Student feedback is essential to enable lecturers to understand whether attempts to improve learning and education experience lead to improvement (George and Cowan, 1999; Gibbs, 1993). Current UK practice relies largely on end of module questionnaires to feedback levels of student satisfaction (Cowan, 2002), however there are inherent weaknesses in this approach; it seldom leads to change for that particular cohort; it relies on uncorroborated opinion, and finally, it may derive from superficial feedback from a minority of students with the remainder suffering from questionnaire fatigue.

This research project involved a cohort of final year building surveying students at Sheffield Hallam University, in England, who were undertaking a dissertation in two modules. During 2002/3 the use of Blackboard software had also been adopted by the module leader as an educational tool to support student learning in the module. The lecturer wanted to identify how students used Blackboard and what they thought about the most appropriate use of the medium. The research methodology sought to redress some of the issues identified above with student feedback, regarding timing of feedback, implementation of change during the teaching period and the lack of depth in the data. Using principles adopted by Angelo and Cross (1993), this research formatively evaluated student perceptions and levels of satisfaction with the dissertation module, the teaching materials, the workshops, the supervisory arrangements and relationships. This paper presents the findings of the research and illustrates the changes that were made during the year and the student's views of these changes. The paper demonstrates how linking teaching with research has been delivered at Sheffield Hallam.

Introduction

Student feedback enables lecturers to understand whether attempts to improve learning and educational experience lead to improvement (Gibbs, 1993). Current UK practice uses end of module questionnaires to feedback satisfaction (Cowan, 2002).
Information technology (IT) (Barker & Yeates, 1985) has become a part of the student learning experience and is frequently used in Surveying education at degree level (Cuthell, 2002). Blackboard was introduced into the Building Surveying degree at Sheffield Hallam University (SHU) on the dissertation module during 2002/3. Questions arose, such as, what is the best use of Blackboard to meet these student’s needs? What materials are best suited to the dissertation module? The researcher extended the enquiry to ascertain student views about the dissertation module and how learning might be improved.

This paper sets out the background and context for the research. The research aims are stated before the author describes the research methodology adopted. Using principles identified by Angelo and Cross (1993), this research used a methodology to formatively evaluate student perceptions and levels of satisfaction with the dissertation module. Using a cohort of Building Surveying students at SHU, views on course materials, the use of Blackboard software, the workshops and the relationships with supervisors were analysed. The research findings are discussed before the paper sets out the conclusions and the lessons that can be learned.

**Student feedback, learning and delivering the link between teaching and research.**

As well as the weaknesses identified by Cowan (2002) above the problems associated with existing end of module questionnaire feedback, Gibbs (1982) noted that questionnaire feedback can provide ‘a foggy and uninformative view of what’s going on’ and the data may not be relevant to the module, a particular weakness (Heywood, 2000). McDowell (1991:5) observed that student feedback may be seen as a paper exercise without direct student benefit and a means of complying with quality procedures.

The benefits of feedback studies are well documented. There are issues to consider to generate appropriate information (Gibbs, 1982). It is imperative to obtain the feedback that enables students to voice their opinions, in a considered way so that extreme views do not dominate (Hounsell et al, 1997). Students need to be encouraged to provide reflective opinions in an atmosphere that avoids a blame culture emerging, so that the feedback is constructive as well as negative. This research adopted the best practice guidelines outlined by Hounsell et al (1997).
An important aspect of this project was that the student feedback was to be centred on their learning (McDowell, 1991) and how it might be improved. Student feedback enables a ‘whole new perspective’ to be taken on the process which becomes positive and enabling (Jenkins et al, 2003). An advantage is that the student experience can be broadened with an emphasis on understanding how the students perceive and value different aspects of the course, in this case the dissertation module.

A considerable body of research in higher education posits how useful student feedback can be (Marton, Hounsell, and Entwhistle, 1984, McDowell, 1991, Gibbs, 1982). There is much to be learned from students about how they approach tasks, their intentions, problems, motivations, and understandings.

Clearly not all students’ issues can be accommodated and this may be due to outside factors, such as professional body requirement, physical resources of the University, human resources of the faculty and so on. However the important thing is that the tutors are aware of student perceptions and needs as well as any barriers to learning. Students’ views need to be considered before appropriate action is taken (Marton et al cited in McDowell, 1991).

There is evidence from previous studies that student feedback and linking teaching with research leads to improved performance (Jenkins et al, 2003; McDowell, 1991), though not always to that particular cohort. This study tries to address that issue by undertaking the feedback at the mid-point and implementing some of the findings during the semester.

Jenkins et al (2003:41) established that exploring student conceptions of learning, responding to students needs, discovering learner goals, making learning relevant, finding out what learners want to do, recognising motivational diversity are all important aspects of motivation in practice and create linkages with research. Jenkins (2003. pp41-48) identified other aspects but the above were considered the most relevant to this research. The potential benefits for the tutor are increased motivation and enthusiasm, deepened knowledge and broadened skills, increased confidence and credibility and provision of practical examples (Jenkins et al, 2003:36).

**IT and learning.**
What use are computers, and what benefits do learners derive from their usage? According to Cuthell (2002) and others (Barker and Yeates, 1985) computers can augment learning, are ‘powerful tools’ and can make ‘good teachers’, and the educational case for usage appears strong.

A perceived benefit is that the quality of learning is enhanced and the efficiency of instruction is improved (Barker & Yeates, 1985:24). Some benefits are; augmenting conventional teaching methods, accelerating the learning process, experimenting with course development, providing remedial instruction, providing individualised instruction, providing enrichment materials, achieving consistently higher teaching standards, and providing on demand instruction (Barker and Yeates, 1985. Joliffe, 2001. Cuthell, 2002). Blackboard can be used in all of these ways. On the surveying course at SHU it has been used in some but not all of the ways identified above.

Another factor is that students enter tertiary education with educational experience of computer assisted learning (CAL) from primary and secondary schools. Students are used to using IT in learning and have levels of expectation about CAL and the quality of materials (Barker and Yeates, 1985:324).

Educationally the real potential of the web is as a tool that can be used in an infinite number of ways to deliver learning events, and to provide an archive for the student who is unable to attend (Joliffe et al, 2001). Blackboard was used on the dissertation module partly for this purpose.

Another perceived advantage is that students can individualise learning to some degree leading to improved student experience (Burke and Rumberger, 1987). IT can lead to the transformation of teacher from subject specialist to a broader director of studies role as students take more responsibility for their learning. In dissertation, the module aims for the supervisor has the role of director of studies guiding the student through the process of a student lead research project.

According to Joliffe et al (2001:2) there are also benefits in using other IT based educational tools such as trouble shooting guides, discussion facilities such as chat rooms, as well as setting up a variety of learner administrative information. Blackboard can host chat rooms, provide announcements and notices and to set out trouble shooting materials for learners. However there has to be some face to face
interaction between the student and lecturer for the maximum advantage to be derived from IT based learning materials (Joliffe et al, 2001:10).

What are the disadvantages of IT based learning? There are concerns about over reliance on technology and dependency on IT for education (Burke and Rumberger, 1987). This view is substantiated in the imperative to use the IT ‘appropriately’, to consider the needs of the students and for there to be a balance between IT based materials and traditional teaching methods (Barker and Yeates, 1985:27).

There can be misconceptions; it can be time consuming to produce the IT learning materials and the learning materials are not easier or quicker to develop (Joliffe et al, 2001:2). Joliffe et al (2001:10) concluded that with all the time and effort involved in development of e learning materials, it may not prove to be an advantage.

The teaching materials designer needs IT and subject knowledge to design an effective learning environment for students (Joliffe et al, 2001:12). Other disadvantages are that the teaching materials may be static and will need regularly updating. Although this is not the case with Blackboard as tutors use it to make lectures, notes, tutorials, and information available to students via an electronic notice-board.

Other potential problems may occur with students having equipment with limited capacity to download graphic intensive materials. Joliffe et al (2001) noted that some learning materials require users to have state of the art PCs and browsers. Finally to make the most effective learning IT based materials and the most effective use of IT, teachers and lecturers need to be trained, as do the students (Joliffe et al, 2001:12). There is a time and a resource implication.

**Context for the research**

The Building Surveying students were final year and taking the dissertation modules which were delivered in two semester long modules. Dissertation A covers the planning and literature review stage of their research in semester 1. Students submit a 3000 word referenced report in week 9, outlining a rationale for the research, a research question, a mini literature review and an outline research methodology. During weeks 11/12 a 15 minute viva voce takes place with the supervisor, second marker and the student to assess their understanding of the subject area and methodology.
In semester two, work is progressed with data collection materials developed and data collected. The data is analysed and the 12,000 word thesis is written up and submitted at the end of the semester.

Throughout the students learning is supported in four ways. There are workshops coinciding with key stages in the research process. Secondly, there is a course reader comprising the workshop notes and examples of previous submissions of varying standards. Thirdly there is a recommended text which is referred to frequently with guided reading is suggested at each key stage. This text is specifically for students on built environment programmes and has industry related examples.

The fourth student support mechanism is the supervisor. The students are allocated a supervisor in week one, based on their topic area, and asked to arrange a meeting as soon as possible to get the project started. Tutors have meeting record forms to complete at each meeting to summarise the discussion and to set out what the student is to do for the next meeting.

During the 2002/3 session materials were loaded onto Blackboard. The tutor and students had not used Blackboard previously.

Research Aims
The three aims were;

1. to gain a deeper understanding of the students perceptions and views regarding the supervisor system, the workshops, the course reader and the recommended text.
2. to gain a deeper understanding of the ways in which Building Surveying students used Blackboard in the dissertation module
3. to identify any changes that could improve the student experience in this module.

Research methodology
This is qualitative research, sharing the three assumptions of qualitative research posited by Patton, induction, holism and naturalism (cited in Naoum, 1998). The research is inductive; the researcher had some ideas about how students felt about
certain aspects of the dissertation module, however as the research progressed these ideas developed. The holistic element was derived from examining the whole picture regarding this Building Surveying student cohort and their views of the dissertation module. The naturalistic aspect came from investigating the issues in their naturally occurring environment, in this case the students within the University.

To generate externally valid research, the researcher had to consider the research population (Naoum, 1998). Here, the size of the building surveying final year at SHU undertaking the dissertation module was 37. A two part methodology was adopted. All students were asked to complete questionnaires to evaluate what they liked and disliked about the dissertation module, thus a census was undertaken of the whole population. They were asked whether they were prepared to participate in further research and some of these students were selected for the focus groups.

Following best practice identified by Naoum (1998) and others (Robson, 1993, De Vaus, 1996) questionnaires were developed. Simple questions were posed to achieve the highest potential response rate and answers that were easy to analyse. The questionnaires were piloted and examined for bias or leading questions by an independent researcher.

There were two questionnaires one in the first term and the second, at the end of the module. The first questionnaire was designed to ascertain the student perceptions about dissertation module prior to commencement. It posed questions relating to previous use of blackboard, questions about use of IT in learning, their views about the dissertation module, levels of confidence, experience of supervision and the recommended text. The questionnaire also asked the respondents what they found the hardest task during the initial stages of the dissertation process. Furthermore the questionnaire asked respondents how hard they found dissertation compared to their other modules and about their use of Blackboard. This questionnaire provided the module leader with an overview of the groups’ views albeit, at a superficial level, and was supplemented by the focus groups.

The second questionnaire was backward looking. This questionnaire asked students what skills they thought important in their professional career and what skills they had developed by completing the dissertation. The questionnaire asked student to rank the modules they studied in order of difficulty to establish an overview of which
modules they found most challenging. Students were asked about the changes that were made and to state how satisfied they were with the changes.

Three focus groups were conducted over the 2002/3 academic session. Each focus group involved a different set of students and examined slightly different issues, enabling a broader range of views to be gathered at a deeper richer level than the data collected in the questionnaires (Robson, 1993). It avoided the potential for focus group fatigue by not using a small group of students.

There were issues about how open the students might be with the tutor (Hounsell et al., 1997). It was explained that the tutor was looking for feedback to find out what the students thought and how the module could be improved. If the students weren’t open about their views then the discussion would be a wasted opportunity and a waste of time. Students were assured about confidentiality. The tutor shared concerns about certain things, and asked for the students views. As the module leader, the tutor was interested and committed to improvements in the student’s experience of the module.

Focus group 1 focussed on expectations about dissertation, the support needed, concerns about doing the dissertation, and perceptions of Blackboard. The focus group also covered views on workshops, the course reader, the recommended text and the supervisor system. The focus group took place in November 2002 towards the end of the first term, so that the students had some experience on which to base their views. Some of the suggestions for improvement were implemented in the second term.

Focus group 2 took place in January 2003 covering the five areas; course reader, text book, supervisor relationships, workshops and Blackboard. However there was more emphasis on the course reader and Blackboard, the group were asked about what they liked and disliked about each aspect and they were asked to suggest any improvements. Some suggestions were implemented in the second and third term.

Focus group 3 took place in May 2003 and was backward looking as the dissertation module had been completed. Again the five key areas formed the basis of the discussion, with students reviewing what they liked and disliked and suggesting improvements. This final focus group placed more emphasis on the supervisor role and their views on the way this worked.
The tutor became interested in aspects not initially considered and the second questionnaire enabled her to ascertain information in those areas. The tutor started to consider whether students appreciated the skills that they were developing in the dissertation module. She wanted to find out what skills they thought were the skills they would need for their professional practice, and whether they felt these skills were developed in the dissertation. This was included in questionnaire 2 and the responses will be used with the forthcoming cohort to identify and emphasise the skills they will develop in the module. This awareness should increase motivation and their perceptions of the value of doing a dissertation, which may impact on standards.

Research Findings

Questionnaire 1 respondents comprised 6.3% female and 81.3% male responses, with 12.5% failing to state gender. The response is representative of the male/female composition of the cohort. The age profile comprises 6.3% over 26 years, 37.5% under 21 years and the largest group 56.3% between 22 and 25 years and is representative of the age profile. Similar responses were provided for questionnaire 2 and both are considered a representative sample of the population.

The three focus groups comprised nineteen students, just under 50% of the total number, from a range of ability levels, age and gender.

This section of the paper examines the questionnaire results, followed by analysis of the focus group discussions where appropriate, under three headings; student perceptions; levels of satisfaction; and evaluation of student suggested changes implemented during the research.

Student perceptions

The questionnaire results show that 75% found the workshops useful to the dissertation process, 93.8% found the recommended text book useful, 81.3% found the supervisor useful, 87.5% found the reader useful. In rank order the results show the text book was highest, followed by the reader, then the supervisor, and then the workshops, though all received high ranking. 46.6% of students were satisfied with the materials on Blackboard which was interesting given that, apart from notices, the materials replicated the course reader and that hits for this site very extremely low.
The questionnaire did not reveal in what ways the workshops or supervisors had not met students’ needs or expectations, and this was explored in the focus group.

These rankings were not replicated in the focus groups where the supervisor was the most important learning support. Consistently Blackboard was felt by focus groups 1 and 2 to be the least important; as one student said Blackboard is ‘added value to all the other things provided’. The supervisor is the most important learning support for these students. The table below shows there is little agreement amongst the three sources about the ranking order except for the most and least important learning support.

Table 1 – The ranking order of the usefulness of learning support in dissertation studies

<table>
<thead>
<tr>
<th>Questionnaire ranking</th>
<th>Focus group 1</th>
<th>Focus group 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Text book</td>
<td>Supervisor</td>
<td>Supervisor</td>
</tr>
<tr>
<td>2. course reader</td>
<td>Course reader</td>
<td>Text book</td>
</tr>
<tr>
<td>3. Supervisor</td>
<td>Workshops</td>
<td>Course reader</td>
</tr>
<tr>
<td>4. Workshops</td>
<td>Text book</td>
<td>Workshops</td>
</tr>
<tr>
<td>5. Blackboard</td>
<td>Blackboard</td>
<td>Blackboard</td>
</tr>
</tbody>
</table>

The focus group discussions revealed a consensus that the supervisor was very important, able to encourage and enthuse students. Students were particularly encouraged when supervisors were genuinely interested in their subjects. Availability of supervisors either via email, timed appointments or telephone was very useful and valued highly. Students disliked vague comments and lack of direction from supervisors; some reported being confused after sessions with some supervisors. Further staff training and development may be required in some areas. The meeting record pads were valued as students had a record of the meeting and knew what to do next. Overall high levels of satisfaction with the supervisors and the system were recorded.

Students are not as confident as expected, with 50% reporting ‘concern’ about doing the dissertation. The tutor was unaware of this level of apprehension among the group and will develop more confidence building strategies into teaching.
The students ranked all the units studied in order of the hardest. Most students found the dissertation module to be the most difficult module they studied during semester 1, possibly because they have not undertaken any single large research study previously and also the individual nature of research. In semester 2 the students found Dissertation and Integrated Project the hardest modules, followed by the options and lastly Refurbishment & Development which is perhaps to be expected as they are engaged in empirical work generating new knowledge.

Of the activities they had to undertake during dissertation in semester 2, the rank order of difficulty was found in Table 2 as follows; (1 is the hardest)

<table>
<thead>
<tr>
<th>Table 2 Most difficult activities in Semester 2 – Dissertation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drawing conclusions from data</td>
</tr>
<tr>
<td>2. = writing up</td>
</tr>
<tr>
<td>2 = analysis of data</td>
</tr>
<tr>
<td>4. access to research population</td>
</tr>
<tr>
<td>5. data collection</td>
</tr>
</tbody>
</table>

This information shows the tutor the activities students find most difficult and she can make others aware of this information from previous students’ experiences, as well as providing additional support and guidance in this area. The results in Table 2 were not unexpected but useful nevertheless.

Questionnaire 2 asked the students to rank skills they saw as useful for their professional career and those they perceive as being developed by the dissertation, and are set out in Table 3 below as a comparison.

<table>
<thead>
<tr>
<th>Table 3 Skills development</th>
</tr>
</thead>
<tbody>
<tr>
<td>skills important for career</td>
</tr>
<tr>
<td>1. report writing</td>
</tr>
<tr>
<td>2=. ability to draw conclusions</td>
</tr>
<tr>
<td>2=. Working in a team</td>
</tr>
<tr>
<td>2=. Ability to solve problems</td>
</tr>
<tr>
<td>5= analysing information</td>
</tr>
<tr>
<td>5= literary skills</td>
</tr>
</tbody>
</table>
It is interesting to identify the skills which are developed in the dissertation and also to see how they fit with the ‘career skills’. There is some further work here to discuss these findings with future dissertation students in order that they might have a greater awareness as to how the dissertation will help them in their career.

### Levels of satisfaction

Blackboard was used as an information notice board by the tutor. Copies of assignments, module programmes were also loaded on Blackboard for students to access. The workshop notes were available. Thus the students had a variety of information available on all Blackboard and were using the software to augment learning. There had also been the provision of enrichment materials and on demand learning all cited by Barker and Yeates (1985) and Joliffe et al (2001) as benefits of CAL.

All students attending the focus groups reported using Blackboard in semester one, though one had not realised there was a site for Dissertation. The focus groups reported that they used Blackboard to check for notices and announcements, to download lectures, to obtain feedback, and to undertake tutorial exercises.

87.5% either agreed or strongly agreed that IT was a useful aid to learning, with the remaining 12.5% neither agreeing nor disagreeing. There is strong support for IT in learning among the cohort. Questionnaire 1 asked students whether they like IT support for the lectures, i.e. to reinforce knowledge acquisition, and overwhelming support of 92.7% was recorded. Less popular support was recorded for IT being best for skills development (68.8%), though this is a high figure.

Only half of the cohort wanted interactive learning materials on Blackboard, and the reasons for this are unclear. Just under a third of the students (31.3%) thought IT packages were boring, though 25% neither agreed nor disagreed, and 43.7%...
disagreed; there is nevertheless a large minority who are not engaged by CAL, perhaps this is evidence of IT fatigue amongst some learners? Universities need to consider this when designing courses, and thinking of satisfaction levels. 50% of the students agreed some IT packages are confusing, the need to design materials carefully using subject and IT specialists (Joliffe et al, 2001:12) is substantiated.

Focus group 1 noted that on Blackboard, they liked general assignment feedback that enabled them to evaluate their performance and acquire additional information, again positive aspects of CAL identified by authors previously. This practice may be extended elsewhere. The students liked to download notes without having to chase teaching staff or loan notes from other students, advantages of CAL noted above. Table 4 identifies in rank order what students liked and wanted most and least from Blackboard for Dissertation.

**Table 4 – Building surveying student likes and dislikes about Blackboard for dissertation**

<table>
<thead>
<tr>
<th>Likes</th>
<th>Dislikes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notices and announcements</td>
<td>Lack of face to face contact</td>
</tr>
<tr>
<td>Checklists</td>
<td>Chat rooms</td>
</tr>
<tr>
<td>Model answers</td>
<td>Interactive materials</td>
</tr>
<tr>
<td>Access on demand</td>
<td></td>
</tr>
</tbody>
</table>

Focus groups 1 and 2 revealed around 15% of students had no access to PCs and the availability of the web from their term-time home. Furthermore the University computers were difficult to access, students’ arrived early and reserved PCs locking the stations so others could not use them. Issues for other blackboard sites were use of graphic intensive files; some found their PCs unable to download materials, an issue raised by Joliffe et al (2001).

The ranking in Table 5 below is not surprising. Where students lack confidence, model answers provide a blueprint, though the potential for plagiarism was a concern to students. The focus groups felt that a mix of different sections from different dissertations would preclude students from plagiarising the work of others. Alternatively locking the system to prevent downloading of materials might work.
The provision of self assessment questions as a higher need contradicted earlier answers in the questionnaire and view of the focus groups. Final year students felt that they had insufficient time to go to chat rooms and this was ranked lowest. Items 5 and 6 were reasonable as students are always given hard copies of assignments and for dissertation in particular student’s reading is diverse and subject lead. These are items students feel they can learn least from.

Table 5 – Students needs of Blackboard and Blackboard and Dissertation in rank order

<table>
<thead>
<tr>
<th>Blackboard &amp; Dissertation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Model answers</td>
</tr>
<tr>
<td>2. copies of OHP’s</td>
</tr>
<tr>
<td>3. Self assessment questions</td>
</tr>
<tr>
<td>4. Case study materials</td>
</tr>
<tr>
<td>5. Provision of reading lists</td>
</tr>
<tr>
<td>6. Copies of module assignments</td>
</tr>
<tr>
<td>7. Hosting chat-rooms</td>
</tr>
</tbody>
</table>

Evaluation of student suggested changes implemented during the research

The opportunity to make changes to the module during the semester, whereby the students could see that their ideas for improvements were being adopted was a very positive experience for all. It provided the students with a direct experience and example of the link between teaching and research, and they expressed positive views as noted by Race (1993:17).

There was discussion about whether the changes were worth doing and what the students thought about them in the final focus group and also in questionnaire 2. The feedback was very positive. For example, the additional session examining two previous submissions, a good and a poor submission was well attended and the students felt they had a much better appreciation of what they needed to do afterwards.

In some respects the ‘ownership’ of the module became more shared. Overall the students in the focus groups engaged in a reasoned and intelligent debate about the issues that were discussed and were able to see different viewpoints and
perspectives other than their own. For the tutor and students in the focus groups a considerable amount of reflection took place during the course of the year which took us through the learning cycles identified by Race (1993:14). The discussions also enabled them to consider the tutors position and concerns and, on this basis, some of their initial ideas were modified or rejected as impossible to implement. For the tutor the experience ‘offered new ways of seeing’ (Race, 1993:27) enabling the tutor to understand the students perspectives.

Another positive outcome of conducting this ‘research’ with the students, whilst they were conducting their own research was that the tutor and students were engaged in the same process, experiencing Kolbs' learning cycle, albeit with different topics (Cowan, 1998, Race 1993).

This research had a beneficial effect on motivation for the students and the tutor as noted by Jenkins et al (2003). For example, over 85% of the cohort agreed that the additional sessions and workshops were useful. The Easter ‘drop in’ session attracted 10 out of the 37 students and the tutor was booked from 10am to 3.30pm. The students were aware that this particular research was intended to provide them with an improved student learning experience.

The potential benefits noted by Jenkins et al (2003:36) for the tutor of increased motivation and enthusiasm, deepened knowledge and broadened skills, increased confidence and provision of practical examples were realised during this research.

Conclusions and recommendations
The feedback was invaluable raising tutor awareness on a number of issues. For example, the levels of confidence they had in actually undertaking the dissertation. As half the group were very apprehensive about doing a dissertation, the tutor will work on confidence building strategies to try to reduce levels of concern. The skills awareness mentioned above needs to be flagged up so that those who perhaps don’t perceive much relevance in this module may become more motivated.

As stated the workshops have been increased, with more formal sessions as well as additional drop in sessions. One issue was that access to some tutors presented individual students with problems which could partially be helped by additional drop in sessions.
The feedback confirmed some things for the tutor, for example, the recommended text book is one the students find easy to read, accessible and relevant to their subject area. Even though the tutor thinks the text is good, it is essential that the students are happy with it too.

The student feedback showed that for this module, the Blackboard, is not perceived as being particularly useful. Possibly because each student is engaged in subject specific research they felt it was unnecessary to place materials on the site. This will be monitored because there will be some relevant applications, and as each cohort becomes more used to Blackboard expectations will change. The findings from this study substantiate some earlier studies and views expressed in the literature review (Barker and Yeates, 1985. Burke and Rumberger, 1987. Joliffe et al, 2001). A number of lessons can be drawn from this initial research.

Students perceive that Blackboard has lead to;
- efficient communication between lecturers and students
- quality of learning improvement because they access information on demand.
- augmentation of teaching methods
- provision of remedial instruction
- provision of enrichment materials
- access for students unable to attend lectures or tutorials

This study concludes there is no proven case for cost savings in the use of IT because students perceive the face to face contact as vital. In dissertation learning the personal supervision was the most important learning support, and Blackboard the least important. Furthermore some students PCs were not sufficient to download some materials on Blackboard which may disadvantage less wealthy students. Furthermore, the financial and resource implication is that there is an expectation of good quality IT materials, and unless quality materials are used students may become bored or confused. As Burke and Rumberger (1987) noted Blackboard does not replace other methods of teaching and learning and it not desirable to become IT dependent.

The recommendations for best practice for tutors using Blackboard are therefore;
Consider the needs of each group when deciding on materials and how they will be used
Do not overwhelm students with additional reading lists and information
Do not assume students want interactive learning materials
Consider student likes and dislikes for IT based learning materials
Do not underestimate the time required and specialist IT knowledge required to produce quality IT based learning materials and the need to update materials
Use IT as an accompaniment to traditional teaching and learning methods.

The students found the research positive and useful. All invited students attended the focus groups and the numbers of responses to the questionnaires was high. The final focus group and questionnaire 2 asked how useful they found the modifications to the module and the response was positive.

Based on this student feedback research, and not in order of importance, with regard to improving student learning the lessons for the module leader are:
1. Communicate effectively the use of Blackboard to all students
2. Tailor make dissertation learning materials to suit demand
3. Use examples of previous dissertations so students understand why some were better than others
4. Be aware of lack of student confidence for this module
5. Do not expect high usage of the blackboard site for dissertation
6. Recognise the importance of the supervisors to students
7. Arrange some general drop in sessions for students to discuss issues
8. Identify the skills students will develop as a result of doing the dissertation and show to links to their future professional practice.

References and bibliography.


George & Cowan 1999


Heywood, 2000


