Centre for Excellence in Teaching and Learning for Promoting Learner Autonomy (CPLA)

Report to HEFCE: Interim Evaluation
July 2007

Appendix 1: CPLA Project Evaluation (2005/06; 2007/07)

Sheffield Hallam University
SHARPENS YOUR THINKING

CPLA Project Evaluation (2005/06; 2006/07)

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1 Introduction

This report forms part of the evaluation of CETL work on Promoting Learner Autonomy. The report is a qualitative exploration of the work on promoting learner autonomy taking place within Sheffield Hallam University. The report focuses on providing an overview of projects within a variety of disciplines taking place under CETL funding in the period 2005-2007. Within these projects it aims to identify good practice and positive approaches to teaching and learning which promote learner autonomy.

Data was gathered through qualitative interviews of each of the CETL associates responsible for a project within the Centre for Promoting Learner Autonomy (CPLA) in academic year 2005/06 and 2006/07. Data gathering was led by questions aiming to explore each project's scope, aims and objectives as well as the extent to which these have been achieved. The projects varied between research and developmental. For those which were carried out as research the methodology of data gathering and analysis was evaluated. The outcomes of the project were explored from the point of view of the potential they had for becoming embedded within the subject's teaching and learning practices in the long term. This meant taking into account the attitudes and perceptions of both the teaching and the student communities

affected.

It needs to be taken into consideration that the approach which this research takes is formative, reflecting the fact that most projects being carried out in 2006/07 would have been at a stage of data gathering or exploration, at which stage evidence of achieving objectives may not have been available.

The methodological approach for this evaluative study was appreciative inquiry (Ludema, Cooperrider, Barrett, 2006). This approach was considered as the most appropriate, since it is in line with the objectives of the CETL initiative of bringing positive change in teaching and learning practices. In addition appreciative inquiry has the capacity to generate and evolve collaborative discussion across faculties and academic subject groups regarding the practice of autonomous learning. The perceived positive outcome of such conversation is the development of a shared vision for the future of learner autonomy in Higher Education.

The research questions for the appreciative inquiry were drawn from the Draft Research and Evaluation Strategy for CPLA (12.06.06) Following is a synthesis of these questions.

Key research questions:

1 What works well (and maybe less well) in developing learner autonomy? How? Why?
2 What persuades staff and students to engage with the concept and the practice of promoting learner autonomy?
3 How is the student experience changing and how are they demonstrating characteristics of developing autonomy both now and for the future?
4 What is the impact on the student learning experience and outcomes in areas where change is happening compared with those where it is not?
5 What is the impact on the student learning experience and outcomes at the module level compared with course/programme level change?
1 How do small scale projects/activities interact with institution-wide large-scale change initiatives?
2 How staff can be encouraged and rewarded for innovation and risk-taking?
3 What are the barriers/inhibitors to risk-taking, innovation and educational change?
4 What do staff think, feel and do when students take a greater role in determining what, where, when and how they will learn and be assessed?
5 How do we research risk taking in LTA and how do we identify its support?

These questions provided a focus for the analysis of interview data.

The actual interview questions followed the guidance notes on evaluation described in the CETL Guide, 'Centre for Excellence in Teaching and

Learning (CETLs): approaches to evaluation'. The following is a synthesis of the interview guide questions:

1. Brief description of the purpose and scope of the project.

2. Brief statement about the project's evaluation framework, methodologies and sources used – how was evaluation carried out?

3. A brief account of your experience of the evaluation process;

4. A summary of the key findings and observations from the evaluation:

5. What is your feeling for the overall progress of the project so far?
    a. Issues which may have arisen – limitations of the study; plans for remedial action
    b. Success points

6. Future actions/ future research/ plans for continuation

Following is the evaluative account of CETL Promoting Learner Autonomy projects carried out in the period 2005-2007.

2 Law in Practice / Law in the Community

Two projects were carried out by the School of Law, under CETL funding. These were Law in Practice and Law in the Community. The projects were run as modules as part of the undergraduate Law course at Sheffield Hallam University. Both modules were practice based, with the distinct aim to provide an experience to students of working in a real world setting and gaining valuable work experience. The modules developed partly as a way of addressing the rising demand for more placement numbers, since the original placement scheme for Law, Law Clinic, could only provide a limited number of places for students.

Following is a summary of both modules, giving an overview of the aims and objectives of the projects and the extent to which they were successful in addressing the needs of the autonomous learner. The aspects of autonomous leaning identified are categorised and parallels are drawn with other CETL projects.

2.1 Law in Practice

Law in Practice was a pilot scheme run in academic year 2005/06. The purpose of the scheme was to establish whether there was a viable proposition for a practice based module to be developed as part of the Law course at Sheffield Hallam University. Students would spend a day a week in a legal practice setting. The module was assessed through a written report and evaluation of practice. Two students were sent out on placement as part of the pilot scheme.

2.1.1 Key findings

Pedagogy

The feedback from students on the Law in Practice module was very positive, as the CETL associate identifies:

'The feedback from Law in Practice has been very, very positive - the demand for it far outstrips anything that we've been able to provide currently... the placements to which students have gone out this year thus far have fed back very positively and said it has been a fabulous experience, they've thoroughly enjoyed it, thoroughly recommend it to anybody else.'

(CETL Associate, Law in Practice)

This is indicative of the high value which students attach to real life work experience. Alongside MSc in Property Appraisal and Management, Psychology, and using iPods with Sociology students, Law in Practice is one of the CETL projects which have successfully implemented real life work experience in their approach. It is apparent that this is a winning strategy and one which supports learner autonomy - students are learning independently, with minimal supervision, as well as developing their employability skills. The aspect of learning within a real life work situation speaks of the situated approach to learning (Lave, Wenger, 1991(a)), where engaging with the authentic activities of the subject setting is key. This makes implications for the approach to pedagogy - a constructivist, situated approach to learning emerges as the optimum choice of pedagogy.

The following description by the CETL associate of the way students are expected to work on the Law in Practice module supports this view:

'They are very much responsible for their own learning because they go out, they make of the experience what they make of it. We don't say to them this is what you will do, this is what you will learn from it - they are all given work to do by their supervisor in the practice setting and it is for them to gain the most they can from it. So the input from us is minimal - we are there to make sure things are going the way they should be, and to deal with any difficulties as and when they arise.'

(CETL Associate, Law in Practice)

The role of academic staff is described as that of facilitators of learning, *'the input from us is minimal'*, an approach which is at the heart of the constructivist paradigm (Doolittle, 1999). More importantly, the learning outcomes and objectives are not predefined: *'We don't say to them this is what you will do, this is what you will learn from it'*. Rather, learners themselves identify those in the process of engaging in practice. In this way learners are actively engaged in making their own meaning within the learning situation. The constructivist model is applied (Doolittle, 1999), of teacher as facilitator and an active learner who constructs and understanding of the learning situation, thus generating their own meaning. Judging by the overall success of the scheme and the high level of engagement and enthusiasm by students, it appears that the constructivist approach is a winning strategy as a pedagogy for promoting learner autonomy.

Assessment and reflection

The project provides a positive example of how the form of assessment used can promote reflective practices in the learner. The approach adopted was to ask students to write a report on one of the cases which they have been working on during their placement. The practice side of the placement was assessed on a pass or fail basis, however the academic report was formally assessed.

This is a successful way of making the two parts of the project co-dependent - while students were only assessed on their academic report, the quality of the report depends on students' fully engaging with the practice side of the project. In this way an attitude of constant reflection is promoted in the learner who has to think about their work in the context of a critical piece of writing. In this way, students' engagement with the practice side of the project is kept high in order to understand the project and be able to provide a critical account of it in their academic writing. On the other hand, the academic piece of writing is firmly grounded in the students' real life work experience.

Issues

While the scheme has been successful in meeting students' expectations and with the high level of engagement and motivation on students' side, the main difficulty has been identifying law practices which would be willing to take on placement students. In the words of the CETL associate:

'The difficulty from their (law practices) point of view is that they've got students coming in who perhaps can't contribute a lot in terms of the work that's done there, that does require an awful lot of resource in terms of supervision and assistance. So it is very difficult to get practices to agree to it for that reason.'

(CETL Associate, Law in Practice)

Despite these difficulties the project has been successful in the two placements in 2005/056 and there are a further two places identified for next year 2007/08. This is indication that links are being formed between the University and professional law practices, which are invaluable in the potential they offer for enhancing employability in learners.

2.2 Law in the Community

2.2.1 Project description

Alike Law in Practice, Law in the Community is a practice based module. Thirty-two students participated in the project, working in groups of four. Within this module students were required to meet with and interview a community group, aiming to establish what areas of the law would be relevant to them. Having established a relevant area of the law, students would work in teams of four to produce a presentation on the subject. Students were assessed on a pass or fail basis through presentation and were marked on an academic report.

2.2.2 Key findings

Collaboration and curriculum innovation

While both projects are practice based, Law in the Community is distinct in its use of collaboration. This project allows students to acquire a variety of skills which they would need in the workplace, but which may not necessarily be covered by the formal, assessed curriculum in Law. Such skills are:

1 Communication and presentation skills;
2 Interviewing;
3 Speaking to people about their (legal) needs and helping identify those;
4 Working collaboratively with a community group and with peers.

Gaining such skills is not only relevant to learners in terms of employability and autonomy, they also promote the level of engagement and enthusiasm in learners and can further be seen as contributing to curriculum innovation:

'The informal feedback we've had and the formal feedback we've had from student reps in year meetings has been very positive, they've enjoyed the way it has been delivered and they've enjoyed the experience they have had. They re going out and presenting to school kids and they have thoroughly enjoyed that experience and have felt that the skills they've learned have been very useful. I think it is very different from anything they have done previously and for that reason they are enjoying it because it is very much a contrast to the other modules they are doing. So for that reason they seem to be enjoying it as well.'

(CETL Associate, Law in the Community)

While Law in Practice takes learning out of the academic setting, Law in the Community adds the element of collaborative learning to the experience of studying Law at University. As the CETL Associate identifies this is different from any of the other work students engage in on their course, bringing new skills such as team working, taking responsibility, distributing work. In bringing these new skills to the Law course it can be seen as curriculum innovation.

Assessment and collaborative work

As in a number of the CETL projects which have included collaborative learning as a teaching / learning strategy, the issue of assessing collaborative work emerged in Law in the Community:

'The biggest issue which we've had this year and it is one which is fairly easily correctable but the biggest issue we've had with Law in the Community is that the presentation side ... taking part in the project and in the presentation is assessed on the basis of pass or fail... because there is no mark attached to it some students are riding on the coat tails of others thinking "I am only going to get a pass anyway so I will put minimum into that element and when it comes to the academic piece of work I will pull my socks up and try and get a better mark that way".'

(CETL Associate, Law in the Community)

The way the CETL Associate plans to deal with this issue in future is to make taking part in the project assessed. The same issue arises as observed in First Year Engineering, Primary Education and Psychology CETL projects. The question remains how can a group effort be assessed fairly to each student and give them individual feedback / individual reward for their work?

3 'Just Ask' - A Peer Mentoring Project

3.1 Project description

This project has been developed within the Applied Social Sciences division as a practice based research initiative working towards similar goals to those of initiatives around student engagement and student transition into Higher Education. The project involved the development of a student-peer mentoring model. Within this students in their second or third year at University would become mentors to first year students, helping orientate them into a more autonomous, self-directed way of learning.

Sixty students were initially considered for the mentoring team. Through an intensive training programme involving students delivering presentations and demonstrations as well as participating in group exercises, a core group of 20 mentors was formed, consisting of the applicants most committed to the role of mentor.

The emphasis was placed on making this a student-led project, where mentors would engage in active decision making regarding the progress and direction of the peer mentoring programme. A pilot scheme was collaboratively developed with the involvement and support of the Student Union at Sheffield Hallam University.

The project built upon research carried out over a number of years in the Applied Social Sciences division on orientation of first year students. The research was further informed by the widening participation agenda as well as debate round non-traditional students entering into Higher Education.

This project is unique within the CETL initiative in focusing on how students relate to the learning environment, how they access resources, how they adjust to new ways of learning. Within this the project recognises that coming to University for the first time can be a daunting experience, and that support systems other than the tutor can play an important role in supplementing the orientation of students.

3.2 Key findings

3.2.1 Student-led inquiry and intrinsic motivation

A key characteristic of this project was that it was a student-led initiative, aiming to develop the autonomy of the student mentors taking part in the

project by allowing them to engage in active decision making regarding the project's form and direction. This is a valuable approach from the point of view of enhancing autonomy in the learner. In making the mentors part of the decision making process the mentors are empowered by responsibility. They take an active part in decision making, engage in collaborative problem solving. This approach further promotes ownership of the learning problem - the student-mentors are more likely to feel that this is their work and therefore adopt responsibility and engage deeper with the learning problem. The following is an example of the kinds of responsibility and engagement student mentors had:

'We were very clear from the beginning that we had to provide evidence for the mentors that they would benefit from the exercise in terms of gaining a number of skills. In that sense, because this was a student driven project the mentors themselves made decisions with the student union project officer about how the project would develop. So they had a budget and they made decisions about how they could use that budget - to print sweatshirts with a logo on, to get some printed stationery, to get a mobile phone so students could contact them, to develop a website.'

(CETL Associate, "Just Ask")

The CETL associate emphasises that student mentors were not merely given responsibility but were further made aware of the specific skills they would gain from the exercise. In this way learners are aware that they are in a position of responsibility and are working towards acquiring valuable skills.

In addition to this the project was carried out on an entirely voluntary basis, and was not related in any way to learners' academic achievement in terms of credits. This suggests that the idea of empowering the learner and making the initiative visibly student-led, has worked. Evidence from the project's evaluation shows a high level of engagement on the side of learners. Considering the voluntary and non accredited nature of the project, this engagement was intrinsically motivated (Hennessey and Amabile, 1988), motivated by learners' personal interest, rather than by external factors such as gaining a higher mark.

3.2.2 Employability

The specific skills which learners were developing were:

1. project management
2. collaborative group working
3. taking control

While the project was part of the Promoting Learner Autonomy CETL, by developing such skills in learners, this project further contributed to enhancing students' employability. It can be argued that learners who have engaged with developing the above mentioned skills would be more equipped to deal with challenges in the workplace. The following comment by the CETL associate carries this idea and identifies the challenges which arose with the project as a necessary part of developing skills:

'Part of my role has been to work with the students and let them understand that whenever you develop a new innovative idea inevitably there would be challenges. Part of their task is to recognise those difficulties and to adapt, and work around those challenges. Those are - I would argue - key transferable employability skills in terms of today's more flexible job market. Much of employment is about thinking creatively and analysing a situation asking questions about why does this work and why isn't this working. And in that sense I had it in my mind that I would be happy or pleased that there would be problems, that I would expect there to be problems and for me part of the challenge is how students respond to these challenges. And in this sense I think it contributes to a set of skills that would help them - when they decide about their future after University - for postgraduate study or employment - what happened during that project that helped me think differently about how I deal with an issue. So in that sense it was built into the model from the beginning.'

(CETL Associate, 'Just Ask')

3.2.3 Promoting reflection

The evaluation approach adopted within the 'Just Ask' project developed out of the challenges which student-mentors encountered with the project. One of the key challenges was that despite the publicity which students themselves organised around the initiative, mentee-student participation was low. The question which emerged was how to change the project to reflect the needs of students more fully. This question was posed to the mentors engaged with the initiative, and became the heart of the evaluation of the project.

In a way unique to CETL, this project made not only the design and execution of the project student-led but also its evaluation. Students were put in contact with the external evaluator for CETL, who valuated the research tools deigned by the students.

Giving students control of evaluation and putting them in contact with the external evaluator is a further strategy of empowering the learner and promoting an attitude of continuous reflection to the work. Being given access to the external evaluator, students were not dealing with the approval of academic staff on their work, but were working with someone external to their taught curriculum in developing evaluation strategies. This way of working involving self-evaluation, critical reflection, using external sources to the University, is a successful way to enhance self esteem in learners and in this way influence learner autonomy.

3.2.4 Non formal learning and intrinsic motivation

'I think there were also difficulties about the expectations that they have in their mind about the types of issues which students would bring with them. And some students came to them with mundane issues. And I think some of the mentors wanted something more challenging. So for example they may have come to them with 'I want to find out where the library is'. And I think for some of the mentors they wanted to be more challenged.'

(CETL Associate, 'Just Ask')

While this is an issue, it is also evidence that the mentors were intrinsically motivated and highly enthusiastic about the initiative. They were not engaging because of the certificate they are going to get or for any other extrinsic factor - they were eager to engage. This shows one of the key advantages which the non formal learning situation provided to the mentors - it was because it was non formal, not related to their curriculum or assessment that learners engaged actively, wanted to be contacted, saw the meaning of the project and the benefit of engaging. Other examples of CETL work which used non-formal learning settings are Problem Based Learning and Engineering; Property Appraisal and Management; Using iPods with sociology students.

This is one of the few examples which stand in contrast with other attempts to engage students with non-assessed learning. Psychology, Primary education, and Engineering CETLs - all reported issues around using exercises which were not assessed. This poses the question - what was it about 'Just Ask' which managed to inspire students to engage without the promise or need for external reward, such as formal assessment?

One possible answer was that students could see the benefit of this form of learning in the transferable skills they would acquire, and could see how these skills could be applied in a real life employment.

3.2.5 Dissemination and embedding

Further mentoring projects are planned within the faculty, which would be informed in their approach by the pilot mentoring scheme 'Just Ask'. The most significant lesson learnt from the pilot scheme was that student involvement needs to be the driving force behind planning, developing and evaluating the mentoring scheme, from establishing students' learning needs to implementing strategies for addressing these needs.

Links have been developed with the University of Wolverhampton, who have carried out a similar project to the 'Just Ask' scheme. Students at the two Universities are now working together on exchanging experiences and developing the projects further.

Papers have been presented internally through conferences, and nationally, at the ISSOTL conference (International Society for the Scholarship of Teaching and Learning), in November 2006. Presentations at conferences were given by students themselves which sustains the ethos of the project of developing autonomous skills of presentation and communication in learners.

While significant work has been carried out so far in embedding the project within the Faculty, a recommendation for the future development of the project is for the mentoring scheme to work collaboratively with Education Guidance and Student Services, particularly in the areas of training the mentors for their role, as well as in accessing students who are actively seeking guidance. This would resolve one of the most significant challenges which the project faces - that of accessing students who need guidance. Students who have approached education guidance are actively looking for guidance and are very likely to benefit from a mentoring partner. In addition Education Guidance

can share expertise on approaching students' learning needs which would significantly benefit mentors in their training.

4 The European Challenge - Students as Consultants, Tutors as Clients: MSc Property Appraisal Management

4.1 Project description

http://www.shu.ac.uk/cetl/autonomy/european.html

The European Challenge was a project ran within the BSc and MSc Property Appraisal and Management programmes. The project involved the 8 European Higher Education institutions, working collaboratively on a consultancy project simulating the relocation of a financial consultancy organisation to a new headquarters in Europe.

Six students from Sheffield Hallam University participated in the project, forming part of an international group of students. With the help of CETL funding the project is working towards ways of integrating DVD material in the programme. In this way all 80 students taking the MSc in Property Appraisal and Management - postgraduate and undergraduate - are able to participate into the project, with scope to expand this number to hundreds, as well as disseminating the programme to other Universities.

The project aims to promote autonomous and self directed learning. It is an intensive programme spanning two weeks. A single 45 minute lecture is given, providing the briefing paper for the project. Students are asked to research a specific theme within the project and upload key resources relating to this theme on the Blackboard virtual learning environment (VLE). Students are then divided into international and inter-professional teams acting as consultants to the clients.

Tutors act as facilitators of learning rather than instructors, adopting the role of clients, for example the chief Executive Officer of the company. Any support provided to students therefore is 'in role'.

This form of delivery of the module as simulation aims to promote autonomy in learners, enhance the development of employability skills. The level of independence expected of learners is quite high.

While currently the project involves students travelling to different locations in Europe and working with their respective teams abroad, the vision for the future is to expand the number of students who can participate in the project by using interactive media. A DVD documenting the process in previous years has been produced with CETL help. The project was run for the first time in 2006 / 2007 through DVD support, including all students on the course.

4.2 Key findings

4.2.1 Pedagogy

One of the key strengths of the project is its approach to pedagogy being grounded in real life experience. Similarly to the Law in Practice module (see section 2) the project is dedicated to giving learners an experience as close to a real working environment as possible. The following is a comment by the CETL associate, relating the positive experience of one of the participating students:

'One of the students wrote about seeing, hearing, doing and how compared to a lecture you hear part of it but not really know what to do. But in hearing things, and seeing things and doing things all rolled into one and how he learned more in these two weeks than he learned in the last six months.'

(CETL Associate, the European Challenge)

It appears that what the learner appreciates most is the versatility of the experience - that it involves seeing (the subject knowledge imparted through lecture), but alongside this includes the practice based side of doing, as well as the hearing (the collaborative aspect of sharing experience). This relates to the situated learning approach to theory - problem based, and practice based learning, which takes place within the authentic learning setting and makes use of the authentic activities within the subject setting. In these terms this project has parallels with the CETL projects ran in Law (section 2), Sociology (section 9) and Psychology (section 10). In a similar way learners are placed in the work setting and are gaining rich and authentic experience.

4.2.2 Action and reflection on action

The CETL associate has commented on the positive value of the intensity of the project as a concentrated activity rather than on a once weekly basis, as is the case with most projects in higher education:

'I think one of the very good things is the intensity. Students are under a lot of pressure and I am a great believer in that kind of pressure... When they have two weeks very concentrated learning, very challenging activity you get deep learning.'

(CETL Associate, the European Challenge)

While this approach has its advantages - since it supports an action model of learning, where doing is an integral part, it needs to be considered whether there is any real time for reflection on the process in such a short period of time. Since it is clearly beneficial for students to work in this way in what is a practice based project, where the flow of activity is sustained, it is recommended that specific time is made for reflection on the practice. The following section makes explicit how this is addressed within the project through the reflective video diary, however in addition some issues are highlighted with this approach.

4.2.3 Ethics issues

The evaluation of the project was traditionally carried out through recording video clips with students speaking about their experiences of the project. A

different approach was adopted in 2006/07:

'This year we did it slightly differently... we ran a kind of Big Brother diary room and we encouraged students to go in and chat at the end of each day how they are feeling and how the project is going. Generally everyone is very, very positive - really great way of learning.'

(CETL Associate, The European Challenge)

The CETL Associate further identified that the primary reason for adopting this approach to evaluation was to make the process of evaluation more immediate and in this way more relevant to students' experience. By asking them to reflect at any point on the process of being involved with the project, the Big Brother approach captures the process of reflection in action (Schön, 1987).

While innovative and possibly beneficial to learners in a way that it provides an outlet for their problems, issues, uncertainties, this approach to evaluation poses ethical issues. Since the evaluation is carried out by members of staff directly involved with the assessment of the module, the question is would students be encouraged to be truthful in expressing any difficulties in an honest way where the information would be viewed by their tutor and could ultimately be perceived as affecting their assessment? The implications of this for the validity of the evaluation need to be taken into consideration.

On the other hand, as discussed above, the immediate nature of the evaluative, reflective video diary promotes much valued reflection in the learner. The possible issue is perhaps who looks at the evaluation, and how to separate this from the assessment process, so that students would be comfortable speaking about their issues and challenges.

4.2.4 Dissemination and embedding

The project was disseminated through the CETL website, CEBE (Centre for Education and the Built Environment). The European Challenge project scored the highest mark (5) on academic and employer engagement on the ACBEE initiative (Accelerating Change in the Built Environment Education).

A case study is being developed for CEBE. In addition several papers have been published on the project.

While it is evident that the project is extremely well regarded and valued by organisations external to the University - CEBE, and the ACBEE initiative - the CETL Associate reported resistance on the side f academic staff within the University:

'There is some resistance. I think people are scared of change. But colleagues have seen the benefits of it. Staff involved from other Universities have really liked the project.'

It appears that the challenge for the project is currently to find ways of communicating the value and benefits of this approach to members of staff

within the Property Appraisal and Management subject group. A precedent for this is found in the CETL on Problem Based Learning in Engineering, Design and Technology where a similar issue arose with staff's resistance to change in the curriculum. The CETL Associate is using methods of gathering evidence of improved student achievement, as well as demonstrating the high level of learner engagement as a way of making clear the benefits of the problem based learning approach to teaching and learning.

5 Historians and Research / Numeracy and the History Undergraduate

5.1 Project description

The project called Historians and Research was focussed on a compulsory module at Level 5 of the undergraduate History programme. The project built on aspects of autonomous learning which were implicit in the teaching and learning practices of the course, but which needed to be developed as well as reflectively evaluated from the point of view of both students and staff. 68 students participated in the research, which comprises the whole group of second year students enrolled on the History programme. This project ran in academic year 2005/06.

The module comprises four taught seminars in which students are encouraged to work intensively as part of a group, developing a group project. After the taught seminar period students build on their initial group work and research to develop their own individual projects. In this way students are supported in initially generating a research proposal and gradually developing this into an individual project. As a result they have the opportunity to benefit from peer as well as tutor feedback.

5.2 Key Findings

5.2.1 Student-led inquiry

The key aspect in which autonomy is addressed within this project is in encouraging student-led inquiry. Students are encouraged to gather information from a variety of sources and use resources which are not immediately available to them through the University. For example, besides working as a group, students are encouraged to contact staff within the History department other than their immediate tutor. They are further encouraged to use local libraries and archives to inform their research. In addition the Blackboard site has been used to give access to students into the National Archive in London. In this way students are encouraged to broaden their literature survey and use external resources, thus enriching their study. The value of this approach is in empowering the learner to initiate their own inquiry into a topic, as well as simultaneously to develop skills for managing their learning in a highly autonomous way.

A further advantage of this approach is that it develops ownership of the learning problem in learners:

'We say this right at the start - it's their project. They must define what it is,

what the parameters are and how they reflect on it. Some students find it difficult to come up with a project, but we make it clear that we do not give them a project. They must come up with their own project.'

(CETL Associate, Historians and Research)

In developing this feeling that the learner owns the learning problem learners are encouraged to think of their research as personally relevant to them and engage with it on a deeper level. In addition, the approach is overtly constructivist, in moving away from the 'given' in terms of the learning objectives, and encouraging the learner to adopt an active role in setting their own learning objectives.

Achieving objectives

One of the most reliable ways of evaluating whether learners have benefited from the self-directed, student-led inquiry approach would be to identify whether students take these projects further. The CETL Associate reported that over 60% of the students would take their self-directed project initiated in the historians and research module and use this as the basis for developing dissertation work in their final year:

'...there is a high proportion who would take it through. But they are not required to, so in the end of the final report they have to make a decision whether they think it is a feasible project to take into their final year or they think it is not...One of the things we have started to foreground at the start is that the great decision of whether to do a project is interest. They choose what they want to do. '

(CETL Associate, Historians and Research)

Foregrounding the element of choice allows students to be intrinsically motivated in their work, as well as to develop ownership of the learning problem. As the CETL associate emphasises, there is no obligation for students to take the work forward, therefore the high proportion of students who do are most likely doing so out of genuine interest for the topic. This in itself is an indication that the self directed, student-led inquiry approach is a successful strategy in promoting engagement as well as learner autonomy.

5.2.2 Evaluation

The evaluation of the project was based on an open ended questionnaire, which was given out to students. The evaluation was built into the assessment as part of a reflective aspect encouraging students to self-evaluate what they have achieved in the process of doing the module. Following is an example taken from a student's reports, reflecting on the experience of engaging with the module:

'In doing this module I've gained new skills and I have developed my ability to work alone without the aid or significant help of tutors, has improved my confidence and my own ability. I believe these skills would act at level 6 as the module has been good preparation for next year's study. One of the main skills I've learned is that you have to be prepared to broaden your normal fields of work as there is a bigger world out there, and that much of the information needed to help you is not contained in the formal walls of the SHU

learning centre. I've also learned that it is ok to admit that one's knowledge is not as extensive as one thought and that it is ok to ask others for help including members of academic staff who are not involved in the current module.'

(Student, Historians and Research module)

Achieving objectives

Based on students' responses, combined with the high percentage of students (60%, or 41 students) who carry their project into their final year, it is evident that the module is having a positive impact on learner autonomy, independence in learning, ability to manipulate resources within and outside the University. In addition the CETL Associate reported that the module does particularly well in its final average mark. In particular it was reported that this has had an influence on raising the final average mark in the dissertation. This could be taken as a positive indication of the long term impact which the module is having on students' learning. It is also encouraging in terms of embedding the new, autonomous learning approaches of the module within the BA History programme. Potentially it can be argued that the module and its related approaches are an essential part of the curriculum in supporting students' achievement both in the second and third year of their degree.

5.2.3 Impact on the programme of study

The outcomes and approaches of the CETL initiative have been disseminated within the History programme of study, influencing the design of the course programme. Some of the specific changes made have been a reduced number of seminars from weekly to fortnightly, but increasing the number of hours per seminar from 1 to 2 hours per week. This has provided a much clearer focus for the seminar sessions as well as given an opportunity for more in-depth discussion. The collaborative aspect of the project has placed a focus on problem based learning approaches, where students are expected to work in groups and are assessed on their project work. The CETL Associate reported that these changes have had a positive and progressive impact on the assessment system of teaching and learning.

5.2.4 Development from the work - Numeracy and the History undergraduate

The evaluation of the Historians and Research module as a CETL project has highlighted a particular area of students' learning needs which needs to be addressed. This is an issue particularly poignant with History and Humanities students, regarding the level of their numeracy skills. The focus of the Historians and Research module on research methods has highlighted the reluctance of students to engage with quantitative research methods. The cause of this according to the CETL associate is the level of numeracy skills of humanities students, which he describes as *'beyond inadequate'.*

The CETL associate further speaks of the difficulty of approaching this through including a block numeracy course into the programme of study since *'students will almost immediately turn off it'.* Part of the issue seems to be in students' attitudes towards numeracy - being students in the humanities, they do not see numeracy as important to their academic or professional development. Yet when students start seeking employment this shortcoming

in their skills becomes exposed, putting them in an undesirable situation regarding their employability.

This has shaped the focus of further research to fall on this particularly neglected side of students' skills - numeracy. In particular current research is focussing on identifying the attitudes of four groups of stakeholders in this issue: future students and their attitudes to numeracy before coming to university; current students' attitudes to numeracy; the attitude of prospective employers and graduates who have been in employment for 2-3 years.

While the relationship between pursuing students ability in working with numbers and promoting learner autonomy may not be immediately evident, such a relationship clearly exists. In failing to develop numeracy skills, students are in danger of limiting the resources they can use as researchers and the kind of data they can work with. This is detrimental to their autonomy since they would always be dependent on secondary sources where quantitative data is concerned. The relationship to employability is much more clearly pronounced since most employers would look for employees who are accomplished in working with both qualitative and quantitative approaches.

5.2.5 Dissemination and future research

As was already discussed the approaches to learner autonomy built into the Historians and Research module are already having a significant impact on the programme of study in History (section 4.2.3). Currently, dissemination and the possibilities for future research are focussed specifically on changing attitudes and improving numeracy skills in humanities students.

Collaborative work has been developed between Sheffield Hallam University, the University of Central Lancashire (UCLAN), and Wolverhampton University, exploring perceptions to numeracy.

In addition a major bid has been put on the National Teaching and Fellowship Scheme for examination of numeracy across three subject areas: Biomedical Science, Marketing and History. The bid is now at stage two. As well as building firm national links, the project is also establishing links with the US, adding an international dimension.

It is important to emphasise the relationship between the work on Historians and Research for promoting learner autonomy and the numeracy initiative. The CETL Associate sees the focus on numeracy as a progression which has developed through insights gained through the research on learner autonomy. In addition, the knowledge acquired through Promoting Learner Autonomy will serve to inform the strategies to be devised in designing an approach to numeracy which captures the autonomous learning aspect:

'The real challenge now is on the numeracy project. How we can go about designing an approach to numeracy which captures the autonomous learning aspect, but also, just equally as important, captures the students. There is a real problem - they freeze when you start to go down the numeracy line, there is a lot of resistance. A lot of it is fear. And we are trying to get over that and

see how we design it. Which we may learn from the Historians and Research module by allowing students an opportunity to work through on their own and individually and encourage them to think for themselves. That may be one way through it rather than what has been happening - we are teaching them the technique and they resist it - it simply turns them off. It is rather trying to get them to engage with the technique. Rather than teach at them - let them learn it.'

(CETL Associate, Historians and Research)

Dissemination

The following steps have been taken to disseminate the research:

1. A paper at the National History Subject's Centre Conference in Oxford; April, 2006
2. 'Numeracy and the History Undergraduate' a paper delivered to the Maths and Stats and OR Network organised by the History, Classics and Archaeology Subject Centre in Birmingham
3. Work is carried out on widening the research scope - a researcher has been hired to contact local employers with a view of finding out their expectations of employees in terms of numeracy.

6 Promoting Learner Autonomy in Engineering

6.1 Project description

Promoting learner autonomy in Engineering was a CETL project which ran in 205/06. It involved first year Engineering students doing a module in Materials and Manufacturing Engineering. Approximately 60 students were on the module and participating in the research. The core idea of the project was for students to use interactive media as a tool for developing presentations of their work. By introducing students to new forms of working, the project aimed to motivate students to engage more deeply with their work and add the elements of stimulus and excitement to their work. Collaborative ways of working were integrated in the approach, aiming to support the development of communication skills in learners.

6.2 Key findings

6.2.1 Interactive media and motivation

The project has been successful in utilising one of the key advantages of interactive media - its capacity to motivate and stimulate the learner. This feature of interactive media has been used to its best advantage, promoting interest in students and in this way supporting learner autonomy - it can be argued that it is because students were engaged and excited to explore the possibilities which the new medium afforded, that they were also encouraged to engage on a deeper level with their work.

6.2.2 Collaboration

With the added elements of collaborative work and the manipulation of interactive media, the project aimed to support the development of a set of skills in the learners which are not traditionally associated with the subject of

Engineering. Yet these are open, transferable skills which are considered essential for employees in any area of the contemporary employment market. The intervention which the project created therefore can be seen as a form of curriculum innovation, bringing in a new set of transferable skills to the students, such as they would not have had the opportunity to develop within a traditional Engineering curriculum.

Amongst such skills the CETL Associate identified communication and collaborative working skills, making a specific relationship between the development of such skills and promoting learner autonomy:

'Skills such as communication, team working, and video production skills - it's all about the communication aspect, because producing a video which is communicative enhances and develops those skills. And because they have to do this as part of a team, their philosophy for the autonomy side was then to develop autonomous skills within a team work environment. Which some researchers have said is a good way of developing learner autonomy. It's not about purely working on your own, it is working as part of the team, and playing a role within the team.'

(CETL Associate, Learner Autonomy in Engineering)

An end of module conference was organised with a keynote speaker external to the University. The students had an opportunity to present their coursework using interactive presentations, in this way building up a range of communication skills. The CETL Associate emphasised the value of this experience for the students from the point of view of raising their self-esteem and in this way developing learner autonomy.

Amongst the factors which contributed towards making this a positive experience for the students, was the fact that students had been given lectures on presentation and communication skills by their course tutor. This contributed to preparing them for the experience of presenting to an external audience and giving them confidence in their abilities. The following is a comment illustrating this experience:

'Researcher: *What is your general feeling, how did students get on with this new approach to learning?*

CETL Associate: *I think they found it enjoyable. They said it helped improve their confidence, improve their employability skills...We had an end of module conference, with a keynote speaker from outside the university - an ex-health and safety executive...So they (students) were at a conference, presenting a paper. So they had a whole day in the Hubs building, where they did their presentations. And the external speaker thought that they were final year students - he said 'are you sure these are first year students? Because the presentations are so good.' And we'd obviously got the students geared up, by giving them sessions on presentation skills. So I did a session on communication and presentation skills. Especially using power point in a conference situation.'*

Amongst the objectives achieved therefore, this project can include giving learners an experience which would be useful in their future employment, as

well as supporting them in acquiring some much needed, but not traditionally associated with the subject of Engineering, skills.

Achieving objectives
The CETL Associate reported that since the introduction of the new methods of teaching and learning practices, the pass rate for the module has increased from 77% to 95% (representing 57 of the 60 students on the course). While this is not a definitive measure of having supported learner autonomy, these figures are a positive indication that the module is succeeding in engaging students and encouraging them to achieve.

6.2.3 Collaboration and autonomous behaviour

The approach which the CETL Associate took to separating students into groups was a Belbin analysis questionnaire. In this approach the students had a chance to explore both their self perceptions of the role they would have within the team as well as other students' perceptions of their role. This is valuable as a self evaluation exercise which supports reflection in the learner and therefore promotes autonomy. In addition the Belbin approach was successful in supporting reflection in the learner in terms of choosing their team not on the basis of affinity but on the basis of who would make the most valuable contribution to the team:

'So I say write on a piece of paper what your role in a team is and hold it up. And you can see what everyone else is - now go and select. So they have the choice - they can pick their friend, or they can pick someone that they know they are looking for. So this is the way I tend to work now because this way I get less conflict, they are happier, they can say whoever they want to be with. And if it doesn't work out - they are to blame not me.'
(CETL Associate, Promoting Learner Autonomy in Engineering)

This is an interesting approach. While students may initially choose to be grouped with their friends, they may realise in time, especially considering that their academic achievement is based on this, that it is better to choose people for the team who will contribute optimally. Such a change happening in learners is indicative of learner autonomy - they take control and make an active and informed decision, by their own will.

The tutor in this case has come to the conclusion that this is the best way to approach collaborative groups through experience and it is an approach which can be seen as successful in both promoting ability to work in groups and enhancing students' skills in learner autonomy.

6.2.4 Assessment and interactive media

There are some concerns regarding the assessment of the module, emerging as a result of interactive media becoming part of the assessment requirements. The CETL Associate reported that changes were made in the assessment structure of the module in order to take into consideration the final presentation. Students were divided into two groups - one of the groups was involved with producing original video material themselves, while the second group had to use video which they found on the internet.

There is an issue arising particularly with the level of interactive media being used. Bekier (2005) identifies different levels of interactivity - with browsing being the lowest level of interactivity and manipulating/ creating interactive content - the highest. Yet, within the module assessment the students who browsed interactive media were assessed against the same criteria as those who engaged in manipulating and creating new content. It is evident that producing video material would have more impact on developing students' skills, not only from a technical point of view but also considering the development of communication and presentation skills.

It appears that this inconsistency in what is required from students where interactive media is concerned needs to be addressed, particularly where it forms part of the assessment criteria. It needs to be emphasised that this concerns not only the Promoting learner autonomy in Engineering CETL but is applicable to all CETL projects which use interactive media as a tool for supporting learner autonomy. Amongst these projects are: Developing the Virtual Learning Environment; ELMAC; The European challenge; Using iPods with Social Sciences students; Psychology; MA Professional Communication. A strategy needs to be developed which takes into account interactive media as part of assessed work.

6.2.5 Dissemination

The findings of research have been disseminated through two international conferences:

1. Engineering Education Conference, Liverpool, July 2006
2. American Society for Engineering Education, June 2007

The CETL associate reported the feedback received at the Liverpool conferences to have been highly positive. The engineering research and teaching community were particularly impressed with the way the approach encouraged students to work as a team, as well as the results achieved in motivating engagement, developing communication and presentation skills and in this way addressing employability.

6.2.6 Development from the work

The approach adopted in 2005/06 was carried into academic year 2006/07, with similar objectives however a different group of students. The approach was built into a module aimed at third year Engineering students, studying Polymer Processing and Polymer Applications. 21 students are enrolled on the module and participating in the research. The students are asked to work collaboratively and produce a DVD as their report instead of a written piece of work.

The fact that the project has been carried into the following year is an indication that the new approach is becoming embedded into the Engineering curriculum. This is encouraging from the point of view of the CETL initiative. However there are a few concerns which the CETL Associate raised regarding transferring an approach initially adopted with first year students to third year students. The assessment of group work is one of these concerns,

as discussed below.

Assessment of group work
Since the module is assessed and part of the final mark for third year students, the CETL Associate expressed concerns regarding fairly assessing students' individual contributions within a group project. The following is an experience with the first year students, which the CETL Associate described:

'In some groups some of the students weren't working too hard and in some cases the stronger students were pulling the weaker students along, and some did the minimum, as you get typical group behaviour. But they ended up with the same mark as everyone else. But this might be an issue for final year students. But we are doing something different now for third year students, and I think they will have to be assessed as final year students. And I'm not sure we've got it right yet.'

(CETL Associate, Learner Autonomy in Engineering)

This is an issue which seems to occur repeatedly across CETL projects which have used group work - how can group effort be assessed fairly to each student and give them individual feedback and reward for their work? The tensions between group work and individual learning outcomes are evident - students perceive it as unfair to have a group mark since they will believe their work is personally different from others'. This calls for the need to develop forms of assessment which mark group work individually. Other CETL projects which have had to address a similar challenge are Psychology and Historians and Research.

7 MA Professional Communication - Promoting an Autonomous Stance to Researching Workplace Issues

7.1 Project description

http://www.shu.ac.uk/cetl/autonomy/projectbriefs/AnneFlorence.pdf

This project is currently running (academic year 2006/07). The project is focused on the MA programme in Professional Communication and in particular the Research Design module. The module aims to introduce students to the methods, theory and skills of carrying out research in their chosen area. As the course population consists primarily of students with professional experience, however with little academic background in research, this is a challenging task where the value and relevance of research skills to their work needs to be made explicit to students.

The course is taught exclusively by distance learning, which makes the issues of learner autonomy particularly relevant. Since students are expected to self manage their learning and exhibit highly autonomous behaviour, the project looks at ways in which these learners can be supported in an optimum way. The Blackboard VLE is used as the platform for discussion forums, self-assessment, peer, formative assessment and portfolio based assessment.

The impact of the project is expected to be on learning, teaching and assessment in the Research Design module.

7.2 Key issues

7.2.1 Virtual ethnography - methodological innovation

An action research approach has been adopted, implementing a form of virtual ethnography (Crichton and Kinash, 2003). Within this the CETL Associate plays the role of participant observer as well as tutor for the module. In analysing students' conversation within a virtual learning environment the project aims to gain insights into students' behaviour and perceptions of autonomy. The following comment is an illustration of the CETL Associate's reflections regarding the use of virtual ethnography:

'My methodology is a virtual ethnography. I know I could have gone for case study and done a lot of content analysis and questionnaires but I want to enrich my practice so observing what's going on and keeping a diary of observation and – it is a bit of an observation log and a personal diary. But I think this ongoing observation is really, really useful. And from what I've read in terms of virtual ethnography, it is ok to do it that way. But it's tricky to find literature on virtual ethnography – no, excuse me – on educational virtual ethnography.'

(CETL Associate, MA Professional Communication)

In adopting virtual ethnography, the CETL Associate is experimenting with a relatively new form of research methodology which has not been widely explored. As she indicates in her comment, while there are virtual ethnographic studies for the research to draw on, these have not focused on education. With the widespread practice of integrating interactive media as a tool for education, it seems that the development of the area of educational virtual ethnography is an area which would be of interest to a wide population of researchers and education practitioners. This form of methodology needs to be taken into consideration by all CETL projects which involve the use of interactive media as part of promoting learner autonomy. Amongst such projects are Developing the Virtual Learning Environment (section 15); Psychology (section 10); ELMAC (section 11); Promoting Learner Autonomy in Engineering (section 5); Using iPods with Sociology students (section 9.1).

It appears therefore that one of the key original outcomes and contributions which this research stands to make would be in developing our understanding of educational virtual ethnography as a methodology for researching the integration of interactive media in HE teaching and learning practices, where learner autonomy forms part of the learning objectives.

7.2.2 Curriculum constraints

The CETL Associate highlights the difficulty of teaching the highly abstract side of research practice - the example she uses is teaching about paradigms:

'... there's also issues about imperialistic values in a way that academia wants people to do particular things even in professional courses, and that at

Masters level we have to do research. So there are issues around autonomy where the research design seems to deny autonomy, because it is all about this weird stuff like paradigms. Paradigms in particular – people hate it. But I've really mashed it up for them so that "there's this little graphic" and "there's this really nice chapter" and the scaffolding there is very, very strong, because I don't want them to go off and get lost once they are on board.'

(CETL Associate, MA Professional Communication)

Since learning about the theory of doing research is an activity detached from practice, students on a professional course feel less motivated to learn in this area, since they do not see the direct relationship to their own work. From the point of view of the CETL Associate this is an institutional constraint, since the curriculum in Higher Education includes learning the abstract aspects of research theory as a compulsory element of the MA Professional Communication course. Since students cannot relate to this knowledge immediately, the tutor faces the challenge to deliver the subject in a way which would be easy for the students to understand. Within this she describes adopting a highly structured approach, similar to the transmission model of teaching. This is limiting to learner autonomy - learners are given knowledge, rather than actively engaging in knowledge construction. As the CETL Associate identifies - limiting learner autonomy in this way is a direct result of institutional constraints regarding learning content.

7.2.3 Attitudes to research

The CETL Associate's primary research interest has evolved as a result of observing the attitudes of students on a professional course towards research and academic literacy:

'I think what I am trying to create through Blackboard is a framework, through which students can gradually develop an understanding that they can make theirs. And I think with research design I think it's a really weird topic to teach because on the one hand it should be about a topic that students are really interested in and would want to research, so there is a lot of ownership at that level. BUT – research methodologies, theoretical paradigms, ethics – they don't want to know. So they have to do it, but some are quite reluctant. So I think the attitude to research is something I need to crack and find out.'

(CETL Associate, MA Professional Communication)

Once again it is the abstract side of knowledge which learners cannot relate to - methodologies, theoretical paradigms, research ethics. The CETL Associate identifies a discrepancy in students' attitudes since learners are researching a topic which they are interested in and *'there is a lot of ownership at this level'*. At the same time learners struggle to relate to the academic knowledge behind research practice. This is a theme which the CETL Associate aims to pursue further:

'I particularly like the theme of academic literacy and the student voice and how this is problematised in terms of the authoritative voice of the University versus what students want to do. And trying to build in flexibility particularly if you want professional people to come and study at University.'

(CETL Associate, MA Professional Communication)

A paper has been submitted reporting on this research, to the English Language and Learning Support (ELLS) conference, to be held at Middlesex University on 30th June, 2007.

The direction of further research has been shaped by this issue. The CETL Associate intends to continue work on developing an instrument to assess attitudes to research in professional Masters courses.

7.2.4 Online communication

Due to the distance learning, online, asynchronous form of communication which the course relies on, the issue of communication both between students and tutor as well as among students emerges. Through observation research highlighted three key phenomena of online communication.

Firstly, students used the online forum facility to openly express their experiences of distance learning. This kind of uninhibited communication can be seen as a good way for students to comment on any challenges they may be facing:

'They can choose – they can always post anonymously, but they are quite happy to say: 'I am who I am and I hate this'. Doesn't get them to write more in terms of what they should be doing but some of them write whole essays about how much they hate the module. So they are definitely engaging in monitoring their learning.'

(CETL Associate, MA Professional Communication)

Furthermore, it is a valuable source of feedback for the tutor, regarding how to modify the course in a way which would respond to students' learning needs.

Secondly, the phenomenon of 'lurkers' was observed - students who did not overtly contribute to adding comments in forums but who appeared as silent participants - viewing comments without making an overt contribution. While lurkers can be seen as a negative phenomenon, it needs to be considered that it can also be seen as a form of peripheral participation (Lave, Wenger, 1991(b)) or productive overhearing (Boyle, 2002) - the idea that learning can happen through silent observation, just as well as through overt participation.

Finally, the element of collaboration between students through the use of the online forum, does not seem to have happened. There was little evidence captured by the researcher of students having a dialogue with each other. In this respect the problem is not local to this project but universal throughout the CETL autonomy projects which have used online learning environments ('Developing the Virtual Learning Environment', section 14; Psychology, section 9). Research literature equally identifies non participation in online forums as an issue.

Dissemination

1. Presentation at Higher Education Research Network (HERN) event, held at Sheffield Hallam University, February, 2007;
2. Paper presentation: 'Crossing Boundaries: Academic Support for the Learner in HE', English Language and Learning Support (ELLS)

8 Working with Students to Develop e-Portfolio as an Integrated Learning Environment

This project aims to integrate Professional Development Planning (PDP) as part of the student and staff experience at Level 4. In 2005/06 an application was made for SHU to become a member of the USA national coalition of electronic portfolio research. SHU became one of the two UK Universities to be accepted in the coalition and formed a third cohort for the coalition.

The broader aims of the research are to see PDP embedded as part of the teaching and learning experience in all Universities in the UK. PDP is seen as contributing to skills development, career development, integration into the University. All of these are skills which in turn contribute to promoting learner autonomy.

The project focussed on developing the use of interactive media for learning, in particular e-portfolios, as a tool to support students in PDP activities. This project has focused on researching the experiences of learners engaging with e-portfolios.

The cohort of participants consists of students in their first year on three different applied and social sciences courses:

1. 285 students on applied sciences courses (sociology; criminology; politics)
2. 200 students on Early Childhood studies courses
3. A CPD course, postgraduate professional students

The intention of the project is to follow these students' progress through the three years of their course. Within this the research will focus on identifying critical moments and events which trigger reflection in students in the course of their studies. The following is an example of the kind of knowledge which research data aims to uncover:

'So for example at the end of the first semester - that's a time for reflection, deciding what you can do well what you can't do well. First year focuses on the academic aspect. But the second and third year the focus changes and is more career-oriented - so they are looking more towards skills in career development and looking for a future career.'

(CETL Associate, e-Portfolio Development)

Such knowledge of students' learning patterns would in turn inform the design of the e-portfolios as a reflective tool which is able to support students' learning needs.

8.1 Methodology

Two types of data are being collected, aiming to capture students' engagement with e-portfolios. Baseline questionnaire data has been

gathered, which is currently being analysed. The questions focused on several key aspects of engagement with the learning environment:

1 What features students use or do not use;
2 Evaluating their familiarity with the technology;
3 Gaining insights into students' perceptions, for example, how useful do students think this kind of tool would be in their academic and professional development.

Such quantitative data could be very useful in identifying how prepared students are for this new form of learning, as well as what their expectations and perceptions are of the online, interactive tool. At the same time however, since it is students' experiences and perceptions which are being evaluated, the main approach to data gathering and analysis needs to necessarily be qualitative in nature, in order to capture such affective factors in learning. This is why the questionnaire is seen only as baseline data, a form of supplement to the main, qualitative approach to data.

The qualitative approach will consist of focus group interviews with students using the e-portfolio. The marked advantage of this approach is that it allows for the participants' rather than the interviewer's agenda to predominate. This is particularly important to this research, since it will allow the findings of research to report on students' perspective and experiences, rather focusing on the researchers' / CETL Associate's expectations of how the system should be used.

One constraint which the CETL Associate reported on was the difficulty of getting participants to participate in focus groups, made even more difficult by the constraints which the institution places on paying students for their participation in the research:

'Possibly the most effective way forward would be to ask for voluntary seminar groups because it's a taught year module. So may be we can do it in their ordinary teaching sessions. We can't pay them... we have the money to pay them but we can't pay them because of all the rigmarole of paying students. But I do have a stock of social science hooded sweatshirts - so I can offer them those.'

(CETL Associate, e-Portfolio Development)

Data analysis

It is evident that this project has a clear and comprehensive methodology for data gathering. While there is no definite approach identified for data analysis, this is due to the fact that not all the data has been gathered. The stance of the CETL Associate is that the data gathered would naturally suggest a methodology for data analysis:

'While there is a clear research question, we don't know what we are going to find out. And we don't know what the critical moments are going to be - to engage students in using an e-portfolio, we don't even know if they are going to engage with it and we don't know in what ways they are going to engage with it. So because we don't know what we are going to find out, we are not specifying a method that we are going to use apart from the fact that we are

sure it is going to be qualitative.'

(CETL Associate, e-Portfolio Development)

Considering there is a clear research question in place, and the significant progress which has been made in gathering data on students' experiences, there is sufficient indication that the project will be successful in its later stages of analysis and interpretation.

One possible recommendation for this project, particularly considering that the key focus of research is on how a community of learners relates to and experiences an interactive learning tool, is to make the best use of the lessons learned in similar work which is being carried out across the CETL for Promoting Learner Autonomy. Of particular interest, especially in terms of methodology, would be the virtual ethnography approach adopted in the MA Professional Communication project (section 6.2.1), Psychology (section 10) and Developing the Virtual Learning Environment (section 15).

8.2 Use of technology and institutional constraints

The project is using a commercially produced package called PebblePAD. The CETL Associate commented that the current virtual learning environment - Blackboard - was not meeting students' learning needs as well as was unable to perform in the way which the research team had intended. The CETL Associate commented on the fact that the University's support for a single VLE programme - Blackboard - limits the potential for curriculum innovation. Consequently this has placed constraints on the project, ultimately delaying the introduction of e-Portfolios to the students.

8.3 Embedding

Having adopted an action research methodology the project seeks to create a specific intervention in the social sciences teaching and learning practices. One of the objectives of this research is to make e-Portfolio use an integral part of the learning experience in this university as well as across the UK. While it is too early in the project to be able to comment meaningfully on whether such outcomes have been achieved, there are indications of acceptance and enthusiasm regarding this work, amongst the research team and teaching staff on the courses involved:

'It's going quite well. When I originally put the project brief together - we had to put a team together to do it. When we first put the team together they weren't particularly enthusiastic, and it was really only me who was driving it. But now the other two lecturers are also extremely enthusiastic...So the team has got together and the cohort has expanded in terms of the number of students taking part. And the enthusiasm is quite high. Some of the team are going to the US next week to take part in a meeting about the project, and to get feedback from colleagues from other universities about how it is going.'

(CETL Associate, e-Portfolio Development)

The continuous communication and idea exchange with Universities in the US is a positive example of strengthening the project - not only in ensuring dissemination and external validity, but also in being open to a broader range of experiences and innovation through idea exchange.

9 Using iPods with Sociology Students (2005/06) / Professional Learning Week, (2006/07)

This section describes two projects ran under CETL funding in the Applied Social Sciences department. The first of these project adopts an approach of integrating digital technology in order to provide new ways of engagement with the learning material. The second project entitled Professional Learning Week is a simulation activity focused on implementing aspects of experiential and situated learning, targeting learners' professional development and the acquisition of open skills.

9.1 Using iPods with Sociology Students - project description

This project was ran in 2005/06 under CETL funding. The project was carried out within the Social Sciences course, with students taking the Comparative Social Structures module. Students were given iPods containing downloaded extracts from interviews with leading sociologists. In this way the students had access to spoken word, conversational recordings of some of the most influential sociologists, as well as having the advantage of ubiquitous technology - they were allowed to take the iPods with the recordings away with them and listen to those in their own time and space.

22 second year Sociology students participated in the module; all of these participated in the research. All 22 students submitted work, with only one of them failing with a mark of 30%. The mark profile was higher in the year in which the project was run, with marks stretching up to 85%. While there is no definitive evidence to suggest that the new method of delivery has influenced student achievement or pass rates, it is highly likely that it has had a significant contribution, considering students' increased level of participation and enthusiasm for the work, as the following sections will make clear.

9.1.1 Key findings

Ubiquitous and informal learning

One of the key aspects in which the project stands out is the possibility it gives to learners to take the technology away with them, in this way having access to the learning material at any place and at any time. This approach promotes learning in everyday, informal settings, in a way which is much more flexible, allowing for learners to reflect on the leaning material in settings where they feel relaxed; where they can exercise spontaneous thought, and draw inspiration. The following is a description of how this approach worked:

'They could go off and use this anywhere. And they do comment on how they were listening to it on buses - so everybody else was listening to music and they were listening to the greats of Sociology, talking about it. It did not reduce their attention to lectures or seminars, which retained an 85% throughout the year and it is a very high attendance rate.'

(CETL Associate, Using iPods with Sociology Students)

The ability to promote learning in informal settings has some pronounced

advantages to formal learning and is a trademark of interactive media for learning, as identified in research literature (Dondi, 2004).

Factors such as inspiration come with the flexibility of use of the learning material, where inspiration is of key importance to the content which is being taught and learned. As the CETL Associate identified, the aim was for learners to hear *'the words of the great'* and be inspired by these speakers in their writing. Such inspiration is particularly relevant with sociology students, who need to provide their own interpretation on the subject studied and within this exercise freedom of expression and independent thought. The informal learning paradigm is therefore all the more relevant.

Student feedback

Students' feedback on being able to take technology away with them and use it anywhere was very positive. The iPods were considered especially useful as not all students had access to internet at home. They did find the clips useful but they commented that the clips could have been longer. Having short nuggets was good but sometimes they were a bit too short. Most students said that they would have liked to have access to the transcripts and thought that it would be helpful to have material like this in other subjects. It was suggested that they should be given the iPods for a longer period of time, say for a term and give them something regular to download or give them permission to download their own materials.

When asked about whether they had any suggestions of how the iPods could be used they were unsure because they did not know all the possibilities. Questions were asked about whether they could record lectures on them and some students said that they would probably record their own materials if it was a possibility. Alternatively they requested that short clips of lectures be put on the iPods. Generally they found them useful but requested longer clips.

The following comment by a student is evidence of the difference which the module has made on the learner's personal development, and in this way to learner autonomy:

'The comparative social structures module and the social sciences as a whole have certainly had an effect on the way in which I as an individual perceive and make sense of the social world around me. As a result of this they have also had a direct effect on my goals, aspirations in life.
Having spent four years in the manual labour sector prior to returning to education I experienced a social structure which I had never even thought about, let alone tried to explain. The social sciences have and continue to provide me with the theoretical tools required to question and analyse this structure and to see how it exists within a global context.'

(Student, Comparative Social Structures module)

A further comment by a student, in which they relate their experience of learning on the module directly to developing autonomy:

'I have realised that I do not have to attend lectures because it is my 'job' to but because it allows me to open my mind to things I already had an idea about but never managed to express before. That I am, and am allowed to be,

in control of my own learning.'

(Student, Comparative Social Structures module)

Critical thinking and informal learning

Promoting critical, reflective thought is another advantage of using ubiquitous technology and conversational spoken word.

'The other piece of evaluation is in the assignment they submit, which is they have to write something on how their own learning developed over the year, and they all commented how using the iPod made them more critical of materials because they were hearing what these people had said, and they could think yes I agree with that or I don't agree with that. So they found it helped them become more critical.'

(CETL Associate, Using iPods with Sociology students)

The CETL Associate is making the point that because the model of delivery adopted through using spoken word on the iPods was informal and conversational, it created a more immediate dialogue with the learner. This is similar to what Mercer describes as the call and response strategy where the reader is addressed directly therefore they feel what they are reading is directly relevant to them (Mercer, 2000). As a result they get involved with the debate on a personal level, which promotes ownership of the learning problem. This could be the reason why learners requested to be able to record onto the iPods, i.e. - to be able to exercise reflective thought while listening to the recordings. Often ideas occur in action, in the process of listening; it is possible that the approach of call and response may have encouraged such ideas developing.

In addition to personalising learning and improving ownership, the conversational, spoken word delivery enhances comprehension:

'Obviously they have to read printed text as well, but they do comment that they find it easier to take on complex ideas when they are presented verbally and when they can go back over it... They do say that they were able to go over it and that they found that really useful going over some of the more difficult ideas. And that's why they wanted more material.'

(CETL Associate, Using iPods with Sociology Students)

This relates to the issue raised in the MA Professional Communication CETL project (see section 7), where learning delivered through highly academic language posed challenges to students. The spoken word approach used within this project could be one possible way of addressing this issue, and a valuable strategy for engaging students as well as promoting a reflexive attitude to their work.

Challenges

The key challenge which this project faced was students' varying degrees of familiarity with the technology. This resulted in cautiousness or reserve on the side of those students who were less technologically savvy. The following is the CETL Associate's account of this challenge:

'I underestimated how difficult students might find iPod use. I thought that they would have greater familiarity than they did. And the reason for that is that Social Science students are just less savvy about this sort of thing in comparison with other students. What is interesting is that they have caught up. This year's lot are much more used to using MP3 players and iPods. Simply I caught them at that particular point. We've had this before where students on the Psychology course five years ago were very computer savvy and there were no problems there whereas sociology students were 'I don't want to know this'. So I underestimated that.'

(CETL Associate, Using iPods with Sociology Students)

While there was an issue with this reluctance on students' side to work with digital technology, students seem to have adjusted to the novel approach. Supporting evidence for this is that all students (apart from one) passed the module, the average grade had improved. In addition, students requested further material to be put onto the iPods, as well as suggesting ways in which the use of this technology could be extended (requesting they should be able to record their thoughts).

Achieving objectives

As the CETL associate reported, pass rates were improved after the introduction of the new form of learning. While there is no proof of the form of learning delivery directly affecting grades, there is significant indication that students' participation improved, as well as that they had a positive experience interacting with the learning content.

One form of positive feedback was students' request for more material to be put onto the iPods. In addition students requested to be able to record their own thoughts onto the iPods. This is evidence that despite their initial cautiousness with using the technology (see 'Challenges' in this section), students grew accustomed to it and reached a stage where they requested for learning material to be made accessible in this way. Students also requested a recording device - a tool which would aid them to reflect on the learning material. In this way students are expressing the need for a higher level of interactivity - that of being able to create new content. This is a positive indication of learners exercising autonomous behaviour and taking an active part in determining how they want to learn.

A further achievement was the increased level of participation by students - their attendance of lectures and seminars retained an 85% throughout the year.

Cultural differences

One interesting cultural distinction emerged from the project being delivered to two cohorts of students - one within the UK and one in Hong Kong. There was a definite preference for MP3 players with the students in Hong Kong, while iPods were much more readily accepted in the UK. This cultural preference needs to be considered in further project work involving students from Southeast Asia.

9.2 Professional Learning Week (March 26-30th, 2007) - project description

Professional Learning Week (PLW) was carried out with the participation of second year Applied Social Sciences students. The project was in the form of an away week, in which students from Collegiate Crescent Campus attended City Campus, engaging in a simulation activity.

For the purposes of the project, students were taken off their timetable. The participation in the Simulation week was on a voluntary basis - an approach which is reported to normally attract 10-15% student participation. In comparison, the actual participation on PLW was quite high at 23.5%, based on an attendance of 45 students.

PLW used a simulation model based on consultancy with students divided into 'consultants' or 'funders'. The 'funders' were based on the North Yorkshire Constabulary, and the Barking, Havering and Redbridge Health Trust. One of the groups had to prepare a brief for the other and present it. An external consultant was employed for one day to provide input on consultancy techniques and approaches. In addition representatives from both the police and the health trust were present, working with the students on their tasks.

9.2.1 Key findings

Situated learning

Similarly to several of the CETLs within Promoting Learner Autonomy, PLW adopted an experiential learning approach. By using simulation, students were placed in real life work experience situations, where they engaged with the authentic activities of the subject setting. This is in line with the situated and experiential learning approaches (Lave and Wenger, 1991(a)), which as discussed in other sections of this report (see section 2), is one of the most successful ways of engaging learners.

Two key aspects of autonomous learning were implemented - collaborative group work and enhancing employability skills through experiential learning, as well as the strategy of empowerment of students, already discussed in this report (see section 3.2.1 and section 2) which involves making students aware of the value of the learning experience in terms of allowing them to gain a skills base.

Learners were made aware of the benefits by receiving a certificate which reflects the extent to which they have contributed to the project. In their feedback to the tutor, students indicated that the certificate, contributing to their employability, was one of the key motivating factors for participating in the project.

Student participation

Student participation was one of the key issues related to this approach. The challenge was to get students to participate in a voluntary exercise, which was non-assessed and which in addition required a firm commitment on their side for a period of a full week. The CETL Associate's comment made before

running the simulation, reflects this:

'Getting students to take it seriously for an entire week - I think is going to be very difficult because it is new, it is not a formal part of the curriculum, which creates a difficulty, and we are pressed for time - is it really going to work, are the students really going to work together in groups for quite a long time, I think at the moment that is a worry - and a concern. But I think the main one is: are students taking it seriously.'

(CETL Associate, Professional Learning Week)

The relatively high percentage of students participating (23.5%) is an indication that students saw the potential and relevance of the course. A high proportion of students participating (70%) indicated that they would appreciate more information on the task being given at the beginning of the week. Suggestions were made for this to be done through Blackboard.

One positive indication of students seeing the relevance of PLW was students' opinion that the task was extremely valuable and challenging. In addition students indicated that this was a far preferable way of working and that all seminars should be offered on a similar basis. This could indeed positively influence participation rates. Students further indicated that it was a useful way of providing new experiences, new ways of working and participating in groups.

Similarly to the findings of the project of using iPods with Sociology Students, it seems that what the students appreciated most was the opportunity to work in non formal environments - which they expressed as a different way of participation.

Tutor intervention and timing

Staff participation was a defining aspect of the organisation and delivery of the week. The three members of staff participating were experienced in knowing when to participate and when to stand back. Tutor intervention is an important aspect in preserving learner autonomy. As the CETL Associate reported:

'...as the students demonstrated the appropriate academic knowledge is gained with less staff intervention. But when intervention occurs it needs to be right - a difficult balancing act which all of us get wrong on occasions. If the week was divided up and refocused around a different topic some of this could be handled.'

Problem areas

The most frequent reasons for non participation given by students (taken from phone calls and emails) were:

1. irrelevance of tasks and purpose outside a formal lecture-seminar format or module organisation;
2. coming on top of a very busy time for assessment preparation - in all cases where this was cited it was also the case the commenter had not started their semester 2 assessment work;
3. uncertainty

There was clearly a balancing act between the risk taking which is involved in undertaking something that was unknown but seen to be of possible value as opposed to a known task, involving little risk that had to be undertaken. However, enhancing learner autonomy depends on students being able to see the relevance of non assessed work and being prepared to face the uncertainties and risks associated with achieving learning outcomes. Students who are prepared to take such risks are the ones who are exhibiting truly autonomous behaviour. In addition, being prepared and able to identify their own personal learning outcomes is a form of learner autonomy.

Embedding

When considering embedding this project within the programme of study, it appears that the most significant issue is that of the timing in which the project is delivered. As discussed in the section on Student participation, the key issue for students is dedicating a full week of their time to a non-assessed, voluntary participation exercise. In addition, delivering it as a full week project separates it from the rest of the work which students do on their course. A form of distribution of the project was suggested by the CETL Associate which would take the following form: One day at the end of level 4; 2 days in level 5 leading to a one day focused on dissertation at the start of level 6.

Other than the reorganisation of the programme into a three day event there is strong indication of the benefits of the event. Students' positive response, engagement and relatively high level of participation reflect this view. At present the PLP might consider between the following options:

(i) non-continuation in any form;

(ii) continuation on the same basis as at present or located in another week;

(iii) reorganisation into a 3 day event (either at end of semester 1, start of semester 2 or as at present) with a continued external contribution;

(iv) integration into a specific module such as work placement;

(v) refocusing the week and using the current approach but tying it more directly to tasks relevant to transition from one level to another and to dissertation on a 1 day in level 4, 2 day in level 5 and 1 day in level 6 model.

10 Promoting Learner Autonomy in Psychology – Embedding Skills

10.1 Project description

http://www.shu.ac.uk/cetl/autonomy/projectbriefs/WillReader.pdf

This section describes a project which is being run under CETL funding in the department of Psychology. The project takes place in 2006/07 – its evaluation is therefore in progress, and any outcomes discussed in this report are intermediate. The project targets the development of key skills in Psychology students such as critical thinking, collaborative working and research skills. All

of these skills are associated with promoting learner autonomy.

The particular course within which the project was carried out was Abnormal Psychology. All 200 students enrolled on the course were taken into account as participants in the research. Students were asked to work in small groups of 3-4, on collaboratively reviewing a scholarly article, using wikki technology. Tutors were engaged in providing formative feedback on students' collaborative work, in this way preparing learners for the assessed task to follow subsequently. The assessed task was given later in the year and will be assessed individually. By giving feedback before assessment the approach aims to prepare students with the skills necessary at a time when they were most needed – in this way students would have a chance to exercise their thinking skills before actually being assessed on them.

A second part of the CETL project is carried out, involving nursing students in their placement year. Students are assessed on a written piece of work. Within this, students are expected to bring together their experiences in the workplace and relate these to new and existing theoretical knowledge of the field.

Both parts of the project aim to equip students with critical thinking skills, ultimately making them better psychologists.

10.2 Key findings

10.2.1 Promoting critical thinking

This project adopts the stance that for a Psychology student one of the best ways to support learner autonomy is to provide them with critical thinking skills. As the CETL Associate identifies, a learner who is able to make critical judgements on an article/academic piece of writing, is exercising their capacity for independent thought, and this in itself is a manifestation of autonomy.

A collaborative learning approach was adopted where students had to work on an assignment in groups, critically evaluating a piece of academic writing/ an article. This task was not assessed, but set before the actual assessed piece of work, to be carried out individually, aiming to prepare students for their assessed assignment. While engaging with the collaborative non-assessed task, learners received regular feedback from the tutor, and were expected to share and exchange ideas. In addition, wikkis were used as a support tool – a collaborative, editable web document, which students could construct, edit and add to.

Several aspects combine in this approach to make it potentially successful to promoting critical thinking skills and learner autonomy. Firstly, the task is not assessed, therefore students would be expected to display intrinsic motivation when engaging with the task – i.e. – engage with the task because they understand the benefits of it, rather than because they are aiming to achieve a certain grade. Such intrinsic motivation would be an indication of a very high level of learner autonomy.

The CETL Associate reported low engagement and motivation on learners' side regarding this project, despite the fact that the tutor made it clear to the students that they stood to benefit from this approach in the long term in terms of the skills acquired. The following is a comment by the CETL Associate:

And the third point comes out of this - the motivation. The way I've sold it to them - you are going to be getting this new piece of coursework which will be coming out in semester two, the module is not going to be assessed, here is an opportunity to practice and develop new skills. And the point I made earlier that students sometimes find it - they've got so many other demands upon their time some of them to do with the module some to do with coursework being assessed, some not, that having to do something that is not going to be assessed, is often put down very low on their list of priorities… What I want to do is try to get some data on this try and find exactly what the important factors were from their point of view and why it didn't really work.'

(CETL Associate, Psychology)

Clearly one of the issues which emerges is the fact that learners failed to see the relevance of the task. Combined with heavy demands on their time, this resulted in low engagement. Parallels can be drawn in this case with CETL projects which have faced similar issues. The Just Ask initiative was similarly a collaborative, non-assessed project, where learners displayed very high levels of motivation. This was due to the fact that they were certain of the benefits of the task to their career development (section 2). This suggests that the project could benefit from a similar approach of making direct links of the task with employability skills.

However, one of the most prominent aspects which would explain why students failed to always see the relevance of the collaborative approach is expressed in the following comment by the CETL Associate:

'Part of the purpose of the collaborative aspect - and this is where it didn't work - was when people work on this, they are not all going to be psychologists, the majority aren't going to be psychologists, but when psychologists write an article they often do collaborate - you rarely read an article which is written by only one person… when they go out to work they are not going to be writing things / doing things on their own, they are going to have to collaborate.'

(CETL Associate, Psychology)

This comment gives a very good reason why some of the learners would have failed to see the relevance of the collaborative working approach – the key words being *'they are not all going to be psychologists'*. While some of the learners would have used the skills acquired in this approach directly in their future employment, and therefore would have seen the purpose and been intrinsically motivated on the task, those of them who did not intend to pursue a career as psychologists, would naturally not see the relevance. The lesson learned, according to the researcher, is that intrinsic motivation is necessary in non-assessed tasks. At the same time it is a valuable tool in promoting learner autonomy, but it would only work if learners can see the direct relationship to a set of skills that they can use in their future careers.

A further aspect which the CETL Associate stated as a possible issue was students' varying computer literacy skills. Learners' success in this collaborative task depended to a large extent on using the collaborative web document – wikki. Unfamiliarity with the technology could have been a deterrent to students. Not only did students have to work with new technology but they were expected to use this at the highest level of interactivity – that of manipulating and creating new content (Bekier, 2005). From this point of view the challenges faced by this project are comparable to those which most projects introducing new technology to learners face – other examples, particularly those which have had to address non participation by learners are MA Professional Communication (section 6); developing the Virtual learning Environment (section 16.2.2).

10.2.2 Experiential learning

In a second part of the project, an experiential learning approach is adopted. The group consists of mental health nursing students, who work and are assessed individually. In this case the assessment of these students is linked to their placement in the mental health sector. The students would be working in a number of institutions, with their goal for assessment being to relate their experiences of working with patients to the theory which has formed part of their seminar and lecture sessions. In this way practice and theory are being brought together and one of the major challenges of the subject is being addressed – the gap between the theory of autism / mental health and the practice involving treatment and symptoms:

'The difficulty of assessment is that there are almost two distinct sections - a whole lot of stuff about autism; describing patients, and then there is almost an entirely different section about theories of autism, treatment, or symptoms. And the two don't really ever come together. Or rarely come together. The idea of this approach would be that they would write about things that have happened to them…'

(CETL Associate, Psychology)

By taking this approach, two aspects of learning are influenced - giving learners ownership of the learning problem (Mercer, 2000) and situating their learning in the authentic activities of the subject setting (Lave and Wenger, 1991(a)). Firstly learners will be engaged in a project where they have to analyse their own experiences of working in the mental health sector and try to relate these experiences to theory. In doing this they will be engaging in a reflective process and in learning from experience. Because it is their own experiences they are analysing the 'learning problem' is immediately personally relevant to them and meaning making can take place.

Secondly, as Lave and Wenger identify - in order for learning to happen, it needs to be situated in the authentic activities of the subject setting (Lave, Wenger, 1991(a)). This example of how the CETL Associate has structured the assignment is a case in point of how to achieve this. Although the module has not yet been assessed in its set up it offers the perfect conditions for situating learning - students act in the authentic subject setting and use their experience to inform their approach and understanding to theory.

It is evident that this approach is likely to address some of the key issues highlighted in the previous section, regarding students' motivation and participation. There is evidence within other CETL work which identifies experiential learning as one of the most successful approaches in promoting learner autonomy, particularly in terms of improving learner motivation, participation and the ability as well as preparedness to work in a self-governed way. Examples of projects which have successfully applied experiential learning are Law in Practice (section 1.1); The European Challenge (section 3) and Professional Learning Week (section 8.2).

Student led inquiry and tutor intervention
Alongside the summative assessment of the written piece of work at the end, a formative evaluation of the work would be used as a way of supporting learners in their writing. Students would make entries in an online blog, to which the tutor would have access. The tutor would be able to then direct learners to relevant theoretical material on the experiences described. On the one hand such intervention by the tutor would provide a much needed feedback for students. However, a heavy intervention by the tutor, suggesting directions of thought may be seen as conflicting with learner autonomy and the student-led inquiry approach. The following comment illustrates the CETL Associate's thinking on the subject:

'Researcher: *Have you thought that it might be better for them to do that themselves, rather than the teacher directing them - considering it's all about autonomy.*

A: *Well that's a good point... Another way of approaching it might be to give them stuff to begin with and then pull it away. Use a form of scaffolding. Because a lot of these students - some of them have done degrees before, some of them haven't. They are second year. So a lot of them are less aware of what's out there and what technologies are available. So it is something to think about - rather than giving them all…'*

(CETL Associate, Psychology)

This quotation makes explicit that the tutor is often faced with the difficulty of judging how much support learners need in order to both preserve their autonomy and to make the necessary and adequate level of support available. The CETL Associate has identified a way of approaching this which is yet to be evaluated - gradually reducing the amount of guidance given as learners start to exercise their own approaches and their own thinking. The CETL Associate refers to this approach as 'scaffolding'.

10.2.3 Achieving objectives

The project is running in academic year 2006/07. Its evaluation is currently being carried out, and no evidence is available on the outcomes of applying the new approaches. However there is evidence of a specific evaluative methodology being in place which would be able to provide evidence on outcomes. In particular the evaluation would be asking questions regarding:

1 Lack of student participation in seminars
2 Issues with collaboration and individual learning outcomes

3 The effects of using technology as a learning/teaching tool

11 International MSc programme in E-learning, Multimedia and Consultancy (ELMAC, 2005/06) - Personal and Professional Development Planning using e-Portfolio

11.1 Project description

This project was run within the International MSc Programme in E-Learning, Multimedia and Consultancy, under CETL funding in academic year 2005/06. The project was focussed on supporting students' personal and professional development planning (PPDP) though the use of e-portfolios. Within this programme Sheffield Hallam University has worked in active partnership with Arnhem-Nijmegen University of Professional Education in the Netherlands. The project is based on developing a community of learning and within this investigating the effects of collaborative and supportive networks of learning.

It is now a formal requirement of HEFCE to embed PPDP in all areas of study in higher education. The purpose of the project is to promote and encourage the development of PPDP within the MSc ELMAC programme through the use of e-portfolios. This is perceived as valuable in providing each individual student with a personal record of achievement, producing personal statements for a CV, as well as structuring learning and helping students in identifying goals and planning their career development.

11.2 Reflective learning

One of the ways in which the use of e-portfolios supports learner autonomy is to encourage reflective learning. Reflection is seen as part of the learning objectives of the programme of study:

'... we consciously look to help students develop the skills of reflection. And we do that by feedback on reflection, we do that by highlighting what we feel is effective reflection, that it is not merely descriptive but analytical. And I think the way to do that is to help students differentiate between reflection in action, and reflection on action.'

(CETL Associate, ELMAC)

In particular learners are asked to reflect on the process of professional development:

'It (reflection) is part of them growing as a learner and it is also part of the professional development process - where are you in your learning; what new learning do you need to do; was the learning that you've done to date valuable to you; in what way was it valuable; how has your thinking changed.'

(CETL Associate, ELMAC)

11.3 Collaboration

The project is guided by the principles of communities of learning as defined by Lave and Wenger (1991(a)). The CETL Associate emphasises that this

philosophy is made explicit to students, in this way making them part of the process of decision making regarding how such a community needs to be shaped. Making learners part of decision making is a strategy which empowers the learner and promotes autonomy.

The CETL Associate defines the characteristics of the community as being supportive; interdependent in collaborating on tasks; creating mutual interdependence, which support collaborative working skills. Within the community the tutor is described as a facilitator of learning, which is a constructivist idea. In this approach the project shares similarities with the Law in Practice and Law in the Community projects (see sections 1.1 and 1.2).

On a number of modules students work collaboratively. In the duration of the three levels of the course - Certificate, Diploma and full Masters - students gradually move towards a higher level of autonomy in their work and different levels of collaboration. This is expressed in starting with collaborative tasks, which involve orchestrated dependency of task and dependency of interest. At the stage of undertaking a full Masters, students move towards working in a highly individual way, supported by collaborative feedback from the community. Three stages are implicit in this approach - tutor guided, tutor supported and student-led. These stages are made explicit to learners, in accordance with the ELMAC approach of making learners part of the decision making process.

One of the valuable features of using e-portfolios is the opportunity for students to give feedback on each others' portfolio work. Within a cohort of students taking the same module, both Dutch and English students, international groups of students are formed. Feedback is exchanged in a variety of ways - verbally; face-to-face; synchronously; asynchronously; written form and videoconferencing. The tools used include forums, blogs, e-portfolios. The main form of feedback given in forums was peer-to-peer. One of the issues which the CETL Associate reported was the quality of such feedback, which could on some occasions be superficial. However the majority of the feedback was reported to have been *'meaningful, directed and focused'* (CETL Associate, ELMAC).

A further issue was that while students were allowed the possibility to view and feedback on each others' work, this publicity made the ownership of the work problematic.

11.4 Empowerment

One of the significant achievements of this project was to empower the learner and promote their self-esteem. One of the ways in which this was achieved was through a student-led conference which has been running for three years (2005-2007). The conference is funded by a fellowship awarded to the community of students and staff in ELMAC.

Another form of empowerment to learners is making them aware of the pedagogy adopted by ELMAC, as described in section 10.3 in the context of communities of learning. The following comment by the CETL Associate

illustrates this point:

'So making explicit our pedagogy to students is really important. If we say to them - we think it is really important that you work and collaborate with others and you learn from others, we realise that first of all you've got a lot to bring yourselves that we value your contribution to the community of learning. We think that that promotes them as autonomous learners, promotes them as individuals with something to give to the community. When they become professionals in the world in their jobs, that's how they will operate - they may be responsible for leading others. So there is an element of induction to that.'

(CETL Associate, ELMAC)

Making explicit the course's pedagogy to learners is a form of empowerment, making students part of the decisions which shape the design and delivery of the course.

11.5 Evaluation

An action research methodology is adopted by the project aiming to establish the impact of the introduction of e-portfolios on learners' personal and professional development. The evaluation of the project involves the following sets of data:

1. qualitative data drawn from students' participation
2. evidence of completion of work by students and retention
3. an evaluation of students' contributions to the student-led conference
4. an evaluation of students' assessed work

11.6 Embedding

The project's primary objective was to promote PPDP within the ELMAC programme of study; to encourage and support the development of e-portfolios as a tool for reflective thinking, as well as to support work-based learning opportunities. The CETL Associate reported that these objectives have been achieved and further embedded into the programme of study. Besides being embedded in the programme of study of current students, the project further aims to support and maintain the community of practice developed through the e-portfolio, including alumni students. The programme aims to keep alumni as part of the community by asking them to report on work they have done since leaving the programme. However this has proved a difficult task due to institutional constraints regarding the Blackboard virtual learning environment:

'The problems - they are often institutional, because alumni, when they leave here (The University) can no longer have access to the Blackboard community. So the potential of having a community of learning is restricted. Because the 15-20 alumni who have left in the last 2-3 years - their ability to communicate with existing students and for existing students to work with alumni, can't happen.'

(CETL Associate, ELMAC)

It appears that institutional constraints are hindering the development and sustenance of the community of practice.

Such constraints are felt in particular by the type of learner on the ELMAC course. These learners are technically proficient. It is natural therefore that their expectations of the learning environment they use would be for a state of the art technology, equipped for use by professionals. The following comment by the CETL Associate illustrates this point:

One thing to remember when talking about these students is that they are professionals in the area of e-learning an they ask me some direct questions about why Blackboard looks very much like it did 5 years ago. Whereas these students are professionals in the field, working with all sorts of VLEs and social networking tools, which we are yet to incorporate into Blackboard. To be fair to Blackboard it is trying and I do like the weblogs but the wikkis for example are very limited.'

(CETL Associate, ELMAC)

The CETL Associate further reported the fact that ELMAC students' learning needs involve experimenting with different platforms for learning environments in a dynamic way. While learners would want to experiment with Moodle, MySpace, Ning etc., they are limited to using Blackboard. In these terms the CETL Associate identifies the need for institutions to take the learner context into account, particularly in cases where the professional development of the learner is so closely dependent on the quality of the learning environment used. The following comment by the CETL Associate reflects this point:

'If the tool is good enough it should be able to be personalised and tailored to individual needs. And Blackboard can't do that. I understand why we use it - Blackboard is a very robust tool, very rarely breaks, we are working very hard to raise a baseline. But the course that I lead is not about the baseline. It is about excellence in e-learning. So there are a lot of very good things that Blackboard can do but it is not always appropriate for the learners that I work with.'

(CETL Associate, ELMAC)

Ideas which have been explored in ELMAC are now being introduced to the Professional Development Programme (PDP) within Sheffield Hallam University.

11.6.1 Publications

The work and related research on ELMAC has resulted in a number of publications. The following is a list of these:

Web publications

1. Conditions for achieving communication, interaction and collaboration in e-learning environments, elearningeuropa.info, 15 August 2005 [WWW document] URL http://www.elearningeuropa.info/index.php
2. Working on educational research methods with Masters students in an international online learning community, University of Sydney database on Research-Led Teaching and the Scholarship of Teaching: [WWW document] URL http://www.itl.usyd.edu.au/RLT/examples/search.cfm

3. Research-Based Practice: on the relationship between action research and design research in the context of the development of an international on-line MSc programme, LERU Invitation Seminar on Research-Based Teaching in HE, League of European Research-Intensive Universities, University of Helsinki, 22-23 March 2005, pp. 37-39. [WWW document] URL http://www.helsinki.fi/ktl/yty/leru-registration/index.htm
4. Developing an open and flexible networked learning community at doctoral level across Europe, MSOR Connections, Vol. 5, No 1. [WWW Document] URL http://mathstore.ac.uk/newsletter/feb2005/pdf/ntf.pdf

Academic journal articles

1. Hudson, B., Hudson, A. and Steel, J. (2006) Orchestrating interdependence in an international online learning community, British Journal of Educational Technology (In press).
2. Hudson, B., Owen, D. and van Veen, K. (2006) Working on educational research method with Masters students in an international online learning community, British Journal of Educational Technology (In press).

Related work

Hudson, B., Keifer, S., Laanpere, M. and Rugeli, J. (2005) eLearning in Higher Education: Proceedings of Intensive Programme ELHE, 1-11 July 2004. Linz: Universitätswerlag Rudolf Trauner. [WWW Document] URL http://www.phlinz.at/typo3/fileadmin/paedak_upload/technik/learn_buch.pdf

12 Problem Based Learning in Engineering, Design and Technology

12.1 Project description

This project was run within the Department of Engineering under CETL funding in academic year 2006/07. The participants were undergraduate students on a professionally accredited Engineering course. Students were taking a module called vibro-acoustics. The main group of students were on a course on Forensic engineering, which involved investigation of why structures fail. There were 19 students on the course.

The project aimed to implement a problem based learning (PBL) approach to teaching and learning within a module which essentially required students to undertake an investigative approach to their learning. In these terms problem based learning, which is investigative in nature, was considered the optimum approach to take.

The following section makes explicit the relationship between problem based learning, its value to teaching and learning Engineering, and its relationship to promoting learner autonomy.

12.2 Problem based learning

The CETL Associate undertook a problem based learning approach to delivering the module in vibro-acoustics to Engineering students. One of the main reasons for this was to use the approach as a way of moving away from a transmission model of teaching and learning, as is being used predominantly, particularly in Engineering courses. The CETL Associate highlighted the fact that Engineering as a subject area is primarily concerned with solving problems, therefore the transmission model of lectures is far from the optimum approach to teaching and learning about problem solving. The following comment illustrates this point:

'...As a professional engineer I worked in industry for 10 years prior to coming here (the University); engineering is about solving problems. So clearly, how can you teach somebody to be an engineer and to solve problems if you are not doing any PBL. So why not incorporate this approach - i.e. - solving problems in the actual delivery of the module itself.'

(CETL Associate, PBL Engineering)

The CETL Associate's own professional experience is evidence that PBL as an approach to learning in Engineering has the added advantage of preparing learners with the necessary employability skills in the area of engineering. It can be argued therefore that one of the positive outcomes of adopting PBL in Engineering is its potential to improve employability in students, preparing them for ways of working characteristic of industry.

Besides being well suited for the subject matter which engineering deals with, the CETL Associate further highlighted some of the key strengths which PBL has in terms of promoting learner autonomy. The following is a comment from the CETL Associate which identifies these strengths:

'Problem based learning really does tackle some of these issues head on about learner autonomy. You can't really learn about a problem without being autonomous in your approach to it - I can't do it for them, the students have to do it for themselves really. So immediately they have to do something - they have to go to the library to read around the subject, they have to discuss between themselves, to identify what the problem is to begin with. It is one of those things which you really wouldn't know whether the student was doing if you were just lecturing.'

(CETL Associate, PBL in Engineering)

The CETL Associate identifies that PBL engages the learner in a highly autonomous way of working. For example self-governance is required when looking for information and resources necessary for solving the problem. Further, problem solving requires collaborative discussions with peers as well as with the tutor. Finally, as a result of this need to collaborate within problem solving, the CETL Associate identifies that the communication between tutor and students is significantly enhanced. From the tutor's point of view in particular this means a greater transparency of the actions and thinking processes which the student is engaging with.

12.3 Evaluation strategy

The evaluation strategy is based on a mixture of quantitative and qualitative approaches. A questionnaire was devised based on written work on autonomy. The questionnaire is distributed to students once at the beginning of the module and once upon completion of the module. The purpose is to establish students' perceptions and understanding of autonomous learning, as well as to see how these might have changed or evolved since the beginning of the course.

However, the experience of learner autonomy can not be captured effectively by measurement, as it is an affective factor, therefore a qualitative approach is needed to support the quantitative data. The CETL Associate plans to gather qualitative data through the following methods:

1. verbal feedback from students
2. video observation of students' collaborative group discussions

Ethics issues will need to be addressed regarding video recording of students as well as in observing anonymity and confidentiality in data gathering analysis and dissemination.

12.4 Challenges with non-assessed work

One of the main challenges which the CETL Associate referred to was students' reluctance to engage with non-assessed work. The assessment for the vibro-acoustics module consists of 80% exam and 20% coursework. As PBL activities count towards coursework the number of students attending diminishes. At the same time however, students who did engage with the PBL based coursework gave positive feedback on its value.

One positive action which the CETL Associate has taken to raise students' motivation and participation into the module, was to make it clear to students what the objective of autonomous learning is - in this case making clear the benefit of formative evaluation of PBL work as opposed to the formal assessment at the end. The following comment illustrates this point:

'Because when you've got an exam at the end which counts for the majority of the marks, so this year what happened was people tried to have an easy ride, throughout the module, and then cram everything in the revision. So I am trying to get across to everybody this idea that if you work with me on these problems we are going along - it has been shown - I have shown them the evidence of literature published which shows that working through problems from week to week increases your knowledge retention.'

(CETL Associate, PBL Engineering)

Making this clear to learners is a form of empowerment, because it gives them an idea of why they are doing things in a different way and how it benefits them. This approach further empowers them to question the approach or even contribute to developing it. Similar approaches to empowerment of the learner have been used successfully in the ELMAC e-portfolio project (section 10.4).

What emerges clearly from the challenge of non-assessed work, is the need

to build new approaches such as PBL into students' assessment. In fact this is a major part of the aims and objectives of PBL in Engineering as a research project - to provide evidence of the value of new approaches, supporting learner autonomy. In this respect the CETL Associate plans to use this project as a benchmark and a corpus of data which would make a case for the value of PBL in Engineering, and convince the teaching staff in the department that the approach is worth implementing.

A further point, which the CETL Associate made, regarding the embedding of PBL in Engineering courses, was that it needs to be implemented across the programme of study for Engineering. The following comment highlights this point:

'A: *What I would like to do is - it (PBL) is no good in isolation in one module. That is the whole point, I said from the start - develop it in a module, then try to expand it to other modules. So then the project becomes wider in its scope in that I then have to try and get other people to buy into it.*

Researcher: *Have you spoken to anyone else about it?*

A: *A small number yes, but I think when you are dealing with that type of institutional change, particularly with my type of colleagues who are all engineers, and trying to fit into their approach to things, like myself require objective data to back up what I am saying. There's no good in me going and saying - I'll explain this idea it's problem based learning, I think we should start doing it because it looks like good fun. They are going to need objective data - so that s what evaluation is about. So I need to get that evidence first before I try and then sell it to other people.'*

(CETL Associate, PBL Engineering)

In these terms the CETL project on PBL Engineering has a clear purpose - to provide convincing evidence to the engineering community within the University that PBL is an approach which holds significant benefits to learning and teaching in the subject. Within this the task would involve building the approach into assessment as well as engaging the teaching community in being enthusiastic and prepared to deliver their modules in a new format.

Some quantitative evidence already exists of the success of the PBL approach, in terms of students' performance. Students' exam performance has increased from a mean of 58% in 2006 to 67% in 2007. This is a significant increase which gives some evidence of enhanced student engagement resulting in improvement in achievement.

13 The Teaching, Learning and Application of Undergraduate Research Skills within the Criminological Discipline

13.1 Project description

This project is currently running, in academic year 2006/07. The project aims to explore the relationship between teaching provision in the Criminological

discipline and students' learning needs. Figure 1 shows the areas of research which the project is concerned with. In particular approaches to research methods teaching are explored and how this impacts on the dissertation module in the third year of the Criminology course.

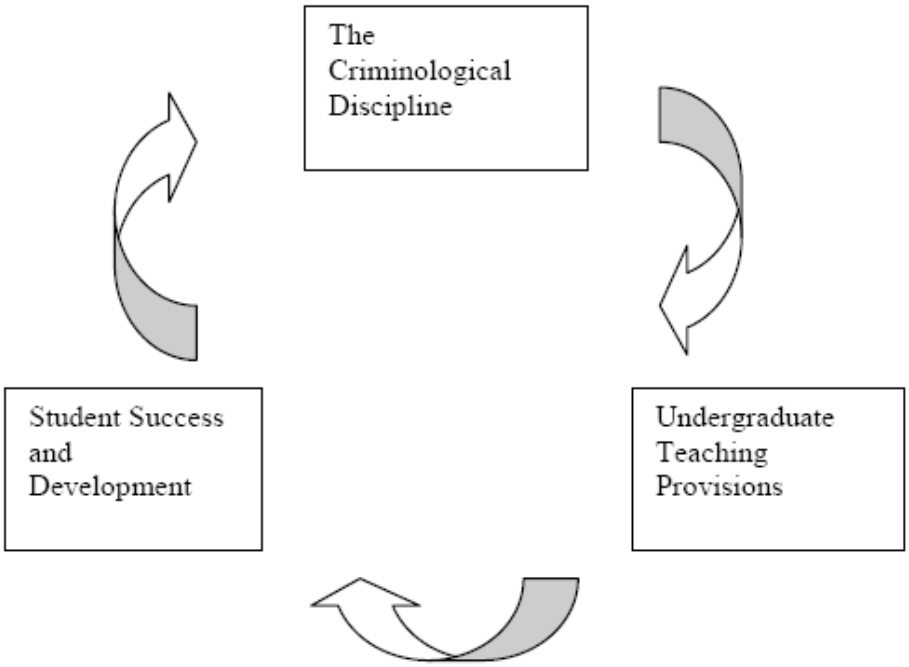

Figure 1. Areas of research for the CETL on Teaching, Learning and Application of Undergraduate Research Skills within the Criminological Discipline

Three sets of data are being collected, which aim to represent the experience of teaching staff, students' own experience and an assessment of the teaching provision on the Criminology course:

1 A questionnaire is distributed to teaching staff, aiming to assess their approaches to research methods teaching and the Dissertation as well as their experiences of criminology research.
2 Undergraduate teaching provision is assessed through content analysis of dissertation assessment feedback sheets, for the 2005/06 cohort of Criminology students.
3 The student experience is investigated through a hermeneutic analysis of diaries kept by a sample of dissertation students undertaking the module in 2006/07.

The project's relationship to promoting learner autonomy is through its focus on the Dissertation module - one of the most autonomous pieces of work which students are expected to produce at undergraduate level. As the CETL Associate emphasises, the Dissertation is significant as both a summative, assessed outcome of three years of learning and as a possible link between undergraduate studies and employment. Exploring how well students are supported in their dissertation is therefore directly related to understanding provision for learner autonomy.

The relevance and opportunities for embedding the project's outcomes within the Criminology discipline are related to the suggested move of the module from a 20 credit to a 40 credit in the coming academic year 2007/08. This will coincide with heightened expectations of the quality of delivery of the module, particularly in terms of teaching provision. The findings from the project therefore aim to influence directly the teaching of research methods in Criminology at Level 5 and provide an empirical basis for further researching resource provision at Level 6, Dissertation.

The following sections outline the evaluative methodology for the project, challenges which the project has had to deal with, as well as perceived outcomes of the study in terms of both autonomy and improving the student experience.

13.2 Evaluative methodology

Five students on the Dissertation module at Level 6 were taken to form the basis of case studies. The aim was to look at how students approach their dissertation. As dissertation students they are engaging in work which is highly autonomous. While students are still working under supervision their projects are to a large extent student led, which raises the issue of how prepared they are to cope with such high level of autonomy, and whether they are equipped with the skills for independent study. This necessitated the approach of critically analysing the content and skills learners have been taught at level 5, and looking at this in the context of what is expected of them in their dissertation module. The operational or intermediary research question therefore was:

1 *Are Criminology students taught what they need to know to be able to be autonomous in their dissertation? Is there room for improving learners' experience?*

The first method of data gathering which the CETL Associate has applied is to track dissertation students' process of reflective thinking in the course of writing their dissertations. The CETL Associate, who is also the Dissertation tutor, keeps a journal of students' reflective activity, which she bases on progress meetings with each individual student. Five dissertation students' reflective activity is being analysed as part of the study in this way, each of which is taken as a case study. The data gathered is qualitative, and will be interpreted by applying qualitative methods. There has been no analysis of this data to date as students are in the process of completing their dissertations.

The second method of data gathering is a quantitative questionnaire to the staff group in Criminology, aiming to get their opinions of the relationship between taught research methods and the skills required for writing a dissertation. The questionnaires are currently being processed, and some basic analysis has been carried out on them. The findings involve data on teaching staff's expectations of dissertation students, as well as their ideas for how the subject's content can change.

In addition a database is being compiled of previous dissertations, in

particular the feedback sheets given by a tutor for each of the dissertations. A content analysis methodology will be applied to those - looking for frequencies and patterns in tutors' comments, as a way of identifying where students struggle. This could potentially be a powerful resource of data for identifying students' learning needs and comparing these to teaching provision in Criminology.

The formal analysis of these three cohorts of data will be completed in summer 2006/07.

13.3 Challenges

The key challenge which the CETL Associate identified with the research project currently was the difficulty of getting students to participate in research activity on a voluntary basis.

The CETL Associate encouraged students to write a reflective journal of their experiences of the progress they were making on the dissertation. However this proved difficult with students having a large number of demands on their time. Students were reluctant to engage in activity which was not assessed.

Gaining an insight into students' own experiences of writing a dissertation could have been a valuable source of data in identifying their learning needs. Not only would such activity be useful to the research, but more importantly it would have the potential of encouraging reflective activity on learners' side. However, students' reluctance to participate in non-assessed activity is a frequently occurring issue, which a number of CETL Projects have had to address (see Psychology, section 9; Engineering, section 5; Professional Learning Week, section 8.2). One way to approach this would be to consider making PPDP (Personal and Professional Development Planning) as part of the programme of study for the Criminology discipline. Many courses now have PPDP built into students' programme of study. This involves a reflective account by students on their own academic progress, which is also assessed. The potential of PPDP to promoting learner autonomy could be to give tutors insights into the development of learners as reflective practitioners.

13.4 Embedding

While there is currently no evidence of the extent to which the findings of research will inform real change within the teaching and learning practices within Criminology, there is a great deal of potential for this work to become the trigger of change for academic practice. This is evident in the CETL Associate's belief that this research should serve precisely the purpose of change:

'I think that it will make a difference. I think that whatever I find or whenever I have done my conclusions, I want to make sure I can embed it into how we teach. So I currently teach on the level 5 methods module which is specifically linked to the dissertation, so whatever I find, I want to take that to the module team and say 'Our students show a real weakness in...' lets say the ability to write a literature review or they are lacking in analysis skills, or they have difficulties conceptualising what research is for example. So then I would take it back to our module and we are going to specifically look at that. And say:

'This is what I found – can we adapt, can we change, can we embed this in what we teach'. So hopefully there will be a progression of change. And I think it will be good for me to keep an eye on the impact of those changes, so possibly think about – if and when these changes are implemented – it might be in stages, it might not be all at once, some kind of evaluation on whether it has had an impact.

So I think may be in a year's time, if changes are implemented it might be interesting to go back and see whether dissertation students are having the same experiences.'

(CETL Associate, Criminology)

Dissemination amongst the teaching staff in the Criminology discipline is one of the primary purposes of the research project. This is encouraging in terms of defining a key purpose and goal for the research, which is very likely to result in real change. In particular this is of interest from the point of view that Criminology is one of the few CETL projects which have stated the purpose of research as informing change through communicating the results of this research to the teaching community. Problem Based Learning in Engineering is another project which has stated clearly the intention to disseminate the findings of research within the teaching community and in particular to use the findings of research as a tool for change in teaching and learning practices (see section 11.4).

Using CETL activity in promoting learner autonomy as the tool for change is something most CETL projects seem to have considered, however not all have articulated as one of the key outcomes of the work. An emphasis is necessary on communicating the findings of research to teaching staff within the relevant subject area. Future CETL work needs to involve such communication as its core objective to be achieved.

14 Assessment for Learning - Promoting Learner Autonomy through Assessment

14.1 Project description

http://www.shu.ac.uk/cetl/autonomy/projectbriefs/christines.pdf

Assessment for Learning is a two year project run under CETL funding in the period 2005/06 and 2006/07. The project was based on redesigning assessment at Level 4 for all undergraduate modules within the Faculty of Organisation and Management (O&M). This coincided with and was triggered by the faculty-wide revalidation process. The driving idea and the relationship to learner autonomy, was to redesign module assessment in a way which would incorporate all the characteristics which would enable students to develop their autonomy. In order to do this the project involves enriching the student learning experience by developing approaches such as self-assessment, collaborative, peer and formative assessment as well as portfolio-based assessment.

The project is informed by the findings of the Smarter Assessment project, which began in 2003 in the School of Business and Finance and was

introduced to the Faculty of O&M in 2004/05. Assessment for Learning is built on baseline qualitative data of good practice provided by the Smarter Assessment Project. The project works in collaboration with the Teaching Learning and Assessment Group, the University's Learning and Teaching Institute (LTI), HEFCE funded project teams (TQEF/FTDL), course planning teams and planning groups. Student representatives and volunteers are also involved at both the planning and design stages.

14.2 Key issues

14.2.1 The value of assessment for learning

Assessment for learning is a term which denotes assessment which is integrated within the learning process. The purpose of assessment from this perspective is not to measure student progress but rather to act as a vehicle for learning. This is achieved by involving practices such as peer evaluation and self-evaluation in the practice of assessment. In its concern with students' progression to acquiring a set of skills which allow them to engage in assessment for learning, this project's objectives coincide with those of learner autonomy. Through the use of assessment for learning the student is empowered to become part of the assessment process and in this way take responsibility for their learning. As we have seen in a number of the CETL projects described in this report, engaging learners in taking responsibility for their learning is one of the most commonly applied strategies for promoting learner autonomy (see Historians and Research, section 4.2.1; ELMAC, section 10.4).

Assessment for learning is seen as any approach which empowers the student to develop skills in learning to learn. This project makes a particular contribution to the CETL Promoting Learner Autonomy, in recognising the potential of assessment to determining what is being taught and learned as well as determining how students use assessment as a way of shaping what they focus on in their learning. The following is the CETL Associate's perspective on the value of the assessment for learning approach:

'The reason why we want to develop autonomy in our students is both from the point of view of lifelong learning, but also we want to improve the way that the students engage with their learning at the university. And what we are looking for - there are some links in the literature that suggest good performance is linked with an increase of control in your own learning and increased involvement and engagement in the learning process. So in a way enhancing the student experience - improving their learning both while they are at university and also preparing them for employability and lifelong learning.'

(CETL Associate, Assessment for Learning)

The relationship which the CETL Associate emphasises with employability is one which has emerged as important in a number of CETL projects (History, section 4.2.4; 'Just Ask', section 2.2.2).

14.2.2 Influencing practice on a faculty wide level

Assessment for learning was a development project rather than a research

project. It used the revalidation of level 4 modules within the faculty as a vehicle of reform. In the way which is characteristic of action research methodologies, the assessment for learning project acted as an active intervention in teaching and learning practices on a faculty wide level.

The project was concerned with mapping assessment practices across the faculty and within this looking for examples of good practice. Good practice was defined as this which involved some form of assessment for learning. Some examples of such good practice which the CETL Associate identified were students receiving regular feedback on their work; students being given the opportunity to self-assess, to reflect on their learning and to give feedback to their peers on their learning.

The actual intervention of the project was achieved by an assessment working group, which devised a number of principles for implementing the ethos of assessment for learning. This document was revalidated, informing further action. Further action was taken in improving the overall experience at level 4 in terms of assessment and student support.

14.2.3 Staff development

As the key outcome of the project is a new assessment strategy, the involvement of staff is a key factor in the successful implementation and development of assessment for learning. In order to facilitate staff involvement several workshops were carried out, aimed at supporting assessment development. The CETL Associate reported a varying level of engagement from staff, with some being more reluctant than others to implementing change in their assessment practices. One strategy for dealing with this was to make it evident that issues such as student retention and addressing the needs of a diversity of students can be dealt with more adequately through the implementation of the assessment for learning approach. In addition, the revalidation of assessment at Level 4 was reported to have strong backing at senior management level in the faculty, which is another incentive for staff to engage with the new approach.

The focus of evaluation is looking at the ways in which the student experience has been influenced by changing assessment cultures. The modules in which such change has been introduced are expected to run in year 2007/08, which will provide a point of comparison in terms of influences on the overall student experience. An evaluation strategy is in place which will be used to provide insights into the changing student experience. The following section discusses this evaluation strategy.

14.2.4 Evaluating the student experience

The project has adopted an action research methodology. This allows the findings of research regarding student and staff experience to inform the redesign of assessment. Within this the methods are both quantitative and qualitative. Quantitative methods are used as a way of identifying whether the new approaches to assessment have influenced retention figures - an aspect of particular concern to the faculty at present. Overall pass rates of students are also monitored as a way of evaluating the impact of the new assessment practices on learner achievement.

In addition to a focus on statistical data the evaluation strategy aims to gain insights into the experiences and perceptions of students and staff regarding the process of assessment change. Accordingly the research is adopting qualitative methods such as case studies and focus groups.

14.2.5 Challenges

As already discussed in section 14.2.3, the engagement of staff in developing new assessment practices is one of the most significant challenges for the Assessment for Learning project. In addition, students' expectations and adopted ways of working also need to be taken into account. The following is the CETL Associate's account of these existing challenges:

'Well it is large scale, and there are obviously people who will show resistance to this sort of approach because it is very different from their own practice and they might not necessarily be comfortable with it. It depends on staff beliefs as well and students' expectations to some extent, but perhaps more staff beliefs. If you believe that assessment is about measuring student progress, then you are going to have problems with assessment for learning. So some staff may feel it's dumbing down standards.'

(CETL Associate, Assessment for Learning)

Support strategies have been developed to help staff making this transition. HEA coordinators have been appointed for each subject group who provide support with assessment change. In addition a series of seminars are being delivered within the faculty with a focus on assessment change. The Centre for Development and Innovation in Teaching and Learning, with a Special Interest Group on Learner Autonomy has been engaged in dissemination, evaluation and organisation of staff development. In these terms the project has made optimal use of the formal structures already existing within the University.

14.3 Dissemination

The objectives and design of the Assessment for Learning initiative, as well as some interim findings have been disseminated outside of the faculty of O&M, in which the project originated - the CETL Associate has disseminated the project within the faculty of Development and Society, at a time when they were in the process of revalidating their assessment programme.

Internal seminars and workshops were carried out in order to disseminate the project within the University. One example is the HERN (Higher Education Research Network) conference - presentations were given in 2005/06 and 2006/07.

Several talks were given at international conferences

CETL view, the CETL newsletter, has further disseminated the design and findings of the project.

15 Developing the Virtual Learning Environment

15.1 Project description

http://www.shu.ac.uk/cetl/autonomy/projectbriefs/sue.pdf

The project ran in academic year 2005/06. Its primary purpose was to explore ways in which the use of the University's virtual learning environment (VLE) - Blackboard - could be expanded. This involved exploring features of Blackboard which had not been widely used, from the point of view of their pedagogical potential. Wikkis were explored as a tool for facilitating collaborative work, as well as the blogging facility as a tool for writing a reflective journal.

The project's aim was to encourage use of the VLE as a tool for collaborative, peer-supported work. In addition the project was supportive of reflective learning through promoting the use of the VLE as a tool for reflective practice. In this way two of the key aspects of learner autonomy - collaborative work and reflective learning - are addressed by the project.

The use of individual reflective journals was piloted with first year students on the ELMAC (E-Learning Multimedia and Consultancy) course, which is described as a separate CETL project (see section 10). Students' engagement with the VLE on a particular module - Open and Flexible Learning Environments (OFLE) - was evaluated within the project. The findings were then used to inform further studies involving learners on other courses, in particular Primary ITT (Initial Teacher Training) courses, in order to establish whether the same facilities can be used to support reflective thought and collaborative work in Primary ITT.

15.2 Key findings

15.2.1 Sample and methodology

A pilot study was carried out with Masters students on the ELMAC programme. Students were required to use the blogging facility as a way of sharing work on the OFLE module. 12 students participated in this study. A similar study was then carried out with specialist ICT students on the Primary programme. These were BA with QTS (Qualified Teacher Status) students. The blogging facility was set up for the students to use as a reflective journal or a tool for submitting work.

The methodology adopted involved a combination of qualitative and quantitative approaches. Quantitative data was extracted through monitoring the number of postings students made in Blackboard. Qualitative data was gathered through looking at the discussion boards, specifically assigned for all users to post comments regarding the usability of the learning tool as well as its pedagogical potential.

15.2.2 VLE and reflective practice

Two very different sets of experience developed in the Masters students' sample of students as compared to the BA ITT students. The CETL Associate reported much higher levels of engagement in the Masters programme as compared to the BA programme. One of the possible explanations for this

could be that the BA students do not seem to have had the culture of reflection developed and integrated as part of their programme of study. The CETL Associate's comment illustrates this point:

The (BA ITT students) way they were using their journals was actually so they could share ideas - and to actually share their thoughts about the module. But the module is not specifically about working and reflecting on what you are doing – so they seemed to see the assignment as being the end product, and were not too worried about keeping a regular reflection of what they were doing from week to week.'

(CETL Associate, Developing the Virtual Learning Environment)

This comment identifies a low level of reflection being employed by learners - they see the assignment as being the end product, which suggests that learners are not really engaging with the assignment as a reflective process. This type of behaviour, particularly on the side of undergraduate learners is not uncommon and is precisely the reason for the development of PPDP programmes, and aiming to make these an integral part of the taught curriculum in any subject in HE (see section 7). The CETL Associate did not report issues with computer literacy or inability to engage with the technical aspects of the technology. Rather the issue seems to be in the lack of a culture of reflective thinking in students. Since the ELMAC masters students have PPDP built in as part of their programme of study (see section 10), it is natural that they would be much more prepared to engage with the VLE in this way. The following comment by the CETL Associate, made regarding the Masters students, reinforces this point:

'They (Masters students) know that they are expected to collaborate, and they know they have to put drafts of all their work up for everybody to see and they feed back on each others' work. So they use their journals as a way of reflecting on their work from week to week, reflecting on their experiences of when they weren't very happy, and they were willing to put that in their journals. And they used it to motivate each other. They found that because someone else has put something in their journal about 'I'm not very happy this week' and 'I can't keep up with the work' they then went and commented on each other and supported each other. So they used it as a support mechanism. And the undergrads have not seen that it can be used as a support mechanism.'

(CETL Associate, Developing the VLE)

It appears that the ELMAC Masters students have used the VLE to exercise a high level of reflection and have collaboratively supported each other. This type of support through the use of a VLE evidences a culture of reflective learning which can only be described as a community of practice (Lave, Wenger, 1991(a)). The CETL Associate has reported a lack of such engagement on the side of BA ITT students. However, to compare the two groups in such a direct way would mean to ignore the fact that ELMAC Masters students have had the benefit of their programme of study being specifically designed to promote the development of a community of reflective practice, as is described in section 10 of this report.

The conclusion which can be drawn from this comparison is that the VLE

would not necessarily elicit a valuable level of engagement from learners, unless it is supported by a pedagogy of reflective practice, such as PPDP modules aim to introduce. CETL projects which have been working towards the development of such pedagogy are ELMAC PPDP using e-Portfolio (section 10) and Working with Students to Develop e-Portfolio as an Integrated Learning Environment (section 7).

15.2.3 Plagiarism

One of the concerns which students conveyed to the CETL Associate was the issue of plagiarism. Students would feel inhibited to post their work online where it would be available for the rest of the student group to see. As a result of this issue arising and the low level of engagement on BA ITT students' side, the CETL Associate is now considering separating the reflective journal from students' work:

'Last year it wasn't just a case of using it as a reflective journal – they were asked to put up their work on there as well. So it got very complicated in terms of what they put up there and finding things. So this year we've refined it and we have changed things so it's just a reflective journal and their work is held somewhere else. And that has proved much more successful.'

(CETL Associate, Developing the VLE)

The CETL Associate's plan for the future development of the programme involves trialling an e-portfolio tool, possibly PebblePAD as a way of tackling the issues which have arisen. This is in line with the suggestion made in the previous section (14.2.2) that promoting reflective activity needs to be supported by the appropriate pedagogy. Unlike Blackboard, PebblePAD is a VLE tool specifically designed to support the pedagogy behind PPDP, and is therefore much more likely to support reflective thought in learners.

15.2.4 Future research

This CETL Project contributes particularly with its experimentation with new technologies, and simultaneously with recognising that technology itself cannot constitute pedagogy. This is why the project has engaged in critically evaluating students' engagement with the technology, constantly reassessing its value and identifying new approaches to using it.

As part of this experimentation and development work, the CETL Associate is currently introducing the PebblePAD e-portfolio tool to students.

In addition, a new Blackboard site for qualified primary teachers in schools is being established. The site is aimed at supporting the induction of primary school teachers in their first year of teaching. This is a good example of activity within the University which supports the maintenance of contact with alumni.

Finally, the approaches used and lessons learned from the research carried out with BA ITT students, form the basis for similar work within the PPDP area. The CETL Associate has set up similar Blackboard sites for PPDP,

which staff involved in education could make available for their students. These sites have now been in use for a year and provide a basis for further research in the use of VLEs.

16 The Criminology Student Experience

16.1 Project description

The CETL project on the Criminology Student Experience was carried out in academic year 2006/07. The project was a development on work undertaken within the Criminology department over the last three years. This work was carried out with the support of the LTI and involved interviews with students, carried out by a researcher, aiming to gain insights into the learning experience in criminology from the students' point of view.

With the involvement of CETL, the project adopted a more holistic approach to evaluating the student experience. The objective was to involve students in actively constructing an understanding of their own experience of studying criminology. This was achieved by using criminology students as researchers. The use of peer researchers ensured the active participation of learners in constructing an understanding of the learning experience of Criminology. The knowledge gathered in this way would serve first of all to provoke an active dialogue with and engagement on the side of criminology staff, as well as would aim to ultimately achieve realistic and well informed change in the Criminology curriculum.

16.2 Key findings

16.2.1 The value of peer research

The idea of peer research emerged from a European project entitled 'Women into work', involving women prisoners interviewing women prisoners after their release in order to find out about issues such as transition into work. This idea of peer research was combined with CETL's ethos of seeing students as co-producers of knowledge. The CETL project merged these two ideas to produce a solution to involving students actively in designing the Criminology curriculum.

A further point of reference was a project carried out by Warwick University, through the Higher Education Academy Specialist Centre CSAP - Centre for Sociology Anthropology and Politics - http://www.c-sap.bham.ac.uk. This project was similar in its aim of involving students actively in shaping the curriculum.

The following is a comment by the CETL Associate identifying the unique value of peer research:

'The notion that we wouldn't just be collecting data, but we are getting more into the idea of students being participants in the curriculum; so if they are saying "my experience of the curriculum", not just the content but the way staff engage them in learning activities, assessment and the rest, if we have

this data from them which is collected hopefully more authentically, because it has students interviewing students. The idea was that they would disclose more, that the student peer researchers would give us a more authentic insight into what was happening than if you had students off a course who wouldn't totally understand the local context, like educational researchers - they are skilled at educational research but they are not necessarily going to understand that student voice in the same way another student would.'

(CETL Associate, The Criminology Student Experience)

It is evident that the value of peer research is seen as allowing for the authentic student voice to predominate, and hopefully influence teaching and learning practices towards a more learner-centred approach to pedagogy. As is already becoming evident from this statement, this is a task which would include an active dialogue involving staff in the discourse on teaching and learning in criminology, which takes this student voice into consideration. As this report will make clear, staff engagement has been one of the main challenges which the project has had to deal with.

16.2.2 Student engagement

One of the key benefits of involving students as active participants in the research was to allow them to develop confidence in research. The project provided students with the opportunity to develop interviewing skills, organisational and planning skills as well as communication skills - all of which are essential in carrying out research involving human participants. Within this process, learners were encouraged to seek support from external resources such as Student and Academic Services.

The CETL associate reported on a number of challenges which were encountered in involving students in peer research. Such challenges included lack of interest on the side of students to participate as interviewees; the external pressures on interviewer students to balance their commitment to the project against deadlines with assessment and exams. It is evident however, that despite the steep learning curve which these challenges posed to students, those who chose to actively participate would have taken away a valuable set of skills, which would undoubtedly prove useful to them both professionally, as work experience and as skills for learning. The following comment by the CETL Associate illustrates this point:

'...the student peer researchers found it very difficult to get anybody to be interviewed. As part of the interview what we did was we set all the ethical tests so we said something like "If all your mates asked you to be interviewed what would you say to them?" and the idea was to get them to think about boundaries and roles and how much is your friend on the course going to tell you the truth. And how easy it would be to degenerate into gossip about lecturers etc. So we put them off doing that, but in reality there was nobody except from their friends who would speak to them... But this year they have struggled to get anybody to speak to them. So I got so desperate I said just speak to anyone, as in, your mates. But we had a second year and a few third years and the second year, I think partly because of confidence issues, only got one person to interview.'

(CETL Associate, Criminology)

As this comment identifies, students were thoroughly briefed about the ethics of this research, which is another valuable skill they had an opportunity to put into practice. While the CETL Associate does not identify this himself, the difficulties which students met with in the course of being participant researchers are common to most research practice involving human participants. Therefore, while the experience might not have been 100% successful, it did succeed in placing learners in a realistic situation typical of the challenges characteristic of all educational research.

The CETL Associate rightly identifies that the most significant benefit for these students participating in the research is seeing their experiences and opinions change teaching and learning practices, and impact on the curriculum in a definitive way.

'Now in terms of the criminology students having the research done to them - my argument there is the more we can find out about the authentic voice of the student, the more that can inform curriculum planning, and therefore the more it informs curriculum planning, the more it helps the students.'

(CETL Associate, Criminology)

The researcher's recommendation in this respect is to ensure that students are continuously made aware of the impact which their opinions are having. While this impact may not be felt immediately, steps could be taken to inform students continuously of the progress which is being made, whether through engaging staff in discussing students' responses, through dissemination of the research, or through actual or envisaged curriculum changes.

16.2.3 Staff engagement

Alongside engaging students in the development of the curriculum, a key outcome of the project was to change attitudes within the staff group in criminology regarding approaches to teaching and learning. The CETL Associate identified a definite need for staff to engage with teaching and learning as pedagogy, rather than as the straightforward delivery of content. Part of this approach, as stated in the bid made to CETL for this project, was to find ways for Criminology staff to learn more about their students. With criminology being a fairly new subject, a range of issues needed to be addressed. The following comment by the CETL associate illustrates this point:

'...the concerns of lecturers at that time were the usual: student non-attendance, non performance, not doing what the lecturer said and the student not doing what the staff expected ... that was a function of the newness of the staff, me being new, them not having teaching certificates, not being into teaching and learning, so that was the way forward. To take them where I felt they'd go, which is - with our own students, they are not interested in anybody else but it sort of evolved from that through to new staff who have come along now have the same old issues about students not turning up and students not engaging in the way the lecturers experience. So now we have this data resource. And the way my colleague presented it because she has been the course leader is - we've got this data, what do you, the staff group want to know.'

The Criminology peer research project therefore had a distinct function - to

inform staff of the learning needs of the student population. At the same time however, the key challenge with this approach was to engage staff to actively think about the learning needs of their students. This is why the research took the form of asking staff to identify issues they were interested in. Once these had been identified, the data gathered on student learning was interrogated, in view of finding some answers to these questions. The following comment describes this approach:

'We did an internal subject group type of thing about this - we did an event: "Why do you think students don't turn up?" Staff write down their reasons - here is what the research says. So we get into a dialogue about that. So we are trying to chip away at the curriculum. Not in terms of formal written descriptors but in terms of the culture of the work group. So yes I do think it will have an impact. But interestingly the staff said - write up a report and tell us what you think should happen. But they would ignore that, the same way they ignore teaching and learning and the same way they ignore educational discipline, research on teaching and learning - they ignore all of that. So we are going to write another report and they are going to ignore that one as well. So what my colleague said, which I think was very clever was "What questions and what issues do you have about student learning?" and we will interrogate the data. So we have collected it in quite an open way - what's good what could be better type of way, we will interrogate the data. So it was about how do we get staff to engage with the data.'

(CETL Associate, Criminology)

It is clear that a key issue is engaging staff with the findings related to the student experience. Staff engagement is an issue which the majority of CETL projects have needed to address, in order to be in a position to implement their findings, which most commonly affect curriculum change and innovation. The Criminology Experience project has applied an innovative and original approach to engaging staff in a meaningful dialogue about developing a culture of teaching and learning. Projects within the CETL for which it is particularly important to engage staff in the findings of research in order to implement curriculum change would particularly benefit from considering this approach. Such projects are:

2 Promoting Learner Autonomy in Engineering (section 6)
3 Working with Students to Develop e-Portfolio as an Integrated Learning Environment (section 8)
4 Using iPods with Sociology Students / Professional Learning Week (section 9)
5 Problem Based Learning in Engineering, Design and Technology (section 12)
6 The Teaching, Learning and Application of Undergraduate Research Skills within the Criminological Discipline (section 13)
7 Assessment for Learning (section 14)
8 Developing the Virtual Learning Environment (section 15)

16.2.4 Dissemination and future development

The data so far gathered from the research has been disseminated both within the University and externally:

1. Dissemination through the LTI (Learning and Teaching Institute);
2. A poster, workshop and a report were delivered at a dissemination event organised by the Faculty of Development and Society: Lynch, R., McCoy, S., Patton, D. & Senior, P. 2006, Shaping a Changing Curriculum through the Student Experience;
3. Conference presentation: Lynch, R., McCoy, S., Patton, D. & Senior, P. 2007, "Shaping a Changing Curriculum through the Student Experience", The International Society for the Scholarship for the Teaching and Learning (ISSOTL) Sydney.

The possibilities for developing this work further, include approaching the research as part of institutional change. Such work can be taken forward with the involvement on the LTI and could form part of the work which the institution is already undertaking on a large scale, concerning the revalidation of courses. The knowledge and implementation of a student-centred curriculum which this research has been developing would be a valuable contribution to this revalidation process.

Internally, within the Criminology subject group, the findings of research will continue to be used as a way of approaching curriculum change, generating a dialogue between staff and students, making the student voice part of curriculum design and development.

17 Conclusions

This section of the report synthesises those approaches to learner autonomy, which have proved to be successful in practice.

Experiential learning
Implementing real life work experience into the programme of study is an approach which is highly valued and engaging for students. A number of projects have implemented this approach with positive outcomes: The European Challenge (section 4); Psychology (section 10.2.2); using iPods with Sociology Students (section 9), Law in Practice (section 2). The advantage of experiential learning is that students have the opportunity to learn in professional settings - this is a liberating and empowering experience as well as having the advantage of developing employability skills.

Empowerment through responsibility
Students are empowered by responsibility. It is when they take an active part in decision making that they are able to experience ownership of the learning problem - this promotes the feeling that the work they engage in is personally relevant to them and they are more likely to engage with the work on a deeper level. The strategy for such empowerment is to make the learning problem their responsibility and in addition make it explicit to learners that they are in charge. The Just Ask mentoring scheme is a good example of how this can be achieved (section 3).

Another approach which results in learner empowerment is making explicit the course's pedagogy to learners. Making students part of the decisions which shape the design and delivery of the course, results in empowerment, since

learners are allowed to think and participate in the learning setting as co-producers of knowledge, where learning is not done to them, but is a process which they are actively engaged in shaping the direction and content of. A good example of how this was achieved is the ELMAC MSc programme (section 11.4).

Student-led inquiry
Within this approach, students are encouraged to seek their own resources for learning. In this way the approach moves away from the given and predefined in knowledge, characteristic of transmission type learning approaches, and implements a more constructivist approach of encouraging the learner to actively explore and construct their learning. A good example of putting this strategy on practice is the Historians and Research project (section 5.2.1).

Intrinsic motivation
Approaches to promoting learner autonomy often involve creativity and therefore risk taking. Since such risk taking may imply temporary setbacks, or may mean taking students out of their comfort zone, students need to be prepared for the inevitable challenges along the way. Making students aware of these challenges is one way to prepare them. In addition a useful approach is to make them aware that there are skills to be gained from the experience - very often related to improving the employability of learners. Being aware of the skills which they will be gaining is enough to intrinsically motivate learners, so that rather than being driven by external factors such as grades, they are driven by the idea of becoming an accomplished learner and professional. This strategy of making the learner aware and preparing tem for challenges is particularly relevant for projects which have attempted non-assessed learning and have met with non participation from students.

Reflection in action
Adopted by the European Challenge project, this approach allows students to create a video diary, in which they have an opportunity to talk about their challenges, successes, uncertainties, ideas, as and when they arise. This approach supports reflection in learning since any thoughts students have in the process of engaging with the practice are captured, something which could elude them in a formally planned piece of writing, such as a self evaluation report. This is an approach worth considering for those engaged in developing strategies for PDP.

Interactive media and stimulus
One of the key advantages of interactive media to learning is its capacity to stimulate and motivate the learner. This makes it particularly useful where open skills need to be introduced, such as communication and collaboration skills. In subject areas where open skills are not seen as part of the traditional curriculum but are just as important, interactive media could be a tool for introducing them. The CETL Promoting Learner Autonomy in Engineering is a good example of how this can be achieved (section 6.2).

Virtual ethnography
Virtual ethnography is a relatively new method of researching the online learning experiences of students (Crichton and Kinash, 2003). It involves

observing students' behaviour and conversations online as a way of providing an interpretative analysis of phenomena which govern their learning. This approach was successfully implemented by the CETL MA Professional Communication - Promoting an autonomous stance to researching workplace issues (section 7.2.1). This approach needs to be considered by all CETL Associates whose projects depend on learners engaging with virtual learning environments. It is particularly relevant to promoting learner autonomy, since it allows for a qualitative approach to analysis, such as the study of the affective issue of autonomy needs.

Ubiquitous and informal learning
The project on using iPods with Sociology students experimented successfully with using handheld technologies (see section 9). Being able to take technology away promotes learning in everyday, informal settings, in a way which is much more flexible, allowing for learners to reflect on the leaning material in settings where they feel relaxed, are able to exercise spontaneous thought and draw inspiration.

The ability to promote learning in informal settings has some pronounced advantages to formal learning and is a trademark of interactive media for learning, as identified in research literature (Dondi, 2004).

Factors such as inspiration come with the flexibility of use of the learning material, where it is of key importance to the content which is being taught and learned. Such inspiration is particularly relevant to sociology students, who need to provide their own interpretation on the subject studied and within this exercise freedom of expression and independent thought. The informal learning paradigm is therefore all the more relevant.

Students' familiarity with new technology may vary, which poses one of the expected challenges in approaches involving new media. Provision and support for all students needs to be envisaged in such cases. On the other hand, once they are familiar with the technology students would request a higher level of interactivity and control, which would allow them to have an input into the learning content, be able to change, adapt and customise it (section 9.1.1).

Tutor intervention and timing
The nature and degree of tutor intervention need to be carefully considered in order to preserve learner autonomy. Knowing when to participate and when to stand back from the learning process is something every tutor needs to consider and plan as part of the teaching and learning experience. This issue becomes particularly poignant when the learning activity detracts from the standard lecture or seminar format and adopts the form of simulation, where learners are expected to engage in decision making and autonomous learning however may not be fully prepared for the challenge (section 9.2.1).

Risk taking
The risk taking involved in participating in a learning situation which detracts from the routine format which learners may be used to, could cause a mixture of responses from learners. It needs to be taken into consideration therefore, that a new format to the delivery and presentation of a module of study will

always be accompanied by challenges, most commonly concerning student participation, as well as students questioning the value of the exercise. While these challenges are to be anticipated, it would be a mistake to interpret these as failure for the new format of delivery. Rather, in anticipating these challenges, tutors can respond to them by making the value of the new format explicit to learners. A good example of such challenges can be found in the projects: Professional Learning week (section 9.2); Developing the Virtual Learning Environment (section 15.2); MA Professional Communication (section 7.2.3); Just Ask (section 3.2.1).

Developing critical thinking through collaboration

A learner who is able to make critical judgements on an article/academic piece of writing, is exercising their capacity for independent thought, and this in itself is a manifestation of autonomy. In this way the development of critical thinking skills is a way of promoting learner autonomy. A good example of a project working towards the development of such critical thinking skills is Promoting Learner Autonomy in Psychology (section 10.2.1). The key strategy used in the project for supporting learners in engaging in critical thinking was collaborative work. By using wikkis, collaboratively constructed documents online, the task is dependent on peer support and feedback. In these terms learners have the possibility to gain confidence in their thinking through sharing their opinions with each other.

Student engagement and employability skills

One of the key challenges to using novel approaches to supporting learner autonomy is students' engagement with these approaches. Through the findings of research, it has become apparent that one of the most successful ways of engaging learners with autonomous approaches is to relate the content learned to the development of employability skills, or situated, practical skills, which the learner can apply within a real life working situation. While every module on every course could argue that it contributes to the development of such skills, in many cases it is a matter of making this value and relevance explicit to learners. Some good examples of the challenges which learner engagement has posed are: Promoting Learner Autonomy in Psychology (section 10.2.1); Professional Learning Week (section 9.2); MA Professional Communication (section 7). In each of these cases making explicit to learners that employability skills can be acquired could have been the answer.

Community of learning

One of the successful approaches to learner engagement has been seeing the teachers and learners involved as part of a community of learning. This philosophy is made explicit to students, in this way making them part of the process of decision making regarding how such a community needs to be shaped. Making learners part of decision making is a strategy which empowers the learner and promotes autonomy. The community of learning is characterised as being supportive, interdependent in collaborating on tasks and creating mutual interdependence, which supports collaborative working skills. Within the community the tutor is described as a facilitator of learning, which is a constructivist idea. The international ELMAC programme is a good example of how such a community has been put in practice (11.3).

Problem Based Learning
Problem based learning (PBL) was identified as an approach which supports learner autonomy by moving away from a transmission based model of delivering learning. The principles of PBL are particularly applicable to subject areas such as Engineering, where there is a heavy emphasis on practical problem solving. The project Problem-based Learning in Engineering (section 12) is a good example of PBL in practice within an academic curriculum. Once again, the skills and approaches which students learn to work with as part of a PBL approach are valuable in preparing them for the ways of working commonly adopted in industry. In these terms, the PBL approach has the potential to improve employability in students.

Changing assessment practices
Assessment is one of the areas of development which needs particular consideration within the discourse on learner autonomy. Considering the nature of the change which approaches to learner autonomy imply, including the encouragement of risk taking, unconventional formats to learning delivery and the use of new technologies, applying the conventional approaches to assessment could mean penalising the teaching and learning community who work towards curriculum innovation, and learner- approaches to pedagogy. Assessment for Learning was a developmental pr centred object looking at ways of approaching assessment in ways which support learner autonomy (section 14). The unique characteristic of this approach was that it treated assessment not as a measure of student progress but rather as a vehicle for learning. This was achieved by involving practices such as peer evaluation and self-evaluation in the practice of assessment. In its concern with students' progression to acquiring a set of skills which allow them to engage in assessment for learning, this project's objectives coincide with those of learner autonomy. Through the use of assessment for learning the student is empowered to become part of the assessment process and in this way take responsibility for their learning.

The relationship between Virtual Learning Environments and Pedagogy
Several of the CPLA projects have used Virtual Learning Environments (VLE) as the tool for promoting learner autonomy (MA Professional Communication, section 7; working with students to develop e-Portfolio, section 8; ELMAC, section 11; Developing the VLE, section 15). One of the key issues which have arisen across these projects has been low levels of learner engagement with the VLE where this has required collaborative or reflective input from learners. Having analysed CETL associate's accounts of the experience, it is evident that the major difficulty in this respect is not the addition of a digital tool or students' computer literacy. Rather, it is the fact that such a digital element cannot substitute the need for the development of a culture of reflective learning. In other words - a VLE does not constitute pedagogy in itself, but is merely the tool for implementing a pedagogical approach. It can only be successful in its use when learners are prepared to think about their work reflectively and when they are prepared for the challenges of collaborative work. Such a culture of reflective learning can only be described as a community of practice, and needs to be supported and developed in learners prior to or in addition to the use of a VLE.

Staff engagement

One of the key and universal issues with all CPLA projects has been the embedding of new approaches to teaching and learning. Such embedding cannot be achieved without the support and contribution of teaching staff on the course or module. A consensus is necessary regarding the approach, which is why a number of the CPLA projects have worked towards achieving such consensus. Research projects have worked towards providing evidence of the value of the approach to teaching and learning in the discipline. Development projects have worked towards providing the necessary support materials to staff in making the transition to new, autonomous approaches to pedagogy. In these terms, staff engagement with the findings of the project has in the majority of cases been one of the key objectives of the project.

One innovative approach to staff engagement was applied by the Criminology Student Experience project (section 16.2.3). The evidence gathered through this research project on Criminology students' experiences in the subject was used to engage teaching staff in an active dialogue regarding the development of a student-centred curriculum. Rather than presenting teaching staff with the findings of the student experience research carried out, the CETL Associate invited teaching staff to initiate the dialogue by posing questions and defining what they wanted to know about the learner experience. The research data was then interrogated to answer these questions.

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