viewpoint. An analogy that could be used is to compare this with the different approaches that can be taken to deciding where paths should be put across open space. One approach (the one where the planners/developer's viewpoint is dominant) is to design and lay out the paths during the building process. Another approach (the one where the pedestrian's viewpoint and choice is dominant) is to finish the development without laying any paths and wait to see where the pedestrians choose to walk (the worn areas, where people have voted with their feet) and then lay the paths on those routes. However, as described below, we do not appear to have managed to pass the decision-making and control to the students in the way we had hoped.

Students liked it when they were given structure and instructions making it clear what had to be done – *“I quite liked the tasks ... as it was clear what I had to do”* and that when this was not there then they found it more difficult - *“I would have done more earlier but it was difficult to know what to do”*, *“a bit more structure early on would have been beneficial”*.

The language used in their feedback tells us something about how they saw their role – they talked about how they hoped to *“influence”* decision-making, rather than perhaps leading it. Several students highlighted how useful they had found the presentations by lecturers and how much they had learned from these (particularly on the poster design and the 1st/2nd order model of reflective thinking). They rightly identified things we could have done better at the start of the project, such as providing them all with the same ePortfolio. Perhaps if we had managed to pass ownership and control over to them more effectively, they would have searched for free ePortfolios themselves and come to the group with the suggestion that we all try these out and use them to communicate with each other.

It seems that we did not manage to effectively pass over ownership and control to the students. One reason for this may be that the students did not want it, as is suggested by some of their feedback. However, another reason may be that we were giving out mixed messages. Despite stating that we were working as a project team, staff set the

agenda and content of each of the Saturday workshops. Although we encouraged them to set their own tasks, we then limited them by pointing out that they could not survey students or undertake a mini research project, as this would require ethical approval. In addition, while encouraging them to propose their own tasks, we also presented our proposed set of tasks and a very clear procedure for completing and reporting on those tasks.

If this approach was to be tried again and thought valuable – perhaps because it was thought to offer more creative solutions, careful consideration would need to be given to how best to ensure that control and ownership was passed over to the students and that they understood why we were doing that. The handover approach that we used (providing some initial tasks to get them going and using the workshops to try to keep them focused on the main objectives) did not lead to the students taking over. Perhaps handing over control earlier (after outlining the objectives), identifying individuals to take up leadership roles and identifying the academic support staff as that: people they could go to for help, but not the people who were directing the work, could have worked better. However, some of our experience (the students not leading on the poster design despite reporting how much they had gained from that session) suggests that students may not have wanted to take up this more complex, responsible role and the work may not have progressed as far as it did. In fact one of the student's comments "*I feel that a bit more structure early on would have been beneficial as the project may have moved faster*" makes it clear that they felt more would have been achieved if they had been provided with greater direction from staff.

Returning to our path laying analogy, it could perhaps be considered that what we observed was pedestrians not setting out across the open area until a few slabs were put down.

There may be a few different ways of overcoming this initial caution and more effectively passing control to the students, for example:

- Consider providing the students with some work structures and ideas, but ones that are clearly in an unfinished form so that they are not presented with a "blank sheet" but they are presented with something that they feel they can reject or improve. When we asked the students to give comments on a draft poster design (but one that actually looked like a finished product) we did not get much feedback and the changes suggested were minimal. Whereas, when we asked students to give comments on a draft presentation (that clearly was in an early draft stage) we had much more constructive feedback that resulted in more fundamental changes being made.
- Instead of structuring the task and workshops for the students, focus on being clearer about the overall goals of the project and clearer that the control (and choice of how to achieve those goals) is being passed to the students. This has some similarities with the Minimally Invasive Education theory as demonstrated in the Hole in the Wall (Mitra, 2003) and Gateshead School projects (Mitra, 2010) that Sugata Mitra has led in which control has been very successfully passed onto the students/children.

4.4 Did the students feel they were genuinely working alongside the staff as a team?

Whilst students did not readily take the initiative and lead on the work, their feedback does suggest that they largely regarded themselves as part of a team working with the academic staff – almost a co-researcher dynamic rather than a teacher-student dynamic. They talked about “*being part of the development*”, “*getting involved with research*”, “*feeling completely involved in the process*” also “*working alongside staff gave greater acknowledgement to our input.*” Something that could have helped to produce this feeling was the length of time that the project ran (27 weeks) and the semi-formal nature of the Saturday workshops, which were all followed by a communal lunch and chat, allowing good relationships to be built between staff and students. The students commented on the “lecturers” (they assumed the staff all were lecturers) being “*helpful*”, “*polite*”, “*patient*”, “*friendly*” and “*passionate*” with a “*wide range of crazy and relaxed personalities*”.

The approach used certainly seems to have led to students feeling that their work was valued and has possibly contributed to increased confidence - “*I felt as though I had been completely involved in the process and I felt proud of the work I had done.*”

4.5 What would students have liked us to do differently?

The students identified two things that they would have liked us to do differently:

- Provide greater structure and direction at the beginning (as discussed earlier)
- Provide all students with a good ePortfolio which they could use from the beginning of the project

The staff also recognise that the provision of a common ePortfolio for all students from the beginning would have been very useful. At the time we had hoped that they would all have access to a reasonable ePortfolio system within their courses, but this was not the case. Subsequently we thought that they could either use the ALPS system (although it was not really set up for this purpose), attempt to use Blackboard (which some universities are doing) or search for a free ware version. One of the main reasons we did not provide them all with the same ePortfolio at the beginning was that we did not want the project to end up being a review of one particular system. However, in hindsight, it was difficult for those students who did not have prior experience of using an ePortfolio, to get started on the project when they did not have access to a reflective ePortfolio system and support from us in using it.

4.6 Did the students make other gains from the project?

The students' feedback demonstrates that they felt they gained a lot from their involvement in this project. Examples given include gaining new skills and experience in the areas of team working, interprofessional working, reflection, communication, poster design, presentation and digital media.

One student felt they had gained valuable experience that would be useful to them not only in their course but in their professional life as well - *“Working in such a big group with different types of students and staff meant that the group was very diverse and at first I thought it would be impossible to work together in order to collaborate on all the different ideas while still having a voice of my own. However the ePortfolio group worked smoothly and everybody was allowed to contribute. I can now use the ePortfolio group as a model for future group work during my course and career.”*

It may be that the size of the group, the fact that students were chosen from a range of professions and that the staff also had different backgrounds and professions (and indeed *“a wide range of ... personalities”* as noted by one student) may have meant that students were exposed to a wider range of opinions and views than they might normally have come across in university group work. One student noted that they now realised how difficult it was *“setting up new initiatives as everyone has such different ideas”*. Exposure to this difference of opinion and the management of it may have brought benefits in that it gave at least one student a model of effective interdisciplinary teamwork.

Several students commented on how their understanding of ePortfolios had changed as a result of their involvement in the project. As well as understanding how it could be used to support reflective practice effectively, they also commented on how they now realised that it went beyond reflection - *“Now I see ePortfolios as a tool that is supposed to help me and make my life easier and more organised (as well as somewhere to reflect)”* *“more important for personal development than I thought”*.

4.7 Student engagement and working hours

16 students were offered places on the project. Although all these students accepted the places, the number of active students (based on attendance at workshops and timesheets sent in) was actually 14.

The average number of hours that students claimed during the project was 38, which averages as 1.4 hours per week. However, there was quite a range within this average - with two very active students putting in 91 and 75 hours each, and 3 less active students only putting in approx 10 hours each during the project.

It is interesting to note that even the two highly active students (who contributed to poster and presentations) still only averaged around 3 hours work per week, well under the maximum we were prepared to pay of 5 hours per week. It is not entirely clear whether this was due to there not being seen to be 5 hours' worth of work to do each week, or whether it is a comment on the number of other demands that the students had on their time.

It should also be noted that the project work included 5 Saturday morning workshops, each lasting 3.5 hours and so 17.5 hours of work could be achieved simply by turning up to these workshops. This accounts for 46% of the average hours total submitted by student. This fact perhaps supports the suggestion that students really wanted to have their work structured for them and found the more independent, flexible working in

their own time harder to fit in (and did not do that much of it) instead gaining many of their hours simply from the workshop attendance.

The relatively low (though not negligible) importance of the money was demonstrated by the fact that 3 of the active students did not submit any timesheets until the very end of the project, despite the fact that we had offered to pay them monthly on receipt of the timesheets. This also supports the students' own comments about how money *alone* would not have kept them interested in their project. They made it clear that they had joined the project because they felt it would also contribute to their "*continuing professional development*", understanding of the technology and reflective practice - "*if I hadn't seen any benefit to myself I wouldn't have joined*".

4.8 Conclusions

The approach of paying students was successful in several ways: the project objectives were mostly achieved with a specification of an ideal ePortfolio being drawn up, the use of ePortfolios and reflective diaries increasing within the project team and various approaches to championing ePortfolios being tried out. The students enjoyed working as part of a project team alongside the academic staff; feeling their work was valued and that they gained important skills and experiences from their involvement. Interestingly the skills they reported gaining were in the common competency areas (teamworking, communication and interprofessional working) that the wider ALPS programme has been supporting.

However, the students did not take control of the project work (taking the initiative and setting their own tasks) as much as had been hoped and the solutions reached did not appear to be more creative or innovative than those we would have gained through a more conventional focus group approach. In fact one of the requests from students was for staff to provide more structure and direction and they clearly found the work easier to manage when this was provided. If a future project wanted to use this approach to try to get more creative or radical solutions to a problem, then careful thought would have to be given about how to provide the initial support and direction that students want, whilst still enabling and supporting them in taking over ownership of the project.

Additional benefits that were seen from the project: the new skills and confidence gained by students, students' increased understanding and use of ePortfolios and reflection, students gaining experience of inter-professional working – provide worthwhile reasons for using this approach again, even if the project ownership stays with the staff.

The students were asked for comments on this report and those comments are included in Appendix 4.

5 Students' recommendations for further work on ePortfolios

When asked what further work they thought was needed in this area the two main areas mentioned by students were:

- To build the improved ePortfolio based on their specification
- To integrate ePortfolios more effectively into the course and the professions

Discussing the improvements they would want to see in the ePortfolio some of the key areas from the specifications were mentioned: ease of use and ability to customise. Two students also talked about the benefits of providing mobile access - *"I think technology is moving that way and everybody will have a compatible mobile device at some point in the future and this will be the main form of communication."* *"I can see me using [it to] reflect when I'm on the bus etc."*

Suggestions for integrating ePortfolios into their courses included linking it to other key university systems (email and submissions) to encourage daily use, ensuring that it provided a place where students could save and manage their own material as well as reflections, better support and use by staff so that the ePortfolio acted as an interface between students and staff and better links between HE and the professions' use of ePortfolios - *"Colleges and professions to meet to discuss ePortfolio use"* *"Professions to link into compatible ePortfolio systems to encourage ePortfolio use for CPD"*.

6 Conclusion

There was a general agreement between the staff and the students that the main outputs of the project had been achieved. These outputs included the students identifying benefits to ePortfolio use, writing guidelines for their introduction and drawing up a specification for their ideal ePortfolio system (a set of functions they would want to see in this system).

It was recognised that ePortfolios are a long game and that time is required to build up a sense of community and good working relations. For this reason the championing approaches recommended using students who were further into the course talking to the newer students about the benefits they had seen after some sustained use of the ePortfolio.

Students felt very strongly that in order for ePortfolios to be introduced effectively then the staff involved must be committed to their introduction, supportive and enthusiastic about their use. The purpose of the ePortfolio needs to be clearly explained and linked to the students' learning and assessment.

The project's aim (to be student-led with students making the decisions about how the work would proceed and taking responsibility for the work) was not fully achieved. The students felt very engaged in the project and enjoyed working alongside the university staff. However, they did not take full ownership of the problem / work in the way that had been hoped. This may have been a result of this aim / possibility not having been made clear enough to students at the beginning and staff keeping too much control of the workshop organisation/planning. Alternatively it may have been related to the difficulty of the task and of the group working particularly since the group was both multi-professional and cross-institutional. The experience of this project has already informed other student-led projects within the Leeds School of Medicine – based on our experience and feedback the SLEMP (Student Led Evaluation of Mobile Learning) project adopted a different approach to their Saturday workshops, keeping the structure much more open and handing control to the students as soon as possible.

The multi-professional and cross institutional approach was both strength and a weakness in the project. It was strength in that students and staff were exposed to different viewpoints and experiences, but it also caused some difficulty making it harder at times to reach a shared understanding and consensus. However, recognising the difficulty in reaching agreement and finding ways of negotiating through this difficulty is a very useful skill set for students to develop and so overall it was felt that this was a good approach to have taken.

The students identified several areas for further work including the building of an improved ePortfolio based on their specification. Their specification has been shared with ePortfolio developers and feedback from Pebblepad already suggests that many of these functions are being incorporated into new versions of their software. Another area for further work was better integration of ePortfolios into their courses and the professions. This is work that the ALPS ePortfolio Network (set up in October 2010) is well positioned to take forward, as it builds on the ALPS partnership of the 5 universities and 16 health and social care professions. Finally it may also be worth considering the differences between the professions in terms of their requirements of ePortfolios as well as the shared requirements/features that were the focus of this work. A future ePortfolio package may be modular in design with individual professions or students being able to choose to adopt or use select parts of the full system based on their professional or personal preferences.

7 References:

- ALPS (2010), *ALPS Website*, <http://www.alps-cetl.ac.uk>, last accessed 30th November 2010.
- Balaban, I., Divjak, B., Kopic, M., (2010) *Emerging Issues in Using Eportfolio*. University of Zagreb, Unpublished Paper.
- Dew, N., Harkin, P., Howes, A-M. & Treasure-Jones, T. (2010), *Using ePortfolios to record and reflect on our journey – the students’ perspective*, poster presentation at LTC7 Seventh Annual Leeds Learning and Teaching Conference, Leeds, January 2010.
- Glaser, B.G. (1998) *Doing Grounded Theory - Issues and Discussions*. Sociology Press.
- Howes, A-M., Collins, B., Dew, N., Harkin, P. & Treasure-Jones, T. (2010), *Minding the Gap: addressing student expectations of learning and assessment in relation to current practice in the use of ePortfolios*, ALPS Conference, Weetwood Hall, Leeds, March 2010.
- Himpsl, K., and Baumgartner, P., (2008) Evaluation of e-Portfolio Software. ICL 2008, Austria
- JISC (2008), *Effective Practice with e-Portfolios – Supporting 21st Century Learning*. <http://www.jisc.ac.uk/media/documents/publications/effectivepracticeportfolios.pdf>, last accessed 17th July 2009.
- Mitra S. (2003), *Minimally Invasive Education: A progress report on the “Hole-in-the-wall” experiments*. British Journal of Educational Technology 2003, 34 (3), pp367-371.
- Mitra S. (2010), *The hole in the wall: self organising systems in education*, Keynote talk at ALT-C 2010, Nottingham, September 2010, <http://www.youtube.com/watch?v=Ps8MwyJH8Zo>, last accessed 30th November 2010.

Appendix 1 - Leeds Learning & Teaching Conference 2010 Poster



ePortfolio use What's in it for me?

Potential benefits to staff

Student assessment

- Allows your students to provide rich multi-media material (audio, video etc) to evidence their learning
- Reduces the amount of paperwork that needs to be kept and allows easier analysis, archiving and searching of student assessments

Student skills development

- Helps your students to develop reflective learning and practice skills

Communication with students

- Provides you with a way of structuring communication and feedback with your students whilst they are out in practice settings

Student support

- Enables you to monitor your students' learning activity whilst they are working/studying outside the university
- Enables you to spot problems early and direct your support accordingly

Potential benefits to students

Academic Facebook – Learning/Support Network?

- An interface between students, module tutors, personal tutors and course managers
- Provides a place to voice queries and concerns
- Facilitates feedback and pastoral care
- Allows the sharing of learning experiences with tutors, fellow students and mentors

Curriculum Vitae

- Provides a way of demonstrating to potential employers who you are, what you have done and what you can offer them.
- Provides a clear record of skills and competences developed
- Allows rich multimedia data (audio, video etc) to be used to evidence skills development

Reflection

- Enables instant recording of reflective thoughts (reflection in task)
- Provides a way of organising thought processes and reflecting on learning experiences (reflection on task)
- Supports the development of reflection and self-monitoring skills



Barriers to use

- Introduced too soon – students feel overwhelmed at the start of their courses
- Purpose and benefits not explained clearly to students
- Tutors not seen to be active in the ePortfolio
- Feedback provided in the ePortfolio is not specific nor encouraging
- Some of the functionality required to see the potential benefits is not provided in the chosen ePortfolio system (e.g. discussion forums or ability to share portfolios with peers)



Student-led design of an Ideal ePortfolio System

The ALPS ePortfolio team (comprising 14 students from health and social care courses and 4 members of staff) was set up, as part of the ALPS CETL programme, with three aims:

1. Developing a better understanding of how students and staff currently use ePortfolios in health and social care across the 5 Partner HEIs
2. Suggesting approaches for improving this use.
3. Championing the use of ePortfolios to reluctant users.

The project is currently building up an understanding of existing ePortfolio use and identifying functionality and practice that would benefit students and staff. We invite visitors to our stand to help us with this by discussing their ePortfolio use or ideas with us.

ALPS ePortfolio Project Team

Robert Collins, Alice Cotton, Alan Coulthurst, Niall Dew, Jan Frost, Francesca Greer, Pat Harkin, Anne-Marie Howes, Gisselle Hull, Shafiq Hussain, Dare Oladokun, Sarah Platts, Rachel Stevenson, Clare Thorpe, Naomi Townend, Tamsin Treasure-Jones, Kate Trigwell & Rachel Wild. The project involves the Universities of Bradford, Huddersfield, Leeds, LeedsMET and York St John.

Please contact T.Treasure-Jones@leeds.ac.uk for further information about the project.

Appendix 2 - ePortfolio Developers' Response to the Specification

Rank	Function	PebblePad ²	Response from PebblePad
1	Portal Access (LDAP)	Y	
2	Initial upload private then distributable as student wants	Y	
2	Reflective elements	Y	
4	Easy to use, but with power options (Subjective)		
5	Import and export functions	Y ¹	
6	CPD	Y	
7	Performance/Progress management	N	PebblePad's profiles are widely used for performance/progress management. When published to a gateway a range of reporting and validation features are available.
8	Easy to navigate (Subjective)		
9	Upload formal as well as informal meeting notes	Y	
10	Linkability (e.g. hyperlink to other sections of ePortfolio)	Y	
11	Ability to format text	Y ²	
12	Printable	Y	
13	Discussion board	N	All assets contain minimum discussions or conversations. Gateway groups have a group blog which is used as a discussion forum
14	Social academic networking	N	
15	Managable entry boxes	Y ²	

² Our original mapping of Pebblepad against the requirements in the specification

15	Multimedia embedding	Y	
15	Peer Support	Y ³	
18	Ability to customise front page and create other tabbed pages	Y	
19	Flagable items	N	Users can mark items to return to. They can also set deadlines for actions. On a gateway a tutor/assessor is able to use the validation function to indicate whether items meet/do not yet meet the 'standards'
20	Customisable with apps	N	Some progress is being made toward this through the CeLTic project aiming to integrate LTI (tools interoperability). See also comment on requirement 21.
21	mPortfolio	Y	
21	Offline access	N	Some level of offline access is available through the PDA version. Mobile access is facilitated through an HTML version and an iPhone version. PebblePad also supported offline blog authoring tools utilising the Blogger API. This API has now been updated and the new Blogger API will be supported from Dec 2010
23	Cheap to buy (subjective)		
24	Time logging	N	Not automated time logging but all assets have a field allowing the user to enter hours and/or points for an activity. When posted to an Activity Log the log maintains a record of overall time spent – also broken down by tag.

Appendix 3 – Feedback Form

ALPS Student ePortfolio Project

Your feedback on the project.

Please let us know what you thought. Even if you don't have time to answer all the questions then your thoughts on what you can answer will be very helpful. We will use your feedback to help us to a) plan future projects b) report your views back to the universities and the Strategic Health Authority c) try to influence decision-making on the use of ePortfolios in our universities and departments.

- What did you personally expect to achieve from working on this project?

- Did you gain that?

- Did you gain anything else? If so then please describe what that was.

- Do you think this project approach (paying students to work alongside staff to explore an issue) been a useful way of gathering student input and views? Why?

- The project had three aims:

1. To increase student use of ePortfolios (where available)
 2. To build a specification (description) of an ideal ePortfolio
 3. To try out different ways of championing ePortfolios to students and staff
- To what extent do you think we have managed to do each of these?

- What would you have liked us to do differently and why?

- What motivated you to join the project in the first place?

- What motivated you to keep working on the project?

- What else could we have done to encourage your (or your fellow students') involvement in this work?

- Has your involvement in this project influenced your **views on** ePortfolios? If so then please give some details.

- Has your involvement in this project influenced your **use of** ePortfolios? If so then please give some details.

- What further work do you think needs to be done on use of ePortfolios in universities a) in your university and b) more generally

- Is there any further work (in any area) you would recommend based on this project?

THANK YOU!

Appendix 4 – Student feedback on this final project report

“I read the report and think that it is excellent, and do not have any constructive feedback really im afraid! I took particular interest in reading the section about championing e-portfolios as I had the meeting with the Leeds lecturer, and i think that was written up very well. I thought section 4.3 was really good analysis of the situation regarding the students not taking as much initiative as I know I felt that as a student I was in a 'helping' role rather than a leading one.”

“I have read about two thirds of the report and found it fascinating! I have one comment to make on one of the points highlighted in the report:

It states that as a group of students we did not take control of the process. I agree with this completely but would like to add one comment as to why I think this might be so, which I don't think has been included. At the beginning of the project it appeared disorganised, as opposed to them trying to encourage us to take charge. It took me several worksessions before I think I fully understood what they meant, and by then my degree work pressures had increased more than I expected so I had to reduce my hours. If intially they had been more direct in saying what the aim of the project was and that we could reach that aim however we wanted then we may have claimed ownership of the project more readily. Instead they did seem to be leading so we - as well practised students! - happily followed their directive.”

“I have read the report and I think it is well written. I especially agree with the part of the conclusion about students differing opinions being more to do with the benefit of reflection rather than that of the eportfolio.

Overall, I think the report is accurate and comprehensive.”

“Thanks for the report and opportunity to peruse it. Having only had time to browse approximately 1/3 of it, it seems that it is generally a correct interpretation of the project. One thing I would like to emphasise is regarding the point of students 'not taking charge/leadership of the project'. I feel (and agree with the observations of the report) that this expectation was not fully recognised by the students due to the three main reasons of:

- Competing demands on our time
- Not being provided a realistic eportfolio system to work with (about this not I am particularly passionate: I feel that although we were provided with the basic ALPS suite to use as an eportfolio it was not utilised in the way that it should have been because students were had different levels of accessibility to alternative eport. systems. For example, I personally tried to engage with the ALPS suite holistically but a poor response by other students in exploring it and engaging with others via this system lead me to lose enthousiasm. I think I can cite two or three reasons for this. 1. Some students may have found it a chore (& may have lacked passion for the project) using the ALPS to 'play about with'... afterall who wants the ALPS suite when they have Facebook. 2. Those students who were passionate about eportfolios already had access to a more colourful system (I forget the name of the system that they

already had access to) which I feel they may have been using to explore further. 3. I think maybe there were some accessibility issues with the ALPS suite as well as some students maybe feeling it was meant to be used to complete the tasks. 4. Lastly, another factor may have been (but I do not remember properly if this was the case) that students did not have full access to the ALPS pages of their colleagues).

- A lack of clarity about the issue of the students taking charge of the workshops. I think maybe students were unaware that they were welcome to host the workshops.”