These case studies illustrate the ‘inspirational learning’ project at Sheffield Hallam University (SHU), as applied to the Development Practice module on the final year of the BSc (Hons) Real Estate. The author draws upon nearly 40 years teaching experience to analyse the those factors that impact on student engagement and performance, including the relationship with students, innovation in assessment and feedback methods, and the use of information and communications technology. In particular, the following are examined: the use of a spreadsheet marking system; software for development appraisal; and, video production by final year Development Practice students.

1. Context

“The object of education is to prepare the young to educate themselves throughout their lives.”
(Robert M. Hutchins)

The case studies used in this paper represent the culmination of nearly forty years experience of attempting to become a better teacher, working within an environment that has become more challenging in some respects but more supportive and stimulating in others.

Forty years ago, within Polytechnics in the UK, tutorial sizes were about one third the size they are today, there was little or no pressure on academic staff to undertake research or publish and only about 10% of school leavers went on to higher education. In contrast, as today's undergraduates enter university with a much wider range of abilities, and are placed in larger tutorial groups, they represent a greater challenge for academic staff, who are also required to undertake a whole range of staff development activities, including research and publication.

During the same period a range of innovations have emerged, mostly associated with developments in information and communications technology (ICT), which has helped to alleviate the problems associated with larger numbers and wider abilities. Today's students have access to the Internet, for example, and lecturers can make use of virtual learning environments (VLEs), commercial software and on-line access within teaching rooms.

Although these technological improvements do not address the fundamental structural and funding issues of higher education in the UK, they can be used to help improve teaching and, in so doing, create an environment in which teachers can concentrate on building closer relationships with students, which are an essential part of motivation towards learning.

It is clear from the author's personal experience that it is never possible 'to get it right' when teaching. Rather like Sisyphus, the lecturer pushes a boulder up hill each year only having to do it again the following year, and knowing that in many respects the pushing was done rather badly. Occasionally there are some successes, with some students, and the following examples have worked well for many students. Equally, they have not worked for others. They are simply presented here to stimulate debate.
2. Learning, Teaching & Assessment Policy

The module referred to in this paper, Development Practice, is part of the final year of the Real Estate Degree programme at Sheffield Hallam University, and is undertaken by some students as a core module and by others as an elective.

The learning, teaching and assessment (LTA) strategy for this module was designed within the framework of the LTA strategy for the programme, with specific emphasis on employability:

"Employability is applied in the programme through opportunities provided to students to engage in practice related learning across a high percentage of modules. The link between learning activities, field trips, visits from external practitioners and assessments aim to illustrate and simulate professional real estate practice. Students engage in site visits, role play and case study material from current real world examples, and these are used to help to ensure that learning is relevant to future employment, specifically in the field of real estate but also in other sectors."

In addition,

"Employability is promoted through the development of knowledge and skills, including problem solving, communication, team working, critical thinking and reflective practice as well as explicit development and assessment of the key competencies which address RICS membership requirements."

Further, learner autonomy, which is closely linked with employability, is a key aspect of the LTA strategy:

"The concept of autonomy in an educational context is predicated on the students' innate capacity to take control of their own learning, and their propensity to take charge of that learning in a supportive and enabling environment. The work related nature of the assessment tasks provides opportunities for students to become more autonomous in their learning. Module activities and assessment within the programme focus on process as well as content to promote the co-construction of knowledge and understanding between student and tutor and student and practice."

In the case of Development Practice, for example, this is interpreted as follows:

"You will have the opportunity, using an enquiry-based approach to learning, to explore fully the nature of the development process, the impact of planning and development policy and the responsibilities of the professional advisors. The emphasis of the module is on a collaborative approach to developing skills and knowledge for your future work. This will allow you to simulate the type of problem-solving you will experience in professional practice."

Assessment is an integrated part of the learning strategy and feedback is regarded as a key element of assessment. Assessment philosophy and strategy are informed by a number of principles including:

- Assessment tasks are designed to simulate professional practice and to support the need for contextual understanding as identified within the broad aims of the programme.

- The idea of collaboration is encouraged as a necessary professional skill but at the same time the needs of the individual are recognised.

- Module assessment is designed to support and motivate student learning through a balance of formative and summative activities.
Feedback and personal reflection are integrated within all module assessment strategies to encourage learners to take an active part in the assessment process.

3. Assessment & Feedback: Spreadsheet Marking Scheme

A semi-automated assessment feedback marking system was developed some years ago by the author, partly in response to coping with a very large assessment load, and partly to provide more effective feedback for students. It consists of a spreadsheet matrix with columns consisting of assessment criteria, criteria weighting, marks for each criterion, weighted totals and comments. Each row contains a specific criterion (e.g. quality of analysis) and when the tutor enters a mark the system generates a weighted mark and an appropriate comment.

Application of the original model was well received by students and external examiners. Professor John Moohan of Nottingham Trent University, for instance, gave his full support to this approach when it was presented for the first time at an examination board. In addition, in the author’s experience it has improved the efficiency and effectiveness of assessment and provides a useful device for focussing students’ attention on the assessment criteria initially.

A Teaching Quality Enhancement Fund (TQEF) project, based on the initial experience gained from using the model, was established with the aim of developing a generic model, with the following aims:

- To improve students’ experience of the assessment process and improve feedback.
- To improve the efficiency, effectiveness and consistency of assessment and feedback.

The assessment model has been presented at a number of staff seminars, and it is currently used by staff throughout the University. The following example is typical:

“I thought you would like to know that I used your spreadsheet to mark my ICT semester 2 assessment work and found it very easy to use. The marking was a lot quicker and I was also able to provide the students with almost instant feedback by emailing each group their spreadsheet. I am intending to use the spreadsheet again to mark my research development work which is due in at the end of the semester.” (Beth Meads, URS Programme Manager.)

The spreadsheet is now used within a number of disciplines and will be illustrated at the conference.

4. Development Practice: Monte Carlo Appraisal Model

Development Practice is a final year module on the BSc (Hons) Real Estate at Sheffield Hallam University. The module outline includes the following introduction:

“Development surveyors are involved at all stages in the development process, from the inception of development projects to their completion. In addition to contributing their own specialist knowledge and skills to this process, they work closely with other specialists, as part of multi-disciplinary project teams. This module provides an opportunity to rehearse this development process, and the role of the development surveyor, using project work based on real-life development opportunities.”

This module consists of both group work and individual work and makes use of a wide variety of information and communication technologies to motivate and inspire students. These include video production technology; Web 2.0 applications (e.g. http://delicious.com/propsys ); computer aided design; and, development appraisal software (e.g. Argus Developer and Monte Carlo Risk Analysis).

The teaching and assessment is supported by a virtual learning environment (i.e. Blackboard) and by the use of a spreadsheet-based marking schema.
One of the individual sections of the project brief requires students to prepare residual appraisals of their proposed development schemes using the Argus Development Appraisal System, which is available on the University's computer suites. In addition, each student must undertake a DCF appraisal and explain the differences between the two measures of profitability (i.e. Developer's Profit and IRR) using an example, such as moving the site purchase to the end of the scheme and comparing and analysing the changes.

As well as undertaking sensitivity analysis, there is a specific requirement in the brief to use the spreadsheet model on the Blackboard site, designed to undertake risk analysis based on a simple residual model. The model was designed for teaching purposes, rather than as commercial software, and is based upon a much earlier model written in Pascal by the author.

This section of the Development Practice project thus provides an opportunity to compare the use of commercial software with a model designed specifically for teaching purposes. Both in the classroom and from the submitted work, it is clear that the complexities of commercial software can act as a barrier to students' understanding of underlying concepts.

5. Development Practice: Student Video Presentations

The group work for the Development Practice project consist of two sections: A market analysis report and a 10 minute video presentation. The brief to the video contains the following introduction:

"The preparation of the video presentation must be based upon a thorough analysis of the current state of the property development sector, and a rigorous approach to planning the structure and content of the presentation. Your analysis must be submitted as a written report."

The brief also states:

"You are required to prepare a 10 minute video presentation to promote the work of a property development company based in South Yorkshire. You should make full use of the opportunities provided by digital media to convey the company's strategy and track record. You should use examples from the Sheffield context to illustrate the following:

- potential development opportunities in Sheffield;
- Sheffield's planning and development policy;
- the relationship between planning and development; and,
- the knowledge, skills and competencies offered by the company.

The main aim of this section of the Development Practice module is to develop effective methods of presenting development proposals and the services offered by a development company to its clients."

The assessment criteria and weighting for this section are as follows:

- Property development content (50%)
- Structure and delivery of presentation (30%)
- Application of digital media (20%)

The property development content is assessed using the following criteria: accuracy; relevance; quality of analysis and argument; and, use of examples/case studies. The structure and delivery of the presentation is assessed using the following criteria: sequence of presentation; variety of delivery; use of visual aids; and, methods for maintaining interest (e.g. humour). And finally, the application of
the digital media is assessed using the following criteria: how well have you applied the grammar of television?; and, how well have you applied the editing software?

Students receive additional tuition from support staff at the University about the grammar of film/television and the use of video editing software. They have access to camera equipment and editing suites throughout the project. This part of the project was introduced 3 years ago and the students who submitted the best video in that first year loaded their work onto YouTube (http://www.youtube.com/watch?v=Kfs5GZW9mVY). This provided a benchmark for subsequent years and the standard of work submitted has been of a very high quality both in terms of content and use of digital media.

The main lessons to be learned from this approach are that it significantly increases student motivation and it allows students to perform using a medium that they are very comfortable with, and which they inherently understand.

6. Conclusion

The three examples explained above have produced varying responses from students. The spreadsheet marking scheme appears to be more or less universally accepted by students. After some ten years of use, there has not been a single complaint from a student about the appropriateness of the method. From the tutor's perspective, it has provided a valuable way of reinforcing the marking criteria before students submit their work, and an effective and very efficient way of undertaking the marking - the results of which can then be emailed to students, providing timely feedback.

The use of the Monte Carlo spreadsheet model has been surprisingly well received by students. For example, in response to a questionnaire asking, "What did you most like about the module - and why?", the following are typical:

"Monte Carlo Risk Analysis and use of Circle [now Argus] appraisal."

"Computer practicals - Monte Carlo Risk Analysis."

"Monte Carlo lecture and spreadsheet session."

With respect to the video production, however, the responses are more mixed. Whilst the project is running the impression is of very committed students who are having fun preparing videos. From the author's viewpoint the results are entertaining, informative and very encouraging. But it is clear from a careful analysis of the student feedback that many students feel that there is far too much work involved in this section, and that they feel that the emphasis is too much on the mastery of the medium - although it is clear from the marking criteria that only a small percentage of the marks are for application of the digital media.

The author's overall conclusions from this experience may appear obvious but are still worth emphasising:

- students gain most from teachers who are continually learning and innovating;
- the key aspect of the learning experience is the relationship between tutor and pupil; and,
- constant improvement in teaching performance is possible but perfection is far from obtainable.

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