

# Perspectives on Pedagogy and Practice

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**Volume 2 September 2011**



# **Perspectives on Pedagogy and Practice**

Volume 2, September 2011

Centre for Higher Education Practice

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Published by the University of Ulster

Desmond Hunter, Roger Moore, W. George Kernohan, Wendy Cousins, Iain McGowan, Ursula Donnelly, Heather Sayers, Mairin Nicell, Anne Hinds, Norman Creaney, Frances Devine, Adrian Devine, Trevor Cadden, Heather Farley, Martin Eaton, Helen Foster, Peter Green, Philip Houston, David McAree, Claire McCann, Douglas McCulloch, Michael Pogue, Eugene McNamee and Grainne McKeever assert their rights to be identified as the authors of the articles in this work.

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**ISSN 2044-7388**



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## **Foreword**

I am pleased to have the opportunity to provide a short Foreword for the second issue of the Centre for Higher Education Practice's Journal, *Perspectives on Pedagogy and Practice*. It is very opportune, coming as it does at the start of the new academic session and the first year of the University's new Corporate Plan (2011/12 to 2015/16). That Plan has as its Vision, 'Leading in the provision of Profession Education for Professional Life'. One of its two primary and integrated goals is 'to deliver high quality, flexible, student centred programmes of study that are intellectually challenging and which provide our students with opportunities to develop their knowledge, skills and confidence' to gain graduate employment or undertake further study or research.

It is both reassuring and gratifying to note that the contributions to this issue resonate with Plan's emergent themes and explicitly address the institution's strategic priorities as set out in our Teaching and Learning Strategy (2008/09 – 2012/13) namely, retention, student engagement, employability and creativity. I trust that future editions will feature the outcomes of the current ongoing work of colleagues in the areas of student assessment and feedback and on-line delivery.

I also hope the journal's readership will be inspired encouraged and motivated to participate in the CHEP's activities in 2011/12 and considering disseminating relevant pedagogic research and practice through the Centre's Seminar Series and/or its Journal.

Finally, I would like to thank all those colleagues who gave generously of their time and talents to bring this second edition to press.

**Professor Denise McAlister**  
**Pro Vice Chancellor (Teaching and Learning)**



## **Editorial: Volume 2, September 2011**

In this second issue of *Perspectives on Pedagogy and Practice*, eleven articles, from internal and external contributors, present different aspects of practice in teaching and learning issues from across the University. These include a range of initiatives concerning, for example, student self assessment, research investigating factors which influence student engagement, cultural diversity training, using films to encourage debate, student peer led workshops and ethical awareness training. These should appeal to us all as we consider their relevance to our own professional context.

The external articles represent invited contributions and are written by academics closely associated with the Centre for Higher Education Practice. The first, by Desmond Hunter, Emeritus Professor of Music at the University of Ulster and a National Teaching Fellow, focuses on peer and collaborative assessment in the discipline of Music. The article contributes to the literature by providing a framework which illustrates how different participant groups can have various roles in the assessment process. It shows how, for example, final year students can work alongside staff to assess second year students' performances.

Five of the articles cover a range of issues which deal with student engagement and therefore retention. Pogue's article asserts a need for our students to become more financially literate. He proposes that if students understand how to use and manage their money they are more likely to cope financially during their course and less likely to drop out. He identifies serious gaps in first year undergraduates' personal financial knowledge and proposes that instead of offering financial support for students when money problems arise, we should embed financial literacy into the curriculum, maybe as an online module.

Kernohan, Donnelly and Shannon's paper addresses professionals' lack of engagement in an online module. They explore the use of personal text messaging, WIKI, and Reusable Learning Objects as a way of engaging busy student doctors, nurses and allied health care professionals with their academic work.

Cadden and Farley's paper deals with the central issue of how engagement impacts upon performance, especially that of second year students who often view this particular year at University as one to be passed, rather than a year in which they can deepen their learning. The authors' perspective is that lecturers need to re-energise the classroom and provide incentives for second year students to attend. They emphasise that our learning materials should be appropriate for 'technically savvy yet time constrained' students and propose an 'IT' matrix, where 'I' stands for interest and 'T' for time. Like Cadden and Farley's paper, the paper of Pogue, Foster, Green, Houston, McAree, McCann and McCulloch, also deals with how student engagement impacts upon performance, this time looking at how work placements ('sandwich courses') effect academic performance. Their findings suggest that those students who participate in work placements graduate with a better degree, underlining that even though students are beginning to question the value of placement because of the fee involved and having to extend their studies by another year, it is important that we continue to incorporate this experience as it does provide benefits which may enhance employment prospects.

Sayers, Nicell and Hinds use an innovative research method to investigate what first year undergraduates worry about when making the move from secondary school to higher education and how these worries may impact upon their engagement with their studies and therefore their academic performance. They employed a research assistant to fully integrate with 106 students enrolled on Computing courses in order to get an insider's view of students' feelings. Interestingly, they found that the type of secondary school attended and the number of part-time hours worked had little effect on academic results.

Another four articles explore a diverse range of initiatives in teaching and learning. Devine and Devine underline the need for us to consider the value of embedding cultural diversity awareness into our courses. They describe how 16 Hospitality and Tourism academics came up with a 'cultural awareness' module for their final year students and emphasise its importance in terms of preparing their students to become future employees in a multicultural environment. McKeever and McNamee's new module shows ways

of making a traditional, 'dry' subject like Law come alive. They use films, guest speakers and team teaching to encourage debate and to illustrate less obvious connections between law, society and the state. For example, they used the film 'Twelve angry Men' to stimulate discussion about democracy, jury trial, social stereotyping and the nature of evidence. Eaton's article describes the use of senior student tutors to carry out peer tutoring for first year Environmental Science students in preparation for their exams. He suggests that this has been a valuable approach to improve students' pass rates and recommends the use of the scheme in other schools, whilst Creaney and Foster describe the introduction of software to promote ethical awareness in Computing and Business Studies undergraduates.

The final article, our second invited contribution, is by Roger Moore. He was named Atlantic Association of Universities Distinguished Teacher in the year 1997 and in 2000 was awarded a 3M National Teaching Fellowship. Like the first article, by Hunter, Roger Moore's paper deals with assessment, in particular students' involvement in course design and self assessment, but this time in Languages rather than Music. He proposes that when students learn to assess themselves with care and accuracy, this allows for criticality and creativity to predominate over rote learning and students' traditional preparation for exams. His article describes how by the fourth year of a Languages undergraduate programme his students were ready to assess and grade their own work; he goes on to suggest different ways in which we can facilitate more flexibility in assessment design. The purpose of the journal is to share practice in new initiatives in teaching and learning issues from across the University and so contributions are always welcome, from those who already have experience of pedagogical publishing but especially from those who are new to pedagogical research and writing for publication. I hope you enjoy reading the varied collection of papers in this second issue of Perspectives on Pedagogy and Practice. I wish to thank those who have volunteered as mentors to the authors and also those who have served as reviewers of articles. They have all made a tremendous contribution to the journal and without their support it would be impossible to produce a quality journal.

**Barbara Skinner**

Editor and Chair of the Editorial Sub-Committee



## Reflections on Peer Learning

Desmond Hunter, Emeritus Professor of Music  
at the University of Ulster

Peer learning “is a necessary and important aspect of all courses. The role it plays varies widely and the forms it takes are very diverse, but without it students gain an impoverished education” (Boud *et al*, 2001, p. 2). This is a challenging statement and one that encourages us to reflect on the ways in which we engage students as active learners. Peer learning “involves students in working with others and, crucially, learning together” (Hunter, 2006, p. 76). Students may be assigned to tasks in pairs or small groups (preparing a seminar presentation, for instance). There may be an element of peer tutoring (which may involve students at an advanced stage in their course providing support and guidance for those at an earlier stage). Peer learning may also include involvement in assessment. Self and peer assessment are valued as important aids to learning; they promote the inculcation of skills that serve students well not only through their university careers but also in employment and lifelong learning. My engagement with peer-learning activity has been largely within my discipline (Music); however, the issues addressed are probably sufficiently generic to ensure relevance for other disciplines and also for developments that cross discipline boundaries.

Throughout the 1990s, there was a gradual development of peer learning in Music at the University of Ulster. Building on student contribution to performance seminars in which there was an element of peer tutoring, peer assessment was introduced in 1992-3 within the BMus (Hons) programme. Initially, the peer assessment concentrated on performance and the assessors were drawn from the same year group as the performers. Whilst this approach continued, particularly when peer assessment was extended to seminar presentations within modules in musicology, in the specialist area of performance there were advantages in involving more experienced students. (In performance studies, the continuum of learning transcends year-group divisions; the focus of individual study is determined largely by the artistic potential of individual students. There is particular value, therefore, in extending peer

learning in performance beyond the confines of a single year group). The approach introduced in 1993-4 is outlined in Figure. 1.

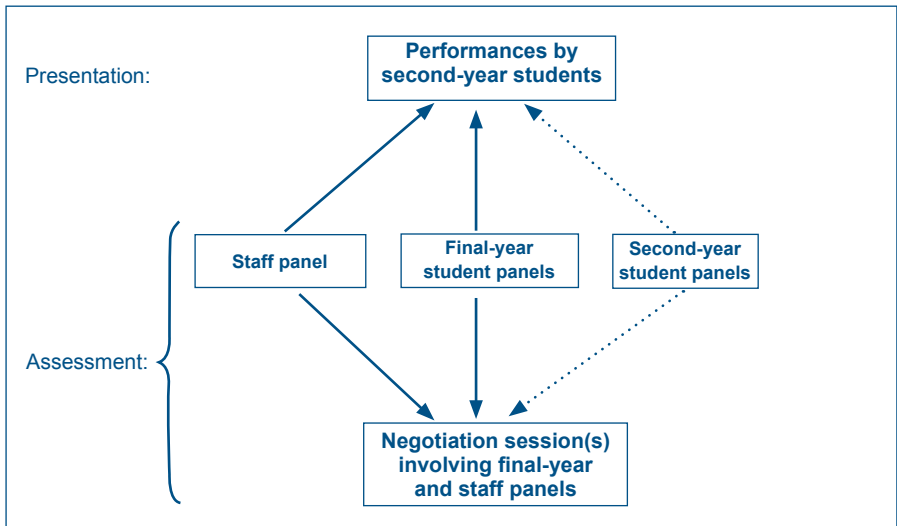


Figure 1

The preliminary reports prepared by the final-year student panels and the staff panel provided the main material for the negotiation session(s); the informal reports prepared by the second-year panels contributed supplementary material that also informed discussion. (It is worth noting that an alternative approach that worked effectively in other situations involved composite panels of staff and students.) In the negotiation sessions, the student and staff panels together reviewed each performance and agreed the content of the final report and also the mark. (The marks generated for this performance element contributed to the overall assessment of work within the module).

From 1994-5 elements of process broadened the context for the assessment: the students' instrumental tutors were invited to submit preliminary reports, commenting on the students' preparation for the performances; also, each student was required to provide a supporting statement, which, in later years, included commentary on how the work presented for assessment had been prepared. (The assessment of process is discussed further below).

Reflecting on the experience of operating a peer-assessment programme in performance during the period 1992-95, there was a realisation that the involvement of student assessors adds a valuable dimension to the process. They identified more closely than staff with the experience of presenting performances for assessment and that tended to contribute a narrative that provided a helpful counterpoint to discussion. The collaborative assessment realised in the negotiation sessions was informed by a broader range of perspectives than staff alone would normally bring to the situation. Students and staff benefited from the collaborative process and the sense of partnership in learning that developed. Moreover, I would argue that, "assessment is a vital part of the learning cycle for students. It helps them in the preparation of their own work and involvement in peer assessment provides students with the skills and experience to engage in informed self evaluation" (Hunter, 2009 p.9). The ability to conduct 'informed self evaluation' is one of the key characteristics of a resourceful independent learner.

The award from the Fund for the Development of Teaching and Learning (FDTL) (1996) for a project on peer learning provided the opportunity to build on the work that had been progressed in the period 1992-5. During the life of the FDTL project there was valuable collaboration with, and dissemination of developments to, colleagues in other universities and conservatoires as well as other disciplines at Ulster. The project published a resource pack in 2000. A key development in this phase of peer learning in Music was the extension of peer assessment to seminars in modules in musicology. In two modules (one in the first year and one in the second year of the BMus) group seminar presentations were assessed by other students in the year group also working within teams. After each presentation, the listening/assessing groups had the opportunity to question the presenting groups and the resulting discussion was an important part of each session (the response to questions formed a category on the peer-assessment report). Each presentation was assessed also by the member of staff present, and the members of each presenting group conducted self and intra-peer evaluation. All of these elements contributed to the overall assessment (see Hunter 1999).

An alternative format that was used in some seminars was

the debate (in which two groups would address a topic, taking opposing positions), the value of which had been highlighted by those students who had identified the potential of this approach in relation to particular presentation topics. The debate still involved an element of presentation, with each group outlining their position before engaging in debate. There is little doubt that the debate as a learning opportunity fosters the development of a range of skills and ensures that knowledge and understanding are shared, challenged and tested in a way that might be difficult to achieve in other learning situations.

The award of a National Teaching Fellowship in 2000 provided me with the opportunity to build on work that had been progressed in relation to assessment. In the early years of the NTFS, only twenty awards were made. Successful applicants received funding for a project, the outline and costing of which was detailed in the application. I undertook a project on the assessment of performance within my discipline (Music). The project involved extensive collaboration and the main outcome was a publication: *How am I doing? –Valuing and Rewarding Musical Performance in Higher Education* (2004).

One of the issues explored through the project was the extent to which assessment might embrace the learning process. “Assessing process emphasises the importance of learning, provides a structure for learning, rewards those who develop good learning habits, and, very importantly, ensures that feedback is a reciprocal process” (Hunter, 2004, p. 56). Inevitably, there is an emphasis on self evaluation but peer and tutor evaluation also contribute strands of counterpoint that interweave and shape the narrative. Structured self-evaluation forms introduced invited students to reflect on preparation as well as presentation, including the proposal and justification of a mark that they considered appropriate in respect of the work invested in the preparation. Completion of the form represented an important element in the learning process. The self feedback generated contributed to the overall assessment conducted through a collaborative process that was informed by independent peer and staff assessment. Ideally, the provision (and use) of feedback includes that generated by self-, peer- and staff processes. These processes are complementary: statements



made in self-assessment reports may be considered by the peer/ staff assessors and inform the outcome determined, and the report completed, by the latter group. There is a cycle of activity, therefore, that is put in motion and should continue to oil the processes through subsequent iterations. Mutch (2003: 25) observes that “feedback practices need to be placed in the context of careful course design. That is, well-meaning attempts to engage in conversation with students may founder if students have not been prepared to engage with such comments”. A useful exercise that may be conducted is to invite students to consider written feedback, provided without marks disclosed, and to propose marks that match the comments.

The ‘assessment conversations’ facilitated by the multi-layered approach should provide a rich learning experience for everyone involved. It is surprising, nevertheless, that “While students have been given more responsibility for learning in recent years, there has been far greater reluctance to give them increased responsibility for assessment processes (even low-stakes formative processes). Yet, if students are to be prepared for learning throughout life, they must be provided with opportunities to develop the capacity to regulate their own learning as they progress through higher education” (Nicol and Macfarlane-Dick, 2006, p.215).

Whilst the efficacy of the processes outlined (self, peer and collaborative evaluation/ assessment) is evidenced in the literature, one should not underestimate the cultural shift required, and the time commitment on the part of students and staff, in introducing, implementing and embedding peer learning. “Setting up a self- or peer assessment study requires careful preparation, monitoring and follow-up” (Falchikov, 2005, p. 149). But, if time devoted to progressing such a development is measured against the outcomes generated, the rewards of the investment (in advancing student learning) are considerable. The participation of students and staff in a training programme is essential and this will involve discussion of the implementation of the various stages (including formation of peer groups, negotiation of assessment criteria, trial sessions, conduct of assessment, report writing). The involvement of students in assessment in no way diminishes the contribution of staff. On the contrary, it informs and strengthens the staff dimension, with staff managing, and benefiting from engagement with, a

multi-dimensional narrative.

The various dimensions of assessment discussed are located within a hypothetical framework, in Figure. 2, outlining a narrative that may unfold during the course of a programme, a module or a particular learning situation. What is proposed is that the participant groups have various roles within the learning process, one of which concerns the conduct of assessment (in essence, the provision of feedback).

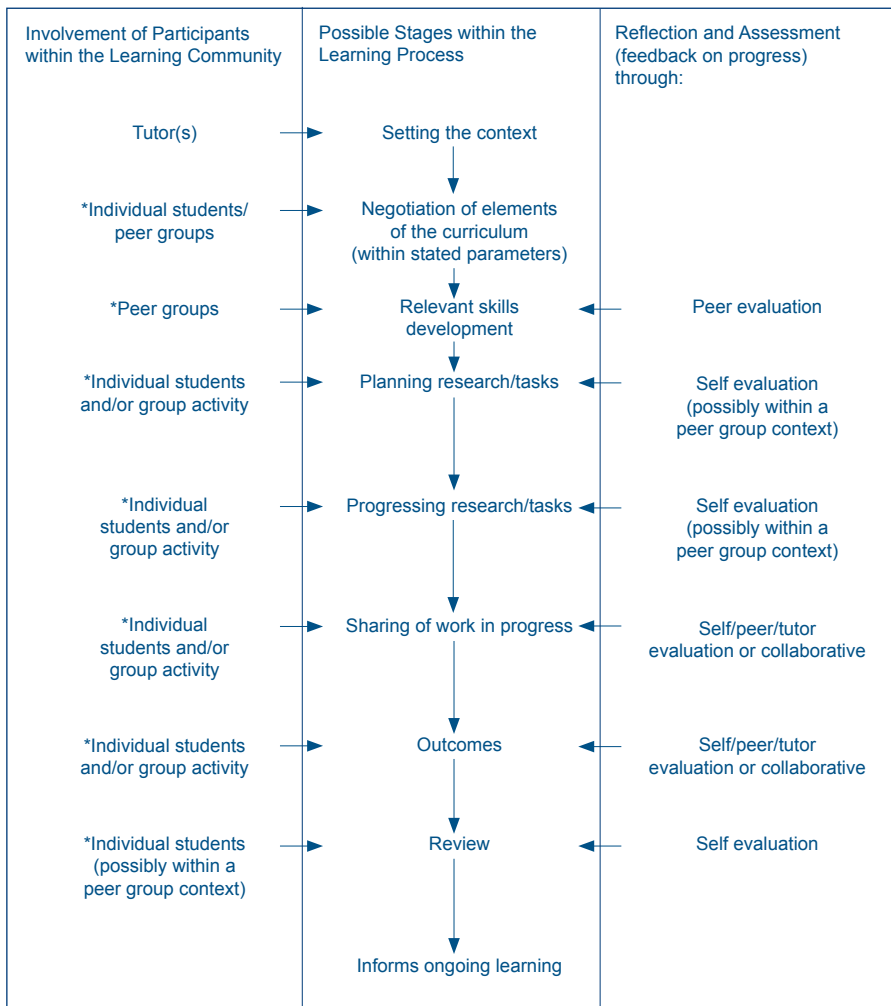


Figure 2

Within this framework it is proposed that assessment should be integrated within the learning with related layers of (self, peer and tutor) evaluation informing the learning experience. The concentration on process has various implications: in addition to the contribution of self, peer and tutor evaluation, there are issues that need to be addressed around negotiation of elements of the curriculum, implicit in the kind of partnership-in-learning context that is being created. In my experience, negotiation of the focus of an assignment or task, the weighting of the assignment and its assessment, within agreed parameters, promotes a sense of shared ownership and, consequently, encourages a deep level of student engagement with the work undertaken. It is envisaged that the role of the tutor would vary depending on how the 'assessment conversations' develop and impact on shared and student ownership of the processes.

This hypothetical framework is offered for discussion. It encapsulates some of the key issues that I have embraced through my experiences in promoting peer learning. "Adoption of peer learning requires that staff listen carefully to students and modify their practices to address the issues which emerge" (Boud *et al*, 2001: 173). The journey travelled since 1992 has encouraged me to explore various pathways and to review practice within a developing partnership-in-learning context. One of the lessons learned is the need to create space to experiment, to re-imagine and re-invigorate the learning process. Assessment, as a dimension of the learning process, is multi-faceted and, whilst it gives meaning to points of punctuation on the learning continuum, it should also inform every stage of the learning process. Inevitably, this means drawing on the various sources of assessment, engaging in a range of 'assessment conversations' and allowing these to unfold within an environment in which the opportunities for student learning are maximised.

### **Acknowledgement**

Much of the peer-learning activity in Music in the period 1992-2000 was progressed in partnership with my colleague Professor Michael Russ (currently Dean of Music, Humanities and Media at the University of Huddersfield and also a National Teaching Fellow). We co-directed the FDTL project, *Peer Learning in Music*, and co-authored several publications.

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Desmond Hunter is Emeritus Professor of Music at the University of Ulster and a National Teaching Fellow. He led the development of Music on the Magee campus (from 2003) and served as Head of the School of Media and Performing Arts and, later, Creative Arts in the period 2004-8. Following the establishment of the Centre for Higher Education Practice, he served as its first Director (2008-10)

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## **Money, Money, Money: Are students financially literate?**

Michael Pogue, University of Ulster

### **Introduction**

Over time the financial support provision for UK university students has been consistently eroded with the student maintenance grant being abolished in 1985 leaving a fees-only minimum award. In 1990, a new system of student financial support, student top-up loans, emerged and, most recently, a multi-layered formula of maintenance grants, student loans, fee subsidies and university bursaries (House of Commons, 2004). The inevitable outcome of this trend is that graduating students are accumulating increasing levels of debt as evidenced by recent statistics from Push (2010), the UK's leading independent resource for prospective students, estimating that university entrants in 2010 can expect to owe around £25,000 by the time they graduate. Moreover such levels of debt were premised on university fees which have been capped at £3,295 per annum but the recent review of government expenditure has permitted universities to potentially increase the maximum charge to £9,000 per annum. As a consequence future graduates could be leaving university with potential debt in the region of £40,000 depending upon the institution in which they choose to study.

The UK Government has long term aspirations for improving the level of financial literacy across the UK and in its recent publication, *Financial Capability: The Government's Long-Term Approach*, recognised that children and young people should "have access to a planned and coherent programme of personal finance education so that they leave school with the skills and confidence to manage their money well" (HM Treasury, 2007). Following the recommendations of the independent Thoresen Review of Generic Financial Advice (Thoresen, 2008), the HM Treasury announced that the FSA would lead a two-year "Pathfinder" programme to set up a service offering free, impartial information and guidance on money matters.

In November 2009 personal finance education was to be made compulsory with schools required to teach primary and secondary school children how to manage their money from September 2011.

However this plan was shelved after the major political parties failed to reach agreement in the Children, Schools and Families Bill prior to the last election. It appears that compulsory financial education has reappeared on the governments agenda but legislation is unlikely in the short term.

The current situation is perhaps succinctly put by Martin Lewis of [Moneysavingexpert.com](http://Moneysavingexpert.com) in that, "We've been a nation that educates our youth into debt when they go to university but never educates them about debt. The state-enforced borrowing by students has diminished the stigma of borrowing. Yet we never explained to people how debt works, how to borrow correctly, and how to choose who to do it with".

## **Background**

The term financial literacy can be defined as "an individual's ability to obtain, understand and evaluate the relevant information necessary to make decisions with an awareness of the likely financial consequences" (Mason and Wilson, 2000, p. 31). The literature provides evidence that there is a history of low levels of financial understanding in the UK amongst young people. Schagen and Lines (1996) undertook an investigation of young people's financial literacy for the NatWest Group Charitable Trust and found that students were the least confident in dealing with financial affairs and few kept good records. Eccles and Bird (2004) suggested that students recognise the importance of financial planning and money management but some students admitted that their intentions to manage their money disappeared after the first week at university, their plans to budget stopped and, by their final year, students had become "debt-blind" as most were unable to identify how much debt they had. This lack of interest in financial wellbeing remains an issue for students with more recent reports of low financial IQ (Haurant, 2005) and poor financial capability (Egg, 2006) being published. Mandell and Klein (2007) concluded, from their longitudinal study of 1997 to 2006, that poor financial performance can be partly explained "by the fact that many students just don't care about their personal finances" (p. 113) and suggested that motivation is an important driver of financial literacy.

The United Kingdom is not alone in exhibiting low levels of financial literacy amongst young people with comparable results being

reported in both the US (Chen & Volpe, 1998; Mandell, 2006) and Australia (Beal and Delpachitra, 2003). Indeed, in the US, the cost of a university degree has been historically considerably higher than in the United Kingdom with private universities charging annual fees in excess of \$30,000 not being uncommon.

**Methodology**

A questionnaire was developed which was targeted specifically at establishing the personal financial skills of undergraduates. The instrument asked questions about students’ ability and intention to budget, as well as gathering background variables including their current level of indebtedness at the commencement of their studies and whether they had received lessons on personal finance at school. Subsequently multiple choice questions were asked grouped around four main themes:

- (1) Student fees and loans (9 Questions)
- (2) Employment (9 Questions)
- (3) Banking and finance and, (10 Questions)
- (4) General expenditure. (8 Questions)

As a number of the questions contained in the multiple-choice section of the questionnaire related to student loans the sample selected for analysis contains only those students in receipt of student loans. The questionnaire was distributed across a range of first year undergraduate programs including accounting, economics, computing, engineering and architecture and a total of 171 completed questionnaires were returned of which 150 were usable. The response rates and analysis of respondents are presented in Table 1.

	Number	%
Questionnaires completed	171	
Usable questionnaires	150	88
Female	87	58
Male	63	42
Mean age	19.4	

Table 1: Response Rates

## Results

The summary results (Table 2) reveals an overall average score of 37.4% with a wide variation in the level of personal financial knowledge also indicated. In contrast to previous research (Chen and Volpe, 2002; Worthington, 2006), there was no significant difference between the mean test scores of male and female students ( $F = 0.07$ ; sig. = 0.80).

Mean score (36 questions)	13.48
Minimum score	1.00
Maximum score	34.00
Mean performance score (%)	37.40

Table 2: Summary performance scores

Question category	
	<b>Overall</b>
<b>Fees and loans (9 questions)</b>	
Mean score	3.53
Mean %	39.2
<b>Employment (9 questions)</b>	
Mean score	2.13
Mean %	23.7*
<b>Banking and finance (10 questions)</b>	
Mean score	4.40
Mean %	44.0^
<b>General expenditure (8 questions)</b>	
Mean score	2.63
Mean %	32.8*

Table 3: Mean performance scores across each question category

\*Significantly below the mean pass score of 40% at 99% confidence interval;

^Significantly above the mean pass score of 40% at 99% confidence interval.

Further analysis shows that performance varied according to the theme of the questioning, with more favourable scores being reported on the banking and finance questions and less favourable scores being



achieved on the employment and general expenditure questions (Table 3).

	Number	%
Ability to budget	150	73
Intention to budget	110	55

Table 4: Students' ability to budget and their intention to budget.

**(i) Tuition fees and student loans**

Despite many students performing well on the questions relating to tuition fees, the receipt of loans and the gross income required for loan repayments to commence, the mean correct answer scores indicate significant weaknesses in students' understanding of the loans system. In particular, poor understanding of interest charges, chargeable income and deductions was revealed (see Appendix for a breakdown of results).

**(ii) Employment Issues**

The responses relating to employment issues produced the lowest average correct answer score which is somewhat surprising given that the majority of students are likely to be in part-time employment. A majority of students (61%) correctly identified the minimum wage and were aware of the meaning of PAYE (Pay as You Earn) and NIC (National Insurance Contribution) but few were able to correctly answer more detailed questions regarding tax and National Insurance.

**(iii) Banking and Finance**

The banking and finance questions yielded the highest scores of all four categories with, for example, almost all students correctly identifying the purpose of a debit card and a majority exhibiting knowledge of exchange rates and APRs. In contrast questions regarding inflation and bank rates revealed typically low levels of understanding.

**(iv) General expenditure**

Whilst a high percentage of students knew the standard rate of VAT they were unable to demonstrate a deeper understanding of it. The questions relating to credit card interest and payment period required students

to make educated guesses rather than produce detailed calculations. However, the majority of students struggled with these two questions with the vast majority unable to answer the questions correctly. It is evident from the results that the majority of first year undergraduate students have an inadequate awareness of the personal finance issues that will affect them whilst at university. In three of the four categories of questions students, on average, performed below a pass mark of 40%. These results support the findings of Schagen and Lines (1996), Scott *et al.* (2001), Chen and Volpe (1998; 2002), and Beal and Delpachitra (2003), and emphasises the need for improvements in the consistency, relevancy and effectiveness of personal finance education in schools and universities.

### **Students’ preparedness for managing their finances at university**

The identification of differences in the test scores of students prompted further analysis of the students’ preparedness for managing their finances at university. When asked if they knew how to budget their income and expenditure, 73% of students said that they could, although only just over half of them intended to budget whilst at university (Table 4). This could be indicative of a lack of interest in their own financial affairs and supports the findings of Eccles and Bird (2004) and Mandell and Klein (2007).

Ability to budget	Number	%
Lessons in school	23	21
Lessons from parents	42	38
Intuitive and self taught	45	41
Total	110	100

Table 4: Students’ ability to budget and their intention to budget

However, regardless of students’ intention to budget, it is evident that students’ knowledge and skills in budgeting were either intuitive or self taught, or the result of help from parents, and not a consequence of lessons in school (Table 5). This gives cause for concern and confirms one of the issues identified by the FSA (2006) that, “the majority of

schools attach a high level of importance to personal finance education” (p. 7).

Excellent preparation for university	0
Good preparation for university	3
Adequate preparation for university	13
Poor preparation for university	5
Inappropriate preparation for university	2
<b>Mean score</b>	<b>2.74</b>

Table 5 Prior development of budgeting skills

The importance of lessons on financial matters cannot be ignored as the results show that students who received lessons at school performed significantly better in the test than those who did not ( $F = 5.77$ ; sig. = 0.02). Despite the improved performance of students who received tuition in school, the students’ perception of the effectiveness of this tuition in preparing them for university was not good. A mean score of less than three on a Likert scale from 1 (inappropriate) to 5 (excellent) supports the findings of Pure Potential (2007) that the extent and quality of financial literacy teaching in schools varied greatly (Table 6).

Excellent preparation for university	0
Good preparation for university	3
Adequate preparation for university	13
Poor preparation for university	5
Inappropriate preparation for university	2
<b>Mean score</b>	<b>2.74</b>

Table 6 The effectiveness of personal finance tuition in schools

### Students’ level of debt

A majority of students (63%) entered university without any debt. However, of the students entering university with prior indebtedness, 35% already had debts in excess of £2,000. (Table 7).

	Number	%
No debt	94	63
Debt	56	
		%
£1 - £500	19	34
£501 - £1,000	6	11
£1,001 - £1,500	3	5
£1,501 - £2,000	8	14
£2,001 - £2,500	3	5
£2,501 - £3,000	5	9
Over £3,000	12	21

Table 7: Number of students in debt on entering university and level of debt

Entering university with pre-existing debt is a disadvantage. For those students with debts over £3,000 it will be particularly burdensome and could be indicative of poor financial awareness. For those students with high levels of debt this is particularly worrying as the need to manage their already limited finances is crucial. Many students will encounter debt as a consequence of going to university and the way in which they deal with their resources is crucial to limiting the amount of funds that are borrowed.

## Conclusion

The picture emerging from the survey is of a stereotypical first year undergraduate student of school leaving age faced with managing their finances for the first time. The mean test performance indicates that there are serious gaps in their personal financial knowledge across most themes and, in particular, a basic understanding of employment issues and general expenditure. It is inappropriate to say that “students just don’t care about their personal finances” (Mandell and Klein, 2007, p. 113) as the findings of this survey indicate that students are worried about the debts they are likely to face and feel that they receive inadequate financial literacy tuition in preparation for their time at university. The test performance scores indicate considerable

weaknesses in students' personal financial awareness and it seems that these students are entering a critical stage of their lives ill-equipped to cope with the severe cash restrictions they will encounter.

The need for students to finance their education through part-time work will increase. However, finding work in the current economic downturn will become more difficult and the ability of students to manage their limited financial resources will be paramount. Their current levels of financial awareness and budgeting capabilities suggest that this will be a difficult task.

The overall analysis of results demonstrates that there are serious deficiencies in the personal financial awareness of undergraduate students. The private and public sector initiatives introduced appear to be ineffective: a clear endorsement for the provision of lessons in personal finance at university. Academic institutions have recognised their responsibility to provide the help and advice students need to cope with the financial implications of attending university. However, in most institutions this support is optional in nature and means that students do not seek help and advice until they encounter financial problems. Rather than preventing students from experiencing financial difficulties this method of support is seen as a cure for financial mismanagement and lack of financial awareness. A more effective way of developing students' financial awareness and understanding would be to include it within the curriculum where a change in behaviour and understanding, or learning, can take place.

For the past three academic years students entering the first year of the accounting degree program have been required to complete a module in personal finance to obtain their professional exemptions rather than improve their personal finance capability. In addition this existing module has been proposed as an option in the revalidation of the business studies degree. Whilst resources would clearly not permit the rolling out of this module to be taught in the traditional mode of delivery across other degree programs, there would be potential for developing an e-learning module with perhaps inclusion as a component of the student personal development system. To incentivize students to engage with personal finance it also may be feasible to offer a basic qualification in conjunction with an external professional body.

Provision of support and guidance could enhance retention and progression as improvements in students' money management skills could result in less reliance on bank overdrafts and loans, credit card debt and part-time work to fund their studies. These are transferable skills with lifelong added value for the students who will need to repay the debts accumulated during their studies.

Student support within the university offers financial advice, support funds and tips about managing your money (<http://uusu.org/content/3538/finance/>).

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**Appendix**  
**Detailed Analysis of Students' Responses**  
***Tuition Fees and Student Loans***

<b>Question answered correctly</b>	<b>Number</b>	<b>%</b>
Tuition fees	103	69
Receipt of maintenance loan	114	76
Receipt of tuition fee loan	100	67
Gross income for repayments to commence	111	74
Interest rate on student loans	31	21
% of chargeable income per annum	17	11
Chargeable income example	15	10
Deduction from income example	20	13
Collection of loan repayments	51	34

***Employment Issues***

<b>Question answered correctly</b>	<b>Number</b>	<b>%</b>
Minimum wage	91	61
Earnings before paying income tax	28	19
Income tax rate	26	17
Personal allowance	13	9



### ***Employment Issues***

#### **Question answered correctly**

	<b>Number</b>	<b>%</b>
Taxable income example	27	18
Meaning of PAYE	76	51
Meaning of NIC	78	52
NIC calculated on gross earnings	24	16
NIC percentage	7	5

### ***Banking and Finance***

#### **Question answered correctly**

	<b>Number</b>	<b>%</b>
Meaning of debit card	138	92
Meaning of direct debit	40	27
Inflation rate	55	37
Bank base rate	35	23
Exchange rate	97	65
Meaning of base rate	47	31
Meaning of liquidity	31	21
Definition of inflation	81	54
Meaning of APR	94	63
Best time to save	68	45

## **General Expenditure**

<b>Question answered correctly</b>	<b>Number</b>	<b>%</b>
Cost of TV licence	54	32
Maximum fine for TV licence	94	55
Standard rate of VAT	142	83
VAT applicability	20	12
Calculation of VAT	94	55
VAT rate on domestic gas/elect	21	12
Duration of credit card debt	22	14
Credit card interest calculation	14	8

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## **Evidence is Good for Your Practice using Technology: Enhancing engagement of healthcare professionals in online education**

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### **Introduction**

It is axiomatic that healthcare should be based on the best available evidence. Consumers of healthcare have a right to expect that they are being treated or cared for in the most appropriate manner available for their condition. This requires that providers of healthcare services be able to apply research and other evidence in their daily practice. This paper outlines approaches used to helping student doctors, nurses and allied health professionals fully engage with evidence-based practice modules delivered via e-learning. This mode of delivery presents learning materials; such as readings, discussions, lectures, tutorials, tasks and assessments; online, using sophisticated software set-up to provide a virtual learning environment (VLE). E-learning is on the rise as it can be more efficient and effective than more traditional forms of education; such as face-to-face lectures and tutorials. E-learning is particularly well-suited to part-time education which is often favoured by busy healthcare professionals, who are the target audience for advanced education to support evidence-based practice.

### **Background**

Basing medical decisions upon rigorous evidence grew from the pioneering work of Archie Cochrane (1909-1988) who initiated the collection and organization of available research evidence on specific topics. Cochrane favoured the evidence drawn from clinical trials, noting the strongest evidence arose from randomised clinical trials. This laid the foundations of modern evidence-based medicine which aims to provide care that is informed by rigorous up-to-date research-based findings, rather than subjective opinion (Hill, 2000).

It has long been established that nurses and other healthcare professionals often have difficulty in retrieving and interpreting research evidence. Parahoo (2000), for example highlighted the inability of nurses to understand research papers as a major barrier to the development of evidence based practice in nursing.

In recent years Internet technology has brought evidence into Doctors' offices and even to the bedside through the pioneering efforts of David Sackett, founder of the Oxford Centre for Evidence-Based Medicine and author of the classic textbook *Evidence-based Medicine* (1996).

These developments have been paralleled by a broad movement within academia to deliver learning of many subjects and at many levels using Internet-mediated e-learning through a variety of VLE systems, such as Blackboard™ and WebCT™.

The development of e-learning in healthcare courses is charted by Riuz et al (2006), who recognise the variability of availability and quality of the courses available (Moberg & Whitcomb, 1999; Ward et al, 2001). Chumley- Jones et al (2002) identified four domains to be considered when designing e-learning courses: *knowledge gain, learner attitudes, learning efficiency and programme costs*. In line with the development of technologies for delivering e-learning a number of published papers have examined these domains.

A number of recent systematic reviews and meta- analysis have explored the effectiveness of electronic delivery for knowledge gain (Chumley- Jones et al, 2002; Cook et al 2010). They report that despite using a variety of evaluation techniques there appears to be no significant differences in the knowledge gained by students when course material is delivered via the internet, suggesting that web based learning can achieve similar learning outcomes to traditional face-to-face delivered material.

Bell et al (2000), for example, compared the knowledge retention of 162 medical residents in the United States in a cardiology-based module when students were given material in print format or the content delivered via the internet. They report no significant

difference in knowledge retention either immediately following the intervention or six months later.

Carbanaro et al (2008) report similar findings in a blended learning course on team process skills in the development of a multi-disciplinary team of nurses, medics, pharmacists, occupational therapists, dentists, dental hygienists, medical scientists and nutritionists.

Spice et al (2011) recently introduced an online research design course for palliative care medical residents. They report an increase in knowledge and satisfaction with the course, however the small sample size (n=10) precludes any meaningful conclusions to be drawn. Similarly Clark et al (2011) report an enjoyable and useful learning experience amongst Japanese dental care specialists undertaking an online research methods module. However, they do not appear to report any knowledge gains and, again the small sample size (n=13) hinders generalisation.

While the previously mentioned studies aimed to develop knowledge in doing research, evidence on e-Learning for *using* research is also equivocal. A large team (Hadley et al, 2010) examined e-Learning for evidence based practice, again finding no difference in learning outcomes between e-Learning and traditional face-to-face methods.

At the University of Ulster we have used proprietary VLE systems such as TopClass™, WebCT™ and lately Blackboard™ to deliver learning to student Doctors, nurses, allied health professionals. Yet, although we have successfully taught online evidence-based practice modules to over 200 students, we have begun to detect a weakness in the approach. In particular a lack of learner engagement has been noted. Recent course evaluations have highlighted student reports that they could find the e-learning environment to be challenging and even isolating. Typically, students of evidence-based practice are concurrently working as healthcare practitioners, often with heavy workloads, which put additional stress on them as learners and a strain on the learning environment. Nevertheless, these modules are highly practice-oriented and clearly relevant and useful to students' professional practice.

This paper provides a report of an initial stage of development of one of an ongoing series of educational technology projects to address student concerns, promote engagement and build communities of learners on these modules of study having learning outcomes to develop and enhance evidence-based practice. In order to achieve a productive synergy we sought assistance from educational technologists to help bring e-learning into the students' professional life in a more integrated manner by the use of technology with the aim of improving student engagement and learning efficiency.

## **Methods**

Three online devices were proposed to enhance the existing online learning module in Evidence Based practice with the aim of developing more engaged learners and enhancing the sense of the online environment as a supportive learning community. These were text messaging, Confluence WIKI and Reusable Learning Objects (RLOs). Each has been subject to prototyping and initial testing within the School of Nursing.

## **Text messages**

The high penetration of mobile telephony into the lives of students has not gone unnoticed. Using mobile 'phones for semi-formal communication can address the issue of maintaining learners' attention - a critically important consideration in the design and development of virtual environments for learning, as these environments depend upon learner attention as an essential condition of their functioning (de Castel & Jenson, 2004). Additionally text messaging allows for the students to access brief information about their academic classes while not logged on to a computer (an important consideration for busy healthcare professionals). Text messaging was initially proposed as a simple device to alert students to key learning and assessment opportunities - it is planned that in future this will be further utilised as a means of communicating questions and answers to inform evidence-based practice (Figure 1).

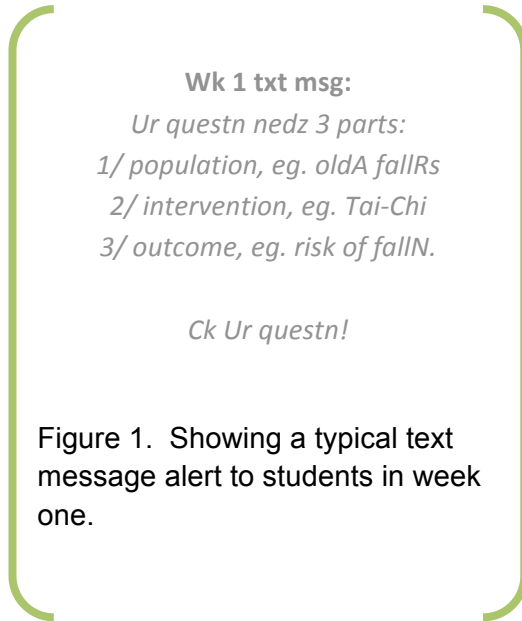


Figure 1. Showing a typical text message alert to students in week one.

### **Embedded WIKI**

The first wiki was created in 1995 by Ward Cunningham. The name “Wiki” was inspired by the Hawaiian word *wiki* or *wiki-wiki*, which means “*quick*”. A Wiki may be defined as a combination of a Web site and a Word document which allows site visitors themselves to easily add, remove and otherwise edit and change available online content. Wikis encourage group social interaction and collaboration. They support asynchronous communication allowing users to contribute content at a time, and from a place that suits them. This highly interactive process is intended to stimulate lively discussion and promote collegiality (Figure 2). Wikis are also valued for their capacity to encourage students to become actively involved in the construction of knowledge (Department of Education, Government of Western Australia, 2010). At the University of Ulster we use the Confluence WIKI embedded within the Institutional VLE. It is proposed that the learning outcomes can be established using five WIKIs to capture the five components of evidence-based practice. These are: question formulation; evidence search; critical appraisal; implementation and audit. There is a helpful match between this incremental, stepwise approach to evidence-based practice and the

idea of a WIKI as a unit of knowledge, demonstrated for the whole class to see.

**Wiki entry:**

*Cat and Dog bites: in primary care ..limiting my search to English language publications over the last 5 years I got 15,400 results which included an RCT which looked promising.*

*Using a data base search was more rewarding, review articles, original research and RCT was obtained.*

*..Medline gave me 22 results for cat and dog bites- 4 were helpful which included an RCT.*

*Using the words primary care was best avoided as I got a lot of irrelevant material that way!*

**Response:**

*I think the intervention is clear (an antibiotic vs none), and the population are people who have sustained an animal (cat/dog) bite. Yes, outcome would be infection rate...*

Figure 2. A student-led wiki describing stage two of the learning journey: searching for evidence. A short supportive response is included, from a peer.

## Reusable Learning Objects

Reusable learning objects (RLOs) are defined as “web-based interactive chunks of e-learning designed to explain a stand-alone learning objective. The fact that the learning object has been broken down to a low level of granularity facilitates its re-use in different learning and teaching situations” (Higher Education Academy, 2010). RLOs on a wide variety of academic subjects can be retrieved from a repository by an academic working at a standard desktop PC and utilized for his or her own teaching practice. Useful resources include JORUM (2010), a free online repository service for teaching and support staff, which aims to build a community for the sharing, reuse and repurposing of learning and teaching materials (<http://www.jorum.ac.uk/>) and the University of Nottingham School of



Nursing and Educational Technology group (SONET) which provides RLOs specifically relevant to nursing and healthcare professionals. (Figure 3). At a fundamental level RLOs can provide alternative and supportive learning strategies and may even take the place of existing materials. Material to support many common topics is readily available. The example is useful to reinforce the module definitions, so that the student achieves a better understanding of the basic concepts involved.

### Reusable Learning Object

Aims and Objectives

*To understand the concept of evidence based practice*

*To understand how, in outline, how evidence based practice is done*

Target Audience

*All students studying evidence based practice*

How to use this Resource

*It should take about 5-10 minutes to complete*

Figure 3. A useful RLO from

<http://sonet.nottingham.ac.uk/rlos/>

## Outcomes

An early prototype of the new enhanced module, including a text-message facility, an embedded Confluence WIKI and RLOs has been developed and will be delivered to forthcoming classes in evidence-based practice in the School of Nursing. As well as developing and enhancing the development of an online learning community, it is intended that the mobile aspect of this approach will help to more fully embed the learning experience in the student's day-to-day life-world and assist in the development of background,

transferrable skills in computer literacy and networking with peers. This will result in even closer linkage between academic learning and the professional environment of busy healthcare professionals. Development of this process will also provide a valuable learning and development experience for the academic staff involved. A planned evaluation of the project using an Action Research approach (identification, data collection & interpretation, action, reflection) will provide valuable feedback and an evidence base on its potential for further use across a range of other web-based modules in the University.

While Hadley et al (2010) examined e-Learning for evidence based practice and found no difference in learning outcomes between e-Learning and traditional face-to-face methods, this study only examined learning outcomes in terms of knowledge gains and potential cost effectiveness. Other important domains such as learner attitudes and learning efficiency (Chumley- Jones et al, 2002) were not explored and reports from our own students highlight the importance of these aspects, particularly for students working in health-care professions alongside their academic studies. Text-messaging (DuVall et al, 2007), the use of WIKIs (Lamb, 2004) and RLOs (Gehringer et al, 2007) have been shown to improve levels of student engagement and the development of active learning strategies. By adopting these strategies for enhanced delivery of online evidence-based practice education we can improve student experiences and increase learning efficiency by building 'electronic bridges' between academic learning and the everyday environment of healthcare professionals. This enhancement is achieved through use of messages sent to mobile phones; and through building knowledge in WIKIs. Maximum efficiency can be achieved through the appropriate use and reuse of RLOs. These devices have good potential for enhanced-delivery of e-learning for evidence-based practice. We conclude that it is important for education providers to understand the current role, and increasing potential, of e-learning in the provision of education to a professional audience. For us, the recent tools and facilities, described in this paper, have the potential to extend the learning outcomes more readily into clinical practice, engage the learner more fully and assist the lecturer/course-builder through sharing and delivering best practice.

Further development is needed as part of regular course review and revalidation of professional courses which is underway and we hope to have results from wider implementation of engagement initiatives and community-building devices in the future.

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George, Wendy and Iain lecture in the School of Nursing in clinical application of research, often described as evidence-based practice. Between them, they have 20 years' experience in that role at all levels. Ursula is an e-Learning consultant who has supported and advised the nursing team over the past 18 months. Damian is a postgraduate student who took one of the courses and provided critical user-appraisal of the project. He is now working as a Health Promotion Officer in the west of Scotland.

## **It's not about the X factor, but the 'IT' factor: insights into student attendance and engagement**

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### **Background: Engaging Students**

It is widely accepted that student engagement is positively correlated with successful student development and outcomes (Berger and Milem, 1999; Goodsell, et al., 1992; Kuh, 1995; Kuh et al., 2005a; Pascarella and Terenzini, 2005). Student engagement is founded on the constructionist principle of learning being influenced by purposeful participation (Coates, 2005, p. 26). It is concerned with the interaction between the time, effort and other resources invested by both students and their tutors, intended to optimise overall student experience and enhance their development and performance in addition to the reputation of the institution (Trowler, 2010, p. 5).

Engagement has been studied in many educational settings (Schaufeli et al., 2002; Hakanen et al., 2006) and is "characterised by energy, involvement and efficacy" (Maslach and Leiter, 1997; cited by Ulutag and Yaratana, 2010, p. 14). Tiredness and exhaustion can significantly affect the level of engagement (Demerouti et al., 2001; Schaufeli and Bakker, 2004), resulting in lower motivation and performance levels (Maslach et al., 1997; cited by Ulutag and Yaratana, 2010). Further, Krause (2005, p. 4) lists "inertia, apathy, disillusionment or engagement in other pursuits" as forms of alienation or distracters of engagement. Of the indicators now scrutinised across the Higher Education sector, Gibbs (2010, p. 5) suggests that the process variables are the best predictors, particularly practices relating to "class size, the level of student effort and engagement, who undertakes the teaching, and the quantity and quality of feedback to students on their work". This develops earlier work by Chickering and Ehrmann (1996) who define seven principles of good practice in undergraduate education as encouraging student-faculty contact; cooperation among students; active learning; giving prompt feedback; emphasising time on task; communicating high expectations and respecting the diverse talents

and ways of learning. Thus, whilst student attendance can act as a potential indicator of student engagement, it is only one of a number of interrelated components.

As part of the student engagement process, a number of issues have been considered, including work:study balance, the nature of teaching and perhaps more importantly, the nature of learning. Recently, the number of class contact hours has received attention (Carney et al., 2005), coupled with studies of the effects of paid work undertaken by full-time students which have reported a substantial reduction in study hours relative to the extent of their paid work (Curtis and Williams, 2002; Hunt et al., 2004). The effects however, appear to vary depending on the nature of the degree programme and on the context. Class contact time may be one influencing factor but what is done with the students in that contact time may be more important. Clearly, some will use class contact in ways that are very much more effective than others in terms of adding educational value for students, in stimulating interest and in encouraging them not only to attend but to engage in effective independent study beyond formal class contact.

As with contact hours, the concept of ‘good’ teaching is also open to interpretation, particularly as students will (hopefully) evolve over time in their level of learner ‘maturity’ and their perceptions of what ‘good’ teaching might consist of. This links to the concept of learning styles and as suggested by Race (2001, p11), we should “not presuppose that [our] own topic is the light in the life of all the students [we] see”. Educationalists should not develop teaching materials purely around their own preferred learning style but rather, should reflect on the many types of learning style likely to be present in any given classroom. Students are not ‘surface students’ or ‘deep students’ – they tend to develop their approach to learning in response to what they see as the demands of the learning context (Ramsden, 1992; Coates, 2007; Trowler, 2010) and features can be included that will foster a deeper approach as per the seven principles (Chickering and Ehrmann, 1996) outlined above, for example.

Thus, much research has been conducted in the area of student engagement and performance outcomes (over 1,000 articles

according to Trowler, 2010) and a review of the literature suggests that the level of student engagement has a significant influence on student performance outcomes. However, fewer studies have sought to explore student engagement from a student perspective (Coates, 2007; Moore et al, 2008). The aim of this empirical study was therefore to investigate some of the key factors that influence student engagement and suggest how this might be translated into enhanced student performance.

Figure 1 below illustrates the study's central proposition that student attendance, when motivated by student engagement, leads to enhanced student performance:



Figure 1: Student attendance, engagement and performance model

## Method

A mixed methodology was used for data collection. Firstly, a learning styles questionnaire: Visual, Audio, Reader, Kinaesthetic (Fleming) was issued to all students in two formats (online – soft copy, and in class – hard copy format), in order to capture a cross-section of both ‘good’ and ‘poor’ attenders, The questionnaire rates student responses to statements pertaining to their learning style and students receive a score against each of the four categories (visual, audio, reader, kinaesthetic). Students typically score in each of the categories but usually one learning style predominates and thus, an appreciation of the learning preferences within the group under study was obtained. Previous research on student engagement has found that understanding participant learning styles and shaping one’s teaching and learning materials as a result is a fundamental prerequisite to achieving student engagement and ultimately increased performance outcomes (Fleming, 1998; Coates, 2007; Trowler, 2010). This exercise was accompanied by a brief preliminary questionnaire on student attendance and engagement, as derived from the literature. The population consisted of all full-time, undergraduate students (n=158) undertaking a second year, jointly taught core module (Operations Management) within the BSc(Hons) Business Studies



and BSc(Hons) HRM programmes. The students were chosen to build upon previous studies on first year, undergraduate student engagement (Krause, 2005; Bevitt et al., 2008; Skinner, 2009; Green et al., 2010) with a central focus on retention. Their conclusions suggested that during first year there is much transitional learning and adaption required as external factors such as living away from home, adapting to university life and uncertainty about their degree choice potentially affect the students' ability to engage. Further, absenteeism, hours worked and time spent studying were all reported to significantly impact student performance (Green et al., 2010; Trowler, 2010). Second year is an interesting point at which to further explore the students' level of engagement as they will most likely have settled into their chosen degree and are more comfortable with the expectations therein. Further, second year marks do not in this instance, contribute to the final degree classification which provides an interesting dynamic in which to study student engagement and performance. In previous research, incentivised assessment was not found to be critical in enhancing engagement (Skinner, 2009).

The questionnaire was issued at the beginning of the module with an overview of the purpose of the study. A cross-section of those who completed the questionnaire were then asked to participate in a focus group, to provide deeper insights into the responses provided in the earlier questionnaire. Two focus groups (10 students of mixed gender in each) were formed, using stratified random sampling methodology. Each focus group was asked similar semi-structured questions pertaining to attendance and engagement and this ensured greater validity and reliability of the data collected. Each focus group session lasted no more than 45 minutes.

## **Results and Discussion**

58% (92 out of 158) students completed the 'Learning Styles' questionnaire (Fleming, 1998) and the results revealed that Kinaesthetic (K: 'learn by doing') was by far the most prevalent (68%) in this sample. This, in itself, can give rich insights into the way educationalists must respond when preparing and delivering teaching and learning materials. Business and Management is a practical subject area and as per the benchmark standard "there should be integration between theory and practice using a variety

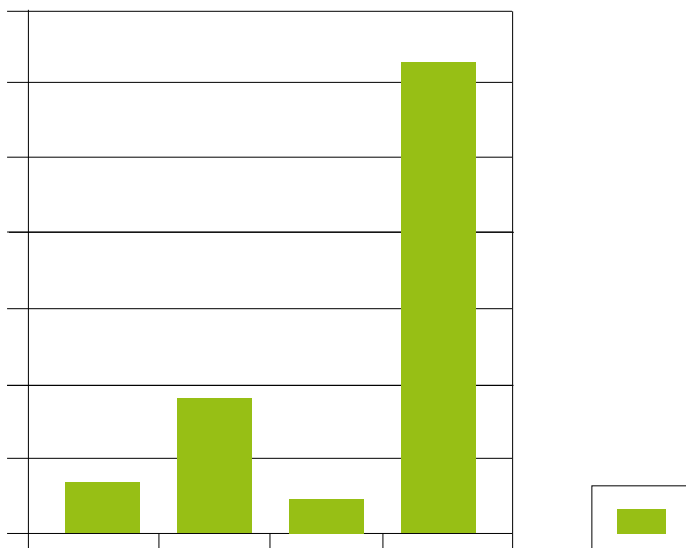


Figure 2: Chart of VARK student learning styles (Fleming, 1998)

of means” (QAA, 2007, 5.2, p. 4). Results from the study reveal just how essential this is, and support earlier work, whereby authors found ‘learning by doing’ to be a key enabler to enhancing student performance outcomes (Coates, 2007; Marshall, 2009).

The second phase of the questionnaire built on existing research in the area of student engagement and performance. Specific questions pertaining to attendance and engagement were pilot tested on a sample of senior teaching staff and student representatives. Thereafter, the questionnaire was issued to students in both hard copy (in class) and via SurveyMonkey. Researchers have called for this form of ‘finer grained’ research on student engagement by asking the students directly (Moore et al., 2008; Trowler, 2010). The questionnaire was followed up by focus groups on each of the question areas but allowing for probing and deeper insights to be gained. The results are detailed below:

1. What are your expectations as a student when attending class?

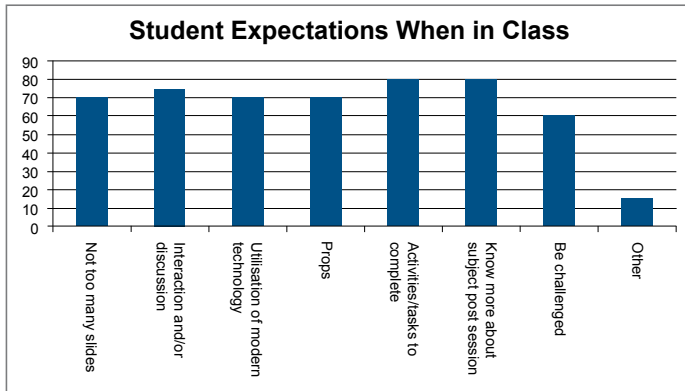


Figure 3: Student expectations in class

The kinaesthetic aspect is evident and students like to be active during the sessions. Clearly, a traditional slide show is not necessarily what is desired and as one student said:

“I form a judgement on each module in the first 10 minutes. If it is boring and unengaging, then I switch off, and it takes a lot to get me back...”

Another commented:

“Variety is key for me. Doing the same anything for 2-3 hours is uninteresting and unfulfilling...”.

## 2. Why would students not attend class?

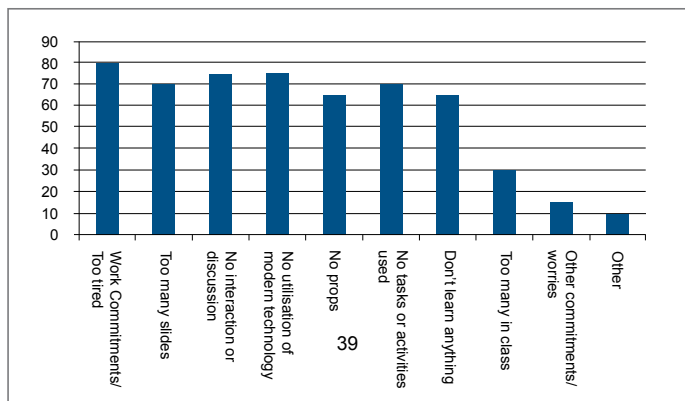


Figure 4: Why would students not attend class?

Interestingly, 90% of students reported that they didn't attend class because of external work commitments or being too tired as a result of external work commitments. As one student said:

"I have no choice; if I have any chance of getting a degree I need to earn money. In second year, when it is operation 40 (referring to just needing a pass as second year does not link to the final award) it makes sense to put work first..."

Another said:

"Most employers want students to work the unsocial hours, mainly late at night. Many nights I go to bed fully intending to go to class but I am too knackered when the alarm goes off, so I just knock it off...anyway, most of the materials are on WebCT so I am not missing anything".

Another student reported a more strategic approach:

"Actually, I only go 1 in 4 weeks, as me and 3 other friends have an arrangement where we take turns going to class and collecting materials for each other....sure most lecturers only read through slides anyway; I can do that myself at home..."

3. Do you work? (Interestingly, 85% of students who participated worked!)

3b. If yes, how many hours per week on average during an academic year?

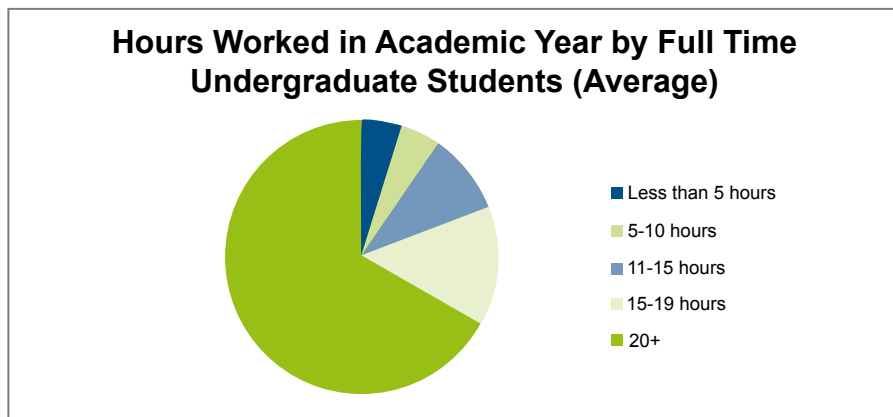


Figure 5: Hours worked by full time undergraduates

A staggering 70% of full-time students who worked, were employed for over 20 hours per week. This supports work undertaken by Green et al (2010) with first year students and would suggest that second year students continued to work long, or in many cases, even longer, hours in employment, particularly as the burden of debt grew. In addition, they may feel more able to 'get around' the system at this point in their University life. The focus groups reinforced the significant impact that working such long hours had on attendance, engagement and ultimately performance and as one student said:

“It’s about balancing priorities and money comes before study, especially in second year (again referring to the non contribution to final year classification)”.

On asking if the amount of employed working hours impacted upon their performance, the students were all in agreement, with one saying:

“Of course it does, many assignments get done at the last minute and only the essential reading and basics are done to get through...however, if I am interested in a subject, I tend to place more effort there...”.

These findings concur with previous studies which have shown that extrinsic factors such as financial pressures influence student attendance, and therefore engagement and performance (Latreille, 2008).

#### 4. What would encourage you to attend class more often?

The data are revealing and clearly, the mode of delivery coupled with the importance of a lecturer who is passionate about their subject, is essential.

Questions 1-4 focused on the theme of student attendance. The key underlying issues appear to be the lack of time that students feel able to devote to their studies. Students appear to be following the insights provided by Horstmanshof and Zimitat (2007) who suggest that at university level students in the early stages of their

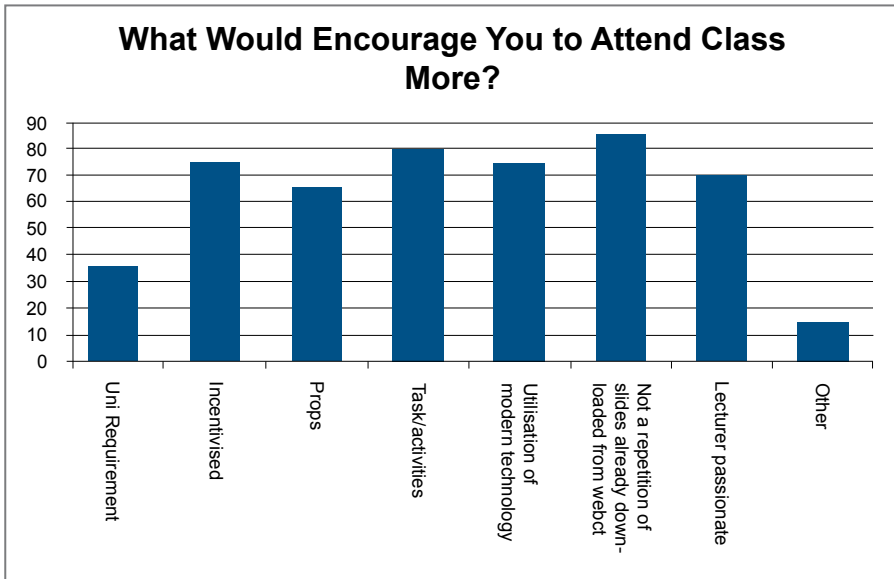


Figure 6: Factors that encourage students to attend class

degree appear 'strategic' with their time. The perception derived from this cohort of students is that second year is more about merely passing each module rather than embedding the learning. Behaviours such as deep learning and engagement appear absent at this stage for many students. Educationalists must therefore re-energise the classroom and provide incentives for students to attend. Early attendance behaviours can result in deeper learning which could transcend not only the entire degree programme but beyond. Therefore, a culture of learning needs to be embedded. Initially it may be a persuasive philosophy in using 'a carrot rather than a stick' (Neely, 2002) to create the culture of attendance. Values are ingrained early in life (Hofstede, 1990) and this is also true in the university life of students. Competing priorities exist and educationalists must redouble their efforts both within and outside the classroom (Trowler, 2010) to win the hearts and minds of students in an era where attention spans and time is limited (Dale and Lane, 2007).

5. What would encourage you to engage more in class?

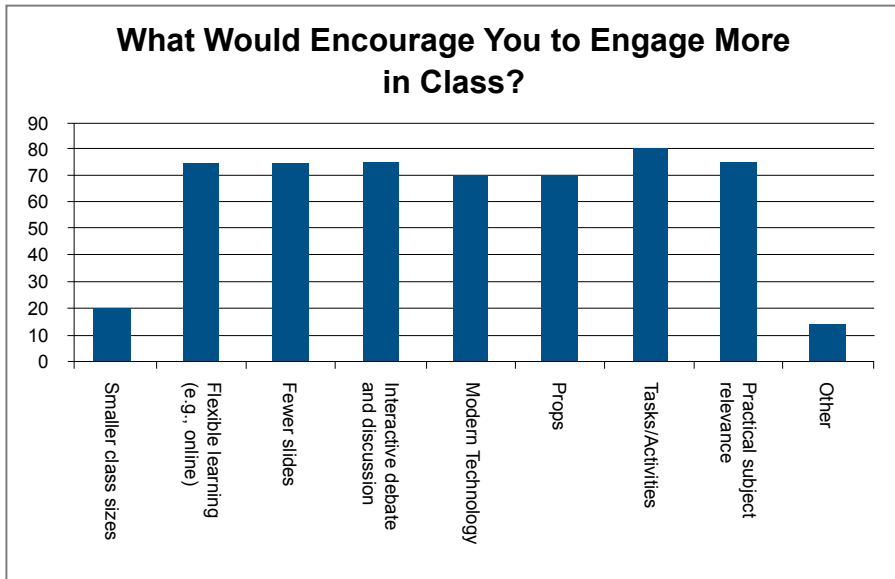


Figure 7: Factors that encourage students to engage more

The results again support the need for a range of activities and variety in module delivery. Slack et al (2010) refer to such engagement methods as ‘hooks’ that will hook the interest of the class. It is also interesting that flexible learning was rated quite highly (75%). In the focus groups, this linked back to time commitments but also to student inhibitions. As one student said:

“With working so many hours, being able to catch up online at my own speed and in my own time would be ideal. Whilst some classes are useful, I like to have control over my learning, and I lose this control when I have to work so much, and have to decide between work and study... Also, there are times when I don’t like to speak in class as I am afraid of saying something silly that people will laugh at... an online aspect would allow me to participate in a non threatening environment...”

6. What would discourage you from engaging in class?

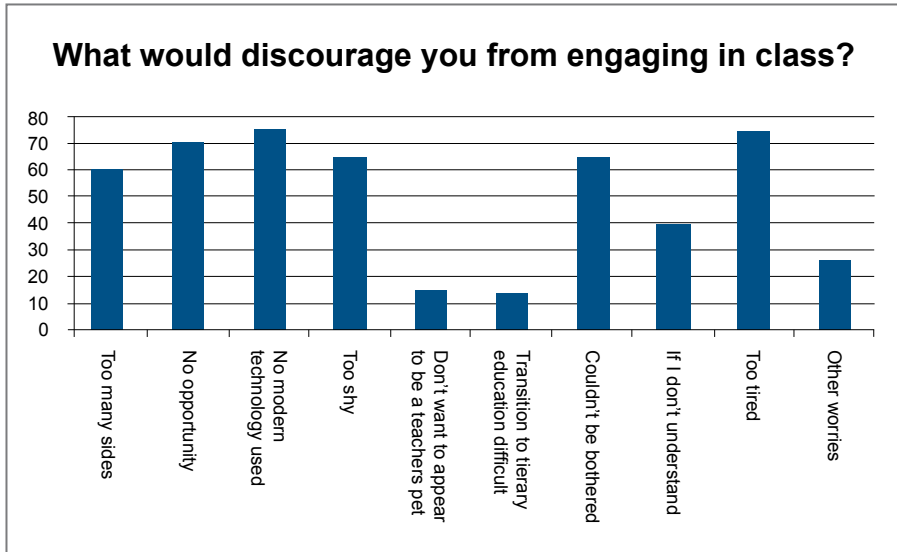


Figure 8: Factors that discourage students from engaging

The favourable comments in relation to on-line resources support work undertaken by Prensky (2001b) who discusses the differences between digital ‘immigrants’ and ‘natives’. Students are immersed in technology and embrace it as part of their daily lives. The evolution of technology has however, had a significant impact on their motivation and concentration levels (Dale and Lane, 2007; Graham et al., 2007) and information has to be instant and varied. 75% of students wanted more utilisation of modern technology and 70% said they couldn’t be bothered to attend classes, although when probed on this, responses often related to them being too tired due to external work commitments rather than an explicit request being made for more technological input alone. It is therefore incumbent on educationalists to ensure that learning materials are appropriate and flexible for students who are technologically savvy yet time constrained.

This finding is supported by the work of Jankowska and Atlay (2008) who discuss the use of “creative space” to enhance students’ engagement with the learning process. As educationalists, we must continue think of new, exciting ways to develop collaboration and



interactivity with the student, be it within or outside the traditional classroom environment.

On further analysing the above data, it is clear that two key themes emerge: Interest and Time. The teaching and learning methods that students require to both attend and engage effectively in class may be represented as the ‘Interest’ dimension, whereas the significant work commitments outside of full-time study that students are engaged in to pay for their study form part of the ‘Time’ dimension. The ‘IT’ factor matrix (Figure 9) below, developed by the authors, is in essence an extrapolation of the inner ripple of Needing/Wanting (Race, 1993) whereby motivation underpins the deeper layers of engaging and feedback.

### ‘IT Factor’ approach to learning

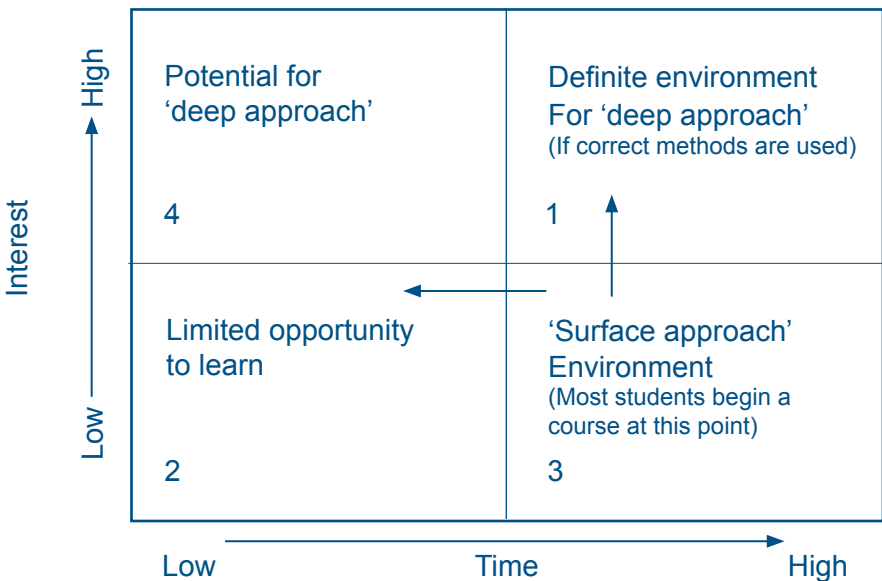


Figure 9: IT Factor matrix

The students under study were full-time, second year students, but increasingly, the gap between full- and part-time student needs is narrowing. It would have been hoped that second year students are

at least beginning to acquire good teaching and learning habits as they move towards their final year and ultimately their final award. Initial findings from this study however, would suggest that students are in paid employment more than ever but if interest in a particular subject is high they will dedicate proportionately more time to it, irrespective of other time pressures. However, if students have a relatively lower interest in the subject, they will devote less time to it and therefore will be less likely to learn. Thus, if students are highly interested in a subject and can devote the time, then the ability to develop a deep approach to learning can prevail with appropriate teaching and learning methods being deployed. When most students begin a module they are likely to be situated in the bottom right quadrant of the matrix, in that they have sufficient time but need their interest to be stimulated and developed in order to sustain this and facilitate active engagement. If this cannot be achieved at an early enough stage in the module, students will either move to point 2, with limited learning and the poor performance problems that are likely to be associated with this position, or stay at point 3 and only learn superficially.

Interestingly, a longitudinal study which focused on STEM subjects across a range of US universities found similar results to this study. The study by Singh et al (2002) found that time and attitude were the two most significant factors in achieving engagement and ultimately enhanced student performance. More must be done at both student and institutional level to redress these issues, a view supported by many studies that suggest the need for a more holistic and innovative approach to student engagement, with student involvement in all aspects of university life being key to making students feel connected to the 'broader university family' (Coates, 2007; Trowler, 2010).

Therefore, the re-specified model below would more accurately describe the current situation in relation to student attendance, engagement and performance. In other words, students who attend class still perform moderately well through what can be described as 'passive engagement' (being present but not actively engaging and therefore learning a little at a relatively superficial level). This definition extends and builds on the work of Coates (2007) who

used the term passive to define a form of transient rather than enduring learning style. This leads to short termism with resultant surface learning and moderate performance outcomes, whereas ‘active engagement’ (attending and actively participating/engaging with activities and learning methods) will be more likely to lead to a longer term, deeper learning experience and enhanced performance outcomes.



Figure 1: Student attendance, engagement and performance model



Figure 10: Respecified student attendance, engagement and performance model post study

## Conclusion

Further work is required to develop and apply this model to different groups of students, and indeed further research could explore the potential influence of on-line learning and the incorporation of learning technologies, on student engagement and performance. The authors of this study found that the old adage of ‘you can take a horse to water, but you can’t make it drink...’ is certainly true of today’s students. Pre-attendance, more preliminary work needs to be done by course teams and individual tutors to ensure higher levels of initial attendance and engagement (Bevitt et al, 2010). Equally, post attendance, more must also be done in order to truly engage these “digital natives” (Prensky, 2001b) in an age where student attention span has decreased dramatically and they have become more demanding of what they perceive to be a good quality experience. New and innovative teaching and learning methods

(Coates, 2007), including the adoption of technologies, can be used concurrently with incentivised activities such as awarding marks for attendance and engagement (Bevitt et al, 2010) and flexible learning. As educationalists, we must rethink how we connect with our students in an age of competing priorities for students; economic pressures for institutions and where both the education landscape and the students themselves, continue to change.

As summarised by Trowler and Trowler (2010), the structure and processes (including appropriate, constant and timely feedback; student roles within university governance and quality assurance processes) augment and enhance the overall student engagement debate. Early work by Coates (2007) and Trowler and Trowler (2010), has also begun to consider the impact of student involvement outside the classroom, to encourage them to feel part of an institution through ongoing activities, social events and societies. It appears that whilst the student-teacher relationship is and will remain central to student engagement providing enhanced student performance, involving students in the broader university 'family' has also a significant and complimentary role to play. And as this research has found, if students' interest can be stimulated sufficiently then students will find the time.

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## Are sandwiches better?

### The impact of work placement upon degree performance

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#### Introduction

A significant decline in the number of students intermitting their studies to undertake a work placement is apparent upon examining available data for the main degree pathways in the Ulster Business School (with a placement option) over the period 2005-2010 (see Table 1). In particular the two generalist BSc Business Studies programs at Jordanstown (J) and Magee (M) have seen a much more marked decrease in numbers in comparison with the specialist programs in marketing and human resource management.

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Business Studies (J)	92	69	59	59	48	45
Business Studies (M)	86	104	93	69	54	17
Marketing	48	43	42	45	50	57
HRM	34	35	26	47	34	41

Table 1: Placement statistics 2005-2010

Whilst the more limited availability of placement opportunities as a consequence of the economic downturn has undoubtedly been a contributory factor, a further question is whether placement is perceived by students as adding value in the quest for employment. There is a financial cost (currently 50% of normal fees) inherent in undertaking a placement together with extending the period of study by an additional year when student levels of debt are inexorably increasing.

The rationale for including a work placement within a degree program is that of work experience improving employability. Educationalists often view the benefits of work experience in terms of soft/transferable skills including attributes such as communication, team work, problem solving and time management (Department for

Education & Skills (2005) in addition to developing an understanding of world and work organisations.

## **Background**

The decline in the relative number of students undertaking a work placement is also evident on a national scale with Higher Education Funding Council for England (HEFCE(2009)) reporting a decline of 7.1% in those graduating with placement despite a 9.1% increase in the number of graduates (over the period 1999-2003). An international comparison is more problematic due to differing durations and payment status although a recent report by Arthur & Little (2010) is noteworthy in revealing a higher incidence of placement in European countries (on average 55%) in contrast to the UK where the observed figure is 29%.

The correlation between industrial placements and students' employability has been comprehensively explored by practitioners such as Bowes & Harvey (1999) and Little & Harvey (2006) amongst others. However there remains a relative dearth of current literature and research exploring the correlation between placements and final degree attainment. The works of Mandilaras (2004) and Gomez et al (2004) explore this area in greater depth. The former study rigorously explores whether the industrial placement augments academic performance for Economics students whilst the latter investigates the impact of an industrial placement on Bioscience undergraduate performance at the University of the West of England in Bristol. Both studies suggest a correlation between placements and final degree results. Similarly, Rawlings, White and Stephens (2006) conclude that internship or placement has a significant positive impact upon academic performance (see also Wallace 2002 and Mendez 2008). None of the aforementioned studies specifically investigate the impact of a work placement year on business related degrees.

Duignan (2002) compared the academic performance of business undergraduates and reported no difference between the performance of students undertaking a placement year and those not. The absence of a beneficial effect is attributed to a failure to fully exploit the learning potential of placement. Gracia and Jenkins (2003) however, provide some evidence that students on

an undergraduate degree programme in accounting and finance at the University of Glamorgan who opt to take a year of supervised work experience before their final year, perform better than those who do not. SurrIDGE (2008) provides evidence from a study of accounting and finance degree students at the University of the West of England, employing the data from three graduating cohorts and concludes that placement students perform significantly better. Within the specific context of the University of Ulster, Green (2011) finds that the average classification of students on the BSc Business Studies degree at the Jordanstown campus, on average increases from a 2.2 to 2.1 for those students completing placement.

A recent HEFCE (2009) report also provides some interesting descriptive statistics (p.4) which are informative to this study, namely that 71% of students graduating with a placement year in 2003 achieved a 2.1 or above, compared with 60% of other students (based upon classified degrees).

Having determined statistically the significance of completing an industrial placement on academic performance, there is justification in exploring the possible causes of this result. Wallace (2002) deliberates over possible causes listing several possible reasons, including those undertaking a placement already having a different temperament and higher aspirations to begin with. He also postulates whether the year in industry alleviates the financial burdens, thus enabling the returning student to focus purely on one's studies in their final year. Mandilaras identifies some potential explanations for the improved academic attainment of returning placement students asserting that:

*'it is possible that the placement experience enables the students to mature more quickly than they otherwise would. Spending a year working in often competitive environments makes them realise that their future professional development is to an extent, related to their academic performance. Hence their ambition is stimulated, they come back to university more focused and determined to do well'* (Mandilaras, 2004, p.48).

## **Methodology**

This study investigates the impact of a work placement year on the

final degree classification achieved by the 2009 cohorts of undergraduate degrees, crossing three campuses and three faculties\schools, of the University of Ulster, a total of 530 students (see Table 2).

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Business Studies (J)	92	69	59	59	48	45
Business Studies (M)	86	104	93	69	54	17
Marketing	48	43	42	45	50	57
HRM	34	35	26	47	34	41

Table 1: Placement statistics 2005-2010

Descriptives	BSJ	BSC	BSM	ACC	HRM	CS	CAM	ECON	MKT	TOTAL
<b>Tariff Entry Points</b>										
Mean	304	255	254	338	295	264	378	280	287	296
Median	300	240	240	340	300	280	370	270	280	300
Mode	300	240	240	320	240	280	400	260	260	240
<b>Final Year Marks</b>										
Mean	59	60	61	57	63	62	65	64	61	60
Median	59	61	61	60	63	61	65	63	62	61
Mode	54	61	58	60	63	60	65	63	54	60
<b>Second Year Marks</b>										
Mean	55	56	57	57	56	61	63	54	57	57
Median	56	55	56	55	54	63	63	53	58	57
Mode	62	52	60	55	53	63	63	51	59	62
Student Number	97	91	79	88	25	30	54	14	52	530

Table 2: Summary Academic Performance

- BSJ Business Studies, Jordanstown, Ulster Business School
- BSC Business Studies, Coleraine, Ulster Business School
- BSM Business Studies, Magee, Ulster Business School
- ACC Accounting, Jordanstown, Ulster Business School
- HRM Human Resource Management, Jordanstown, Ulster Business School
- CS Consumer Studies, Coleraine, Ulster Business School
- CAM Communications, Advertising and Marketing, Jordanstown, School of Communications.
- ECON Economics, Jordanstown, Faculty of Social Sciences
- MKT Marketing, Jordanstown, Ulster Business School

A number of control variables are incorporated including total tariff points on entry (a measure of prior school level achievement), second year level degree performance, and gender. A combination of both parametric and non-parametric statistical tests are employed to investigate the issues of interest. In addition, a multivariate model to explain final year degree mark is developed and estimated using OLS regression as follows:

$$Y = \alpha_0 + \alpha_1 X + \alpha_2 M + \alpha_3 DIS + \alpha_4 GEN + \varepsilon$$

Where,

- Y is the final year degree mark achieved,
- $\alpha_0$  is a constant terms introduced as a rather *ad hoc* way of capturing the impact of omitted variables,
- X is the total tariff points on entry to the degree,
- M is the second year degree mark achieved,
- DIS is a dummy variable which takes the value of 1 if a work placement is completed and 0 otherwise,
- GEN is a dummy variable which takes the value of 1 if the student is male, and 0 if female,
- $\varepsilon$  is a stochastic error term.

## Results

The findings suggest that a work placement year, gender, and second year degree performance are all statistically significant in explaining the final degree mark achieved by students (see Table 3 below). The overall explanatory power of the model is quite high at 44.6%, but the constant term is highly significant and as it is incorporated in the model as a surrogate for omitted variables it is likely that these exist.

Constant	Tariff points	Second year mark	Placement	Gender	R <sub>A</sub> <sup>2</sup>
22.264	0.008	0.593	4.492	-1.986	0.446
(0.000)**	(0.120)	(0.000)**	(0.000)**	(0.001)**	

Number of observations is 530.

\* Significant at the 5% level. \*\* Significant at the 1% level.

Table 3: Ordinary Least Squares estimation of multivariate model (Full sample)

### Control Variables

To allow for the possibility that the results obtained could be influenced simply by academic ability, we include two control variables namely tariff points on entry (although recent research questions whether tariff points on entry is an appropriate measure of academic ability (see Fee, Greenan and Wall, 2010)), and second year performance. Table 4 indicates that, on average, the total tariff points on entry for students proceeding to a work placement year is slightly higher than that for students proceeding directly to final year, but the difference is not statistically significant.

#### Mean difference in total entry tariff points

DIS	Number of Students	Mean	Std. Deviation	Std. Error Mean
1	293	296.59	57.588	3.364
0	237	295.78	59.622	3.873

t-test on equality of means 0.157 (0.875)

#### Mean difference in second year average mark

DIS	Number of Students	Mean	Std. Deviation	Std. Error Mean
1	293	58.14	6.947	0.406
0	237	55.95	7.152	0.465

t-test on equality of means 3.563 (0.000)\*\*

Figures in brackets represent two-tailed significance levels.

\* Significant at the 5% level. \*\* Significant at the 1% level.

Table 4: Control Variables Academic Performance

There is therefore no evidence to support the contention that “better” final year performance for those students taking placement derives from such students having better general academic ability as measured by total tariff points on degree entry. From the same table it is also apparent that students taking a work placement year have a



impact of a placement year is positive and statistically significant for both male and female students and is associated with an increase in classification from 2.2 to 2.1.

**Male students average mark in final year**

Gender	Number of Students	Mean	Std. Deviation	Std. Error Mean
1				
1	75	60.40	7.05	0.810
0	89	54.54	10.07	1.070

t-test on equality of means 4.360 (0.000)\*\*

**Female students average mark in final year**

Gender	Number of Students	Mean	Std. Deviation	Std. Error Mean
1	218	63.86	5.350	0.362
0	148	58.39	8.389	0.690

t-test on equality of means 7.032 (0.000)\*\*

Figures in brackets represent two-tailed significance levels.

\* Significant at the 5% level. \*\* Significant at the 1% level.

Table 6: Mean difference in final year degree mark between students taking a work placement year (DIS=1) and those proceeding directly to final year (DIS=0) by gender

**Conclusions**

The analysis reveals that those students undertaking a placement year graduate with a higher degree classification than those proceeding directly to the final year of their studies. Moreover this outcome remains statistically significant after controlling for academic ability (entry tariff point and second year performance) along with gender. Admittedly the fact that currently second year performance (or the placement mark) does not contribute towards the degree classification may also be pertinent in explaining the outcome.



The downward spiral in the uptake of placements has undoubtedly been heavily influenced by ongoing economic problems and informal evidence suggests that a significant number of current final year students were unable to obtain placements due to a shortage of available positions. Whilst this may be a relatively short term phenomenon there may be a need to review the current structure of placements. Alternative options could take the form of a number of shorter placements within the degree program, perhaps during the summer vacation, or perhaps unpaid placements similar to the internship system operated in the US. The former is unlikely to be attractive to employers given the requirement to train placement students and the latter is unlikely to be favourably received by students who themselves face difficult financial circumstances. Indeed the current system may allow them to save money during placement to alleviate financial constraints in final year which may itself indirectly improve performance.

It may also be an opportune time for the university to review the fees charged for placement (currently 50% of normal annual fees), particularly in light of the expected increase in tuition fees. An insistence on retaining the current arrangement would result in a fee of £3,000 which is likely to be viewed as prohibitively expensive by the majority of students.

Despite this rather pessimistic future outlook for placements it is evident that the experience does provide benefits, both tangible and intangible, which may enhance employment prospects. The enhancement of soft skills (communication, IT, time management and confidence) is well documented and highly valued by employers. Moreover the accumulating evidence that placement is also likely to result in a higher degree classification may also contribute towards reversing the current trend (economic conditions permitting).

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## **IN-TUNE: Investigating Transition to Undergraduate Education**

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### **Introduction**

The IN-TUNE (Investigating Transition to Undergraduate Education) study was conducted with first year computing students within the School of Computing and Intelligent Systems (SCIS) in the 2009-10 academic year. SCIS offers Bachelor of Science (BSc Hons) and Bachelor of Engineering (BEng Hons) courses in both full-time and part-time modes and welcomes 120-150 new entrants each year. An integrated foundation year (IFY) for those students who do not reach the required tariff points for year one is also offered. A UCAS tariff of 260 points for year one entry and 120 for IFY entry, plus GCSE Maths and English at Grade C, are required for entry. All subjects are considered, with the exception of the BEng degrees which specify the inclusion of one science-based A Level subject. Student transition and retention are major priorities within the university as a whole, and SCIS has recently made significant efforts to improve its performance in these areas through a number of initiatives. Attendance monitoring and follow-up have been closely pursued with the establishment of a first year teaching team which meets weekly to consider students at risk, with the Course Director taking speedy action when necessary. In terms of the teaching and learning environment, small group tutorials have been introduced to supplement the modules undertaken in each semester in year one. Induction activities have been enhanced and extended throughout the year, and a social outing has been organised in an effort to assist with social integration. Feedback from these initiatives from both students and staff has been encouraging, and retention figures have improved. However, retention still remains a problematic area, and much still needs to be done both in the identification of the root of the problems and in strategies for tackling them.

This study adopted a novel approach through the integration of a researcher within the student cohort itself. A research assistant (RA) was employed during semester one to accompany students to a selection of classes, and to set up and administer formal and

informal data collection activities including student focus groups, questionnaires and interviews. This paper presents the findings from the study in relation to student performance, and how SCIS plans to address transition, retention and engagement of first year students in 2010-11 and beyond.

## **Background**

Over the last two decades, as widening participation has been promoted within higher education (HE), student cohorts have undergone fundamental changes which have presented tertiary level institutions with new and often exciting challenges. Students now come from a much more diverse range of social and educational backgrounds, carrying differing expectations and skills (Heagney, 2008). In addition, changes in the structure of pre-entry qualifications such as A Levels have led to findings that students are not sufficiently prepared to make the move from a highly structured learning and assessment environment to one where more independent work is necessary (Crabtree, 2006; Murtagh, 2010). Yorke (2003) reports on HEFCE data from 2002 which shows that students with high A Level scores are more likely to successfully complete their chosen programmes of study. Bentley (2006) found that students from a vocational background performed better in modules with a high level of cumulative assessment and in modules involving smaller groups and more tutor contact. Mackie (2001) states that, for students having doubts about the suitability of courses, a lack of social integration was often found to be a major contributing factor.

Difficulties with transition often lead to poor retention, and retention figures have become one of the metrics by which the UK government views an institution's success; indeed: "Levels of student retention are an important indicator of institutional health" (Bourn, 2007, p.15). Naturally, some level of attrition is unavoidable through perhaps wrong choice of course, financial or personal issues. Yorke (2003) cites age, social class, and entry qualifications as factors that also impinge on completion rates. In Northern Ireland, the grammar school versus non-grammar school debate adds an additional factor to investigate, since it is often assumed that Northern Ireland's grammar school system produces more academically able students.

Different subject areas often have different retention rates and different issues which need to be addressed. Strategies that retain one group of students may be detrimental to the integration of another group, and no single strategy can solve the multiplicity of factors related to retention (Squire, 2005).

Four hypotheses relating to student engagement, qualifications and educational background, and employment, were derived for investigation:

H1: Poor attendance results in poor performance.

H2: Students who have A Level qualifications perform better overall.

H3: Students from a grammar school educational background perform better overall.

H4: Students who have more hours of paid employment do not perform as well as those who work less.

### **The IN-TUNE Experimental Study**

Three modes of data collection were employed: questionnaires; focus groups; and interviews. All interviews and focus group sessions were audio recorded and transcribed. The questionnaires were designed to gather information on students' educational and social backgrounds, while the focus groups and interviews aimed to gather information on students' opinions on all aspects of the teaching and learning environment within SCIS. These data were collected during the twelve weeks of semester one, 2009-10, and were supplemented with attendance and progression statistics throughout the full academic year. There were 106 participants (79 male and 27 female) with 84 enrolled in year one, and 22 in the IFY.

### **Student Profile**

The majority of students (86%) were school-leavers in the 18-24 age group. Of the 106 participants in this study, 57% entered with A Levels, with the remainder holding BTEC National Diploma, HND, Access course, or Irish Leaving Certificate qualifications. The average UCAS tariff point entry profile was higher than the tariff required for entry for both year one (260 points) and IFY (120 points) entrants with 277 and 151 points respectively. Students' ages, their UCAS tariff totals, and qualifications on entry show that the

participants in this study fell into a mixture of all three retention risk categories identified by HEFCE - low, medium and high (HEFCE, 2010).

The secondary level school or FE college attended was also recorded, and participants came from 75 different secondary sector schools, with 33% from grammar schools, 62% from secondary schools and 5% from further education colleges. Only 40% of participants (34 in year one, and 8 in IFY) were in paid employment in addition to their studies. 30% of these working students worked between 5-10 hours per week, with the majority working between 10 and 20 hours per week.

Almost two-thirds of participants in this study lived at home with 9% travelling between 10 and 20 miles and 11% travelling more than 20 miles to attend classes.

62% of participants had friends attending the Magee Campus of which 31% were enrolled on the same course. In 71% of cases, neither parent had attended university and 56% of respondents were the first of their siblings to attend university. 80% had their own bedroom, and 90% owned a laptop.

### **Experimental Results**

The four hypotheses were tested against the performance results of all participants, to obtain quantitative data related to both individual modules and overall progression. Figure 1 presents the progression profile for all 106 participants.

The categories for the horizontal axis in Figure 1 are derived directly from the progression codes used at formal examination boards. Early leavers, students who have failed and are thus required to withdraw, and students presumed withdrawn through poor attendance and non-submission of assessments are all considered non-progressing students. All others are considered as successfully progressing, resulting in an 84% progression rate for the 106 participants. Progression was poorer for the IFY students (77%) in comparison to year 1 (86%), although a 2x2 Chi Squared test showed that this difference is not statistically significant ( $X^2(1, N=106) = 1.83, p>0.05$ ).



### List of figures

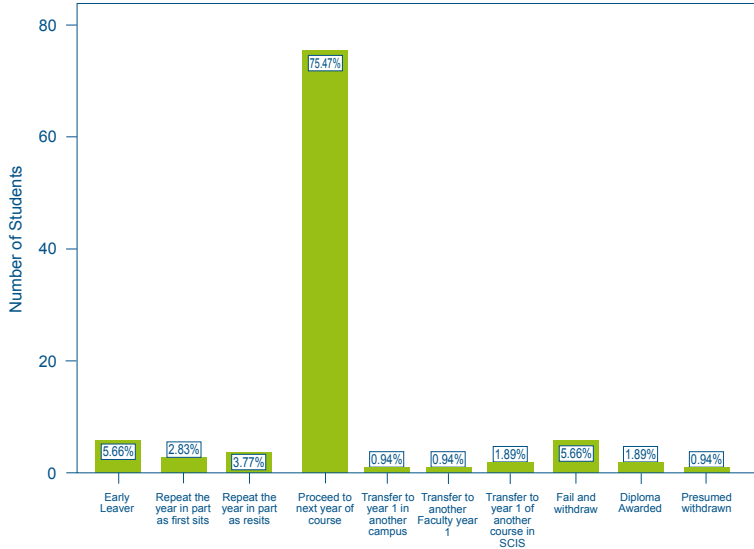


Figure 1: The progression status of all participants

### Attendance

Figure 2 presents the percentage attendance statistics for all 106 participants, with early leavers extracted, for semester one.

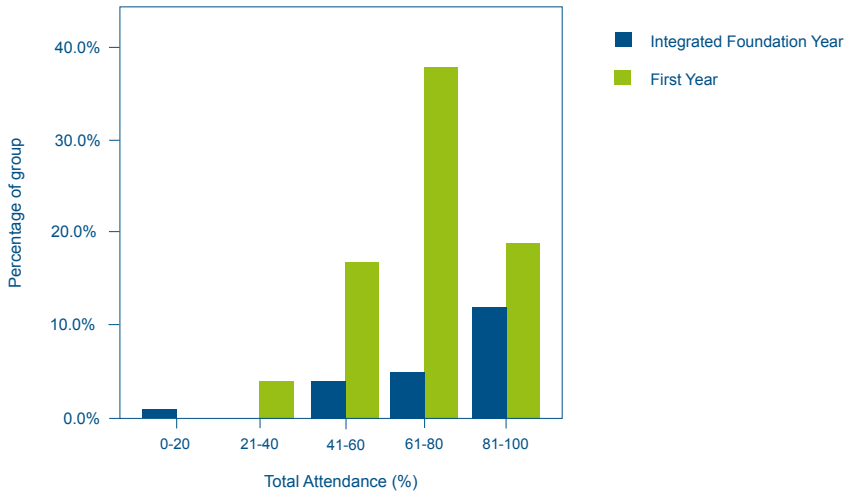


Figure 2: Percentage overall attendance (Year 1 and IFY)

Despite rigorous attendance monitoring and follow-up, only 31 of the 106 students attended between 81-100% of all classes (12 IFY and 19 first year students). Almost 55% of the 22 IFY students were therefore in the top attendance bracket in comparison to 23% of the 84 first year students. Modules with a high level of continuous assessment (for example, Mathematics I and Programming 1), or small numbers (the IFY modules and the year one Introduction to Computer Games module) recorded higher attendance levels. Feedback from student focus groups and interviews also suggests that the Computer Games students were strongly motivated in their choice of specialist course. This pattern of attendance continued for semester two.

Hypothesis 1 (H1), poor attendance leads to poor performance, was tested using analyses of variance (ANOVAS) followed by post hoc procedures to ascertain if the attendance pattern had a significant effect on overall performance. Overall attendance, grouped from 0-20% up to 81-100%, was the independent variable and the average semester mark was the dependent variable. As expected, attendance was found to have a statistically significant main effect on overall performance with poor attendance relating to poor performance ( $p=0.000$ ,  $F[3,61] = 12.208$ ). The post hoc analyses to compare groups within the data confirmed this result with strong correlations between attendance and the mark category. Feedback from informal interviews and focus groups identified various reasons for poor engagement. For example, one student considered what he described as “a five hour gap” between classes on a Monday a valid reason for not attending the later class, while another “liked to be able to choose when to come in”. Other reasons included illness, family issues, work and travel commitments, but lack of motivation was also a key factor gleaned from the transcripts in the attendance debate.

### **Educational Background**

*The type of institution - grammar, secondary and FE Colleges – was investigated to test H3 – that grammar school pupils would perform better. Of the 33% from a Grammar School, 73% successfully progressed, and of the 62% from a Secondary School, 74% successfully progressed. Almost all of those from FE Colleges (11*

students) successfully progressed (91%). Further investigation was conducted to test H2 – that entrants with A Levels would perform better. No distinction was made between vocational and non-vocational subjects. Entrants with A Levels (57% of the total) had a higher rate of successful progression than those without (82% and 70% respectively), although a 2x2 Chi Squared test showed that this difference was not statistically significant ( $X^2(1, N=106) = 1.26, p > 0.05$ ).

UCAS tariff points *on entry* were also *considered*, although this data was not held for all participants; for example, those with Access Diplomas, HNCs or Foundation Degrees. Using Pearson’s test, a weak correlation was found between tariff and overall performance ( $R^2 = 0.189(1, 64), p < 0.05$ ). It should be noted, however, that all year one students with recorded tariff points successfully progressed. Figure 3 graphically presents the consistent increase in overall average for the 45 year one participants with tariff totals. The students with higher UCAS tariff totals on entry consistently achieved higher overall averages for the year of study.

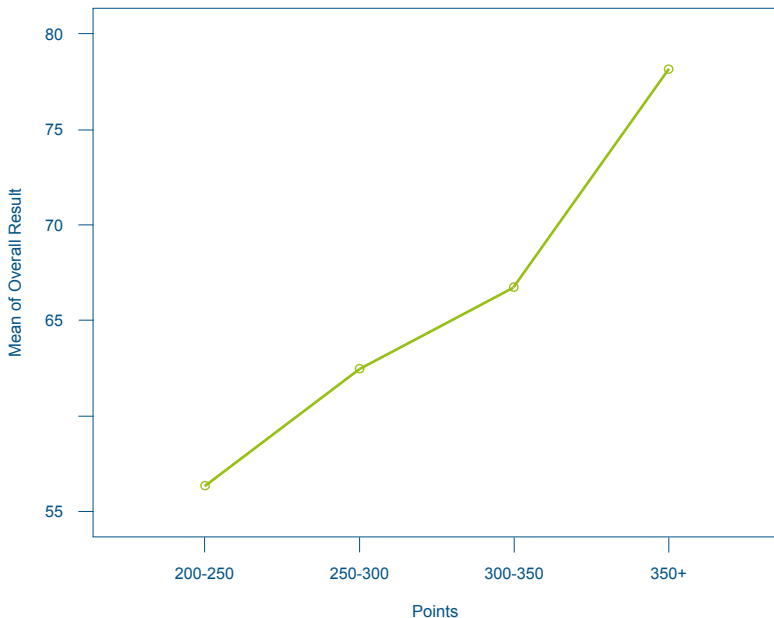


Figure 3: Effect of UCAS tariff point totals on overall averages

## **The Effect of Employment**

ANOVAs were used to test Hypothesis 4, that the more hours worked, the lower the students' attendance and performance would be. Students were grouped into two categories: working and not working. The results disproved the hypothesis that there was no significant effect of work on either performance ( $p = 0.542$ ,  $F[1, 89] = 0.374$ ) or attendance ( $p=0.104$ ,  $F[1,105] = 2.711$ ).

## **Other Factors**

Two topics that recurred consistently in the student focus groups and interviews, were the teaching and learning environment and the social integration of staff and students.

## **The Teaching and Learning Environment**

There were many comments on the differences from secondary level in terms of lectures and the move to more "independent learning". Traditionally, lectures had been scheduled for 3 hours, yet many have been reduced to 2 hours and have incorporated much more interactivity. Students reported, however, that they were still too long – much longer than classes at secondary level. The general consensus was for the provision of more practical/tutorial classes instead, with more staff support in the large laboratory classes. One student summed it up, saying, "I don't really learn that well in the lectures, just being talked to, rather than doing something like in a practical". Many students felt that lectures were particularly inappropriate for teaching maths with comments such as "we need to do more questions" and "people who haven't done it before can't grasp it (in lectures)". Some students commented that the volume of information covered within one lecture was much more than what would have been covered in school, and that he found this particularly difficult to cope with. An interesting theme noted by the RA was that, despite experiencing problems with adjustment, students did not want it to change to become more like the secondary school environment. Comments included liking "the freedom", being "treated like an adult", and "the more relaxed atmosphere" as opposed to being "constantly told what to do next" (at school), although one student described the change in the following way: "Here, you're given quite a lot of cord (rope) to hang yourself!".

## **Socialisation**

Despite the high levels of entrants who had friends attending the same campus and even the same course, there were many comments on the lack of social opportunities for interaction with other students and staff, even from those who attended the social outing. The socialisation issue is compounded by the fact that almost two-thirds of the participants live at home and travel to the university daily (63%).

## **The Research Assistant Perspective**

The RA was asked for her general perceptions of what she felt were the main issues affecting first year students. In her opinion, motivation is key to the first year experience. Whilst she could sympathise with many of the issues raised at interview and through focus groups, those who demonstrated clear motivation and interest in their subject were able to overcome and deal with problems encountered, and for these students the efforts to address their issues would, in her opinion, reap benefits later. On the other hand, she felt that unless the motivation can somehow be instilled in those without it, then any efforts may be in vain.

## **Discussion**

The findings from the study have enabled SCIS to consider its future activities based on the evidence obtained. The findings on attendance were as expected, since the relationship between poor attendance and poor performance is universally reported and established (Crabtree, 2006; Bourn, 2007). It is interesting to note, however, that attendance is clearly not the only factor in poor retention figures, since the IFY students recorded much better attendance than year 1 students, yet also recorded poorer progression statistics. Factors such as the lower entry tariff, and smaller class sizes, however, need to be considered in more detail. The findings on the effects of A Level qualifications and type of secondary school attended on performance were unexpected since this debate has consistently recurred at course committees and school boards over the years with many staff convinced of the academic superiority of grammar school and A Level entrants. No significant differences were found between those with A Level qualifications and those without, and progression data for both

secondary and grammar school entrants was almost identical, with FE colleges having the highest percentage progression rate. The tariff point total on entry seems to be the main factor affecting performance, regardless of the qualification type or type of school attended. Further work is now required to follow students' progress through to graduation to establish whether this remains true throughout years 2 to 4, including industrial placement in year 3. Further surprising outcomes related to students in part-time employment which, again, had been considered by the course team as a major contributing factor to poor attendance and hence performance, with no significant effect of work found on student performance.

Changes over the last two years have included an increase in tutorial and practical sessions in some modules, shorter lectures, and a movement to 100% continuous assessment in the more practical-based subjects such as computer programming. Continual monitoring of these issues needs to continue, but a balance needs to be established between addressing the needs of students in transition whilst at the same time ensuring that we are promoting more independent, autonomous learning.

Lack of social integration was highlighted during the focus groups, therefore further efforts to improve in this area are in progress. The authors submitted and secured funding for a further CHEP project to follow on from the IN-TUNE project – STIR: Socialisation to Improve Retention – with a focus on promoting the social integration of first year students and staff and students. As part of this project, a number of activities involving both staff and students have been carried out in semester one and are in progress in semester two this year (2010-11). Initial feedback from team-building activities and efforts to improve studies advice through socialisation are very encouraging.

Further changes in the time allocated to tutorials and practical sessions rather than to formal lectures have been made in the very practice-oriented modules, programming and mathematics. In an effort to motivate students and assist them in the transition to HE, a 3-week Career Development Centre module has been incorporated into the year one, semester one timetable. This module focuses on the study skills required for university life, and

assists students with building personal development plans. Further work is required to continue monitoring the progress and feedback from the 2009-10 cohort, and also to collect information from the 2010-11 intake. Unfortunately this will not be done from an “inside” perspective due to lack of resources, but the results from this research demonstrate clearly that a dynamic approach to the issues of transition and retention is required and continual monitoring necessary. The experiences and findings reported are also transferable to cohorts of students in any discipline where there are similar general entry requirements.

## Conclusion

Transition and retention are clearly complex and evolving challenges for HE institutions. The research carried out for this study has considered the issues from an “inside” perspective and the findings have challenged many assumptions and identified the need for continued initiatives with constant review and adaptation of activities and practice to address the needs of each individual cohort. Financial resources are always a restrictive factor when considering any new initiatives, and changes to factors such as the physical environment or course structures naturally take time for approval and implementation. Given the findings of this study, it should be possible for SCIS to ease the transition to HE more effectively, thereby increasing motivation in both students and staff.

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## **Exploring the Need for Cultural Diversity in the Curriculum**

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### **Introduction**

With higher education being progressively charged with preparing students for the world of work (Dearing, 1997; Department of Education, Northern Ireland, 2004) and the increasing internationalisation of the business industry, traditional homogenous based business modules of study have been increasingly challenged. This view is supported by many educational commentators (Ryan and Hellmundt, 2005; Black, 2004), who justify that internationalising the curriculum became relevant in order to develop students' ability to work in global business environments. Raimond and Halliburton (1995) advise that if a student is to be capable of operating in more than one country, an internationally relevant programme of study requires international case studies and examples to be used in teaching. Authors such as, Wijensinghe and Davies (2001) make a case for the inclusion of intercultural skills training, particularly in hospitality and tourism curricula whilst Seymour and Constanti (2002) report on the effectiveness of studying in culturally diverse environments to develop the intercultural competencies necessary for managers in a global economy.

### **Aims and objectives of the study**

A reflective practice exercise on the content of modules in the Department of Hospitality and Tourism Management, led to a deeper consideration of the student experience. Increasingly the need to enhance provision and advance on new ideas at the point of delivery for hospitality and tourism business management students is all important as it is the effectiveness of teaching that will determine the quality of the students' experiences and ultimately lead to improved graduate employability.

Key elements of this vision drew on the European Quality Improvement System (EQUIS) guidelines for internationalisation. EQUIS is the leading international system of quality assessment,

improvement and accreditation of higher education management and business administration institutions. Internationalisation is one of the overarching dimensions in the EQUIS framework and a comprehensive set of guidelines are provided to enable programmes to demonstrate a 'commitment to educating and preparing students and participants for management in an international environment' (EQUIS, 2009, 61).

Thus, with internationalisation high on the education agenda, the aim of this study is to investigate the need for cultural diversity in the curriculum within the Department of hospitality and tourism management and to explore the challenges of preparing indigenous students more appropriately for the multicultural working environment of today. Both management theorists (Kandola and Fullerton, 1998; Kreitner, 2004) and hospitality researchers (Gröschl and Doherty, 1999; Maxwell *et al* 2000; Devine *et al* 2007) highlight the benefits of diversity. A positive culturally diverse workplace is a workplace that celebrates its employees' cultures, that values and explores differences and that actively seeks to learn from other cultures in an inclusive and respectful manner.

Although the aim of this paper is to explore how cultural diversity may be embedded in the hospitality and tourism curriculum, the recommendations, perceptions and concerns of academics may be of interest to other educational disciplines. Ultimately embedding cultural diversity in the curriculum should help indigenous students to become more culturally aware of both the working environment and the diverse customer marketplace.

## **Background**

People are often ill-equipped to manage the heightened levels of uncertainty that are experienced in intercultural encounters. Devine *et al* (2007) highlight some perceptions from migrant workers presently working in the hospitality industry in Northern Ireland; they include:

"...always being told what to do"; "shouted at due to impatience", "misunderstandings in communication due to language difficulties". Indeed, in their 2007 study respondents stated that local staff would

make them do the 'dirty/heavier' jobs such as "setting up of the dining room" and "preparation and delivery of the breakfast trays to the bedrooms" (p. 344).

Faced with the need to deal with a diverse workforce and with the attendant myths and stereotypes that exist some authors have referred to the need for certain additional skills or 'diversity competence'. The qualities needed for effective cross-communication are described by McEnrue (1993) to include: the capacity to appreciate and communicate respect for other people's ways, backgrounds, values and beliefs; the capacity to be non-judgemental and a tolerance for ambiguity.

The ability to work effectively with people of both genders and diverse disciplines, cultures, races, religious and nationalities is one of the essential skills that graduates require but may often lack. Ellis and Sonnenfield (1994) stated that training current employees how to deal with diverse colleagues, can help shift many discriminatory attitudes. It can help, by breaking down the widespread ignorance which may exist among the present local workforce. With these issues in mind the aim of investigating the strategic development of the hospitality and tourism curriculum is to capitalise on the strengths and distinctive attributes of each individual (national and international) in the workplace and to develop a more positive multicultural working environment for all stakeholders.

### **Research design**

On considering the guidelines presented by EQUIS the authors developed a workshop on 'Cultural diversity in the curriculum' in February, 2009 within the Department of Hospitality and Tourism Management, University of Ulster, Belfast. From this seminar, a focus group of 16 academics represented the Department and agreed to come together to respond to a set of questions in relation to a proposed idea of implementing cultural diversity within the curriculum as part of a forthcoming revalidation process. The focus group guaranteed a collective response on ideas generated and allowed a consensus to be drawn from the expansive discussions raised among the participants.

The focus group session was organised in three parts. The first part (Table 1) consisted of yes/no/not sure response options (questions 1.1 through to 1.8) regarding academics' knowledge and preparation of cultural diversity in the hospitality and tourism workplace at present. The second part (Table 2) contained nine statements (2.1 through to 2.9) to evaluate the academics' perceptions and attitudes of cultural diversity in hospitality and tourism. Responses were based on a five-point Likert-type scale, where 1 = disagree strongly through to 5 = agree strongly. The third and final section was used to gain comments and suggestions of academics on what methods of assessment and delivery should be considered to help indigenous students develop their knowledge and skills with respect to embracing cultural diversity.

## Results and discussion

Regarding part 1 (Table 1), 'Academics' knowledge and preparation of cultural diversity in hospitality and tourism', when hospitality and tourism academics were asked "*have you taken any courses or attended any seminars on cultural diversity related topics within the last year?*" 75% (12) of hospitality and tourism academics responded "no" to the question. This finding may indicate that cultural diversity is not widely discussed or focused on among hospitality and tourism academics. However, as Hallinan and Khmelkov (2001) found, teacher training programmes fail to prepare teachers to meet the new challenges presented by contemporary society, it is becoming vitally important that academics learn new skills and pedagogies to prepare students to meet the demands of a culturally diverse workforce. When hospitality and tourism academics were asked "*have you taught any cultural diversity related issues within your academic programmes in the last year?*" 75% (12) of academics responded "no". McGlynn (2003) has suggested that teachers, particularly those working with a diverse cohort of students, need to be fully trained in critical pedagogy lest good intentions are sabotaged by a limited understanding and poor delivery of multicultural education. In answer to the question "*does the university offer cultural diversity related courses or workshops for staff?*" 87.5% (14) of the respondents stated "no" or were "not sure". This result indicates that institutions on the whole are unaware of the need for students to have cultural diversity education and training or

a more worrying idea may be that hospitality and tourism school or department academics do not receive communications about such developmental courses and or workshops. This is in agreement with the work of Kelly (2005) highlighting a dearth of staff development initiatives to facilitate academics in dealing with this pedagogical experience.

When hospitality and tourism academics were asked “*have you conducted any research projects related to cultural diversity in the past year*”? 87.5% (14) of respondents stated “no” to the question. This result may imply that hospitality and tourism academics are not interested in conducting research in cultural diversity issues or simply do not have the time to do so. In addition, in terms of awareness of cultural diversity initiatives being integrated into corporate goals and priorities for the educational institution, 75% (12) of academics replied “no” or were “not sure” if such integration existed. This may suggest that cultural diversity initiatives are discussed at strategic level but perhaps had not yet filtered through to School or Department level. Even more worrying is the idea that such initiatives are not communicated to staff members at teaching level.

Question:	Participants = No: 16		
	%		
	Yes	No	Not Sure
1.1 Have you taken any courses or attended any seminars on cultural diversity related topics within the last year?	25	75	
1.2 If yes, do you think any of these cultural diversity courses or seminars have been of benefit to you?	100	0	
1.3 Does the University currently offer cultural diversity related courses or workshops for staff?	12.5	75	12.5

Question:	Participants = No: 16		
	%		
	Yes	No	Not Sure
1.4 Have you taught any cultural diversity related issues within your academic programmes in the last year?	25	75	
1.5 Do we formally discuss cultural diversity on a regular basis in this Department?	37.5	62.5	
1.6 Have you conducted any research projects related to cultural diversity in the past year?	12.5	87.5	
1.7 Are cultural diversity initiatives integrated into corporate goals and priorities for the University?	25	12.5	62.5
1.8 Do you think cultural diversity awareness can be taught?	100		

Table 1: Academics' preparation of cultural diversity in hospitality and tourism curriculum

One hundred percent of participants believed that cultural diversity awareness can be taught and of those academics that undertook cultural diversity related courses or seminars in the last year, 100% (16) thought that such courses or seminars had been of benefit to them. This finding indicates that hospitality and tourism academics have positive attitudes toward education for cultural diversity, if only they were supported from a strategic level with more specialised multicultural developmental programmes. Banks (1994) states that continuous professional development can help educators in developing high expectations for students and to better understand the cultural experiences of all students. If universities and colleges are going to prepare students for employment in a multicultural working environment, it may be argued that best practice can only be enhanced if cooperation is acknowledged at the management level in terms of support in developing goals and philosophies for the benefit of both academics and students alike.

Part 2 (Table 2) illustrates the academics' perceptions and attitudes towards education for cultural diversity in the hospitality and tourism curriculum. This Table displays the degree to which hospitality and tourism academics agreed with all of the nine statements (2.1 through to 2.9) with regard to cultural diversity preparation for students.

Note. No = 16

Likert –type scale (1= Disagree Strongly through to 5 = Agree Strongly)

<b>Statements: Mean</b>		
2.1	Cultural Diversity is important and must be introduced to students before they work in the hospitality/tourism industry	4.41
2.2	Cultural Diversity should be addressed and discussed in all fields/areas of business on a regular basis	4.07
2.3	Hospitality/tourism programmes should focus more on cultural diversity issues pertaining to the workplace	3.96
2.4	Cultural diversity courses/programmes help hospitality/tourism students with their future career	3.80
2.5	Hospitality/Tourism Schools should offer more specific courses to teach students to be aware of cultural diversity	3.70
2.6	I am aware of what is expected of students on entering employment in a Multicultural workforce	3.48
2.7	I communicate and teach cultural diversity issues with students	2.97
2.8	This Department is responding to the challenge of preparing students to embrace cultural diversity	2.68
2.9	This Department has sufficient resources available to enable staff to teach cultural diversity issues to students	2.32

Table 2: Academics' perceptions and attitudes of education for cultural diversity in the hospitality and tourism curriculum

Among these nine statements, most of the hospitality and tourism academics agreed strongly that *“cultural diversity is important and must be introduced to students before they work in the hospitality and tourism industry”* with a mean score of 4.41. This may suggest that hospitality and tourism academics would like to encourage more cultural diversity education and training for the entire department. In addition, most of the hospitality and tourism academics scored the statement *“cultural diversity should be addressed and discussed in all fields or areas of business on a regular basis”* as the second most important statement with a mean of 4.07. Both of these results support the fact that hospitality and tourism academics are very aware of the importance and demand of education for cultural diversity among hospitality and tourism students prior to commencing work in the hospitality and tourism multicultural working environment of today. The academic respondents were in least agreement (2.32) with the statement *“this school or department has sufficient resources available to enable staff to teach cultural diversity issues to students”*, closely followed by disagreement with the statement *“this department is responding to the challenge of preparing students to embrace cultural diversity”* with a mean score of 2.68. The low mean score value allocated to these two statements suggest that although academics realise the importance of indigenous students receiving education for cultural diversity, they are concerned that they themselves are not prepared or supplied with the correct academic environment or resources to deliver education for cultural diversity to meet the students’ requirements (see Table 2). In the light of current and anticipated hospitality and tourism service trends and population mobility, faculty level development activities for staff should reflect the continually changing cultural diversity inherent within a pluralistic society and ensure planned rather than incidental integration of cultural concepts in the hospitality and tourism curriculum. This issue is argued further by Bruce (2006) in stating that the narrow economic model of education is flawed, as the education system exists not just to prepare students for work in today’s market, but also to inform staff and students alike about the [diverse] market and to encourage critical thinking about the marketplace. Perhaps a cultural-awareness development scheme supported at management level would be a good starting point as a vehicle for both student



and staff integration and communication abilities across cultural diversities.

In part 3 academic comments and suggestions were sought regarding cultural diversity education. The participants were asked three specific questions:

- Q1. What is this Department doing by way of diversity teaching and learning practices at present?
- Q2. In your opinion what content/learning outcomes could be incorporated into hospitality/tourism programmes in preparing students for employment in a multicultural working environment?
- Q3. What methods of assessment(s) should be considered to help indigenous students develop their knowledge and skills on embracing cultural diversity?

In response to question 1, "*what is this Department doing by way of diversity teaching and learning practices at present?*" although the main response was '*no learning practices addressing cultural diversity at present*', some respondents emphasised that staff are made aware of multicultural issues as and when they arise as a problem in the teaching of programmes. However, it is confirmed that much more could be done to integrate and embed cultural diversity into hospitality and tourism programmes of study. In response to "*what potential content and learning outcomes could be incorporated into education for cultural diversity in preparing indigenous students for employment in a multicultural working environment?*" academics were forthcoming with ideas such as, communication styles and norms, learning tolerance, dealing with cultural differences and recognition of individual rights. These suggestions for potential learning outcomes complement the qualities needed for effective cross-communication as described by Mc Enrue (1993).

Academics in the study also provided suggestions for methods of assessment and delivery to help indigenous students develop their knowledge and skills of embracing cultural diversity. Their

ideas included study abroad trips, placement opportunities, work experience, case studies, role-play exercises, discussion of news items and film analysis. As Eisner (1998) suggested searching for the one best teaching method is a waste of time. Clearly, many of the above approaches could be used collectively and involve interaction with other people (for example role play exercises and case study approach for group work among [diverse] class peers) which may improve both the quality and enjoyment of learning. Kirk (1999) highlights that such cooperative learning [group work] as an educational strategy and classroom management technique is applicable to all cultures reducing prejudice towards other ethnic groups. Other authors as Schank and Cleary (1995) recommend the use of case-study approach and the use of the Internet. The discussion of news items and film analysis may be an excellent approach to foster critical thinking among students as there are many cross-cultural dimensions portrayed in modern films, for example, in 'To Kill a Mocking Bird', 'Mississippi Burning', and 'City of God'. The emphasis on critical thinking is also considered by Shanahan (1995) who makes the point that increased cross-cultural learning should lead to the student's ability to empathise, that is, to experience other's values, goals and presuppositions as if they were their own.

### **The case for cultural diversity in the curriculum**

Although education for cultural diversity is supported by government initiatives (Department of Education and Learning, 1997; Higher Education Funding Council for England, 2004; Qualifications and Curriculum Authority, 2009), it is noticeable that it is a difficult and complicated area to sustain within the curriculum. From this study, education for cultural diversity means an education which aims to educate people equally and help people get along with each other peacefully, that can be achieved through the implementation of educational policies, curriculum design and effective teaching strategies. Ongoing strategic development in this area is therefore important, to address and embed cultural diversity initiatives with both local students and industry organisations. As a result of this investigation a module of study 'Cultural Awareness' was developed and incorporated as an 'optional' module at final year (level 6) within the Department of Hospitality and Tourism Management in 2009/10. Indeed cultural diversity/awareness may also be relevant to other

programmes of study, for example within all business type subjects within the Ulster Business School, as many businesses today are facing difficulties in achieving goals and business objectives due to cultural barriers and misunderstandings within their teams. Many business organisations are also trading globally and need to negotiate effectively with partners, suppliers and customers from other cultures. The cost of doing this is high so it makes sense to ensure that success is not threatened by cultural misunderstandings. As a future recommendation we hope to further this study by examining the student perception of cultural awareness in the curriculum. It is anticipated that the more we promote quality education with culturally responsive educational practices today, the more harmonious our world should become for future generations.

### **Conclusion and wider implications**

Key results from this study show that most of the hospitality and tourism academics agreed strongly that *“cultural diversity is important and must be introduced to students before they work in the hospitality and tourism industry”* with a mean score of 4.41, suggesting that academics would like to encourage more cultural diversity education and training for the entire department. In addition, most of the participants scored the statement *“cultural diversity should be addressed and discussed in all fields or areas of business on a regular basis”* as the second most important statement with a mean of 4.07.

These results strengthen the opinion that both students and academics would be more culturally aware in dealing with multiculturalism dilemmas if they received more education and training on cultural diversity and/or multiculturalism. This belief should be acted on by embedding cultural diversity issues into the hospitality and tourism programme. A cultural-awareness development scheme is proposed as a vehicle for improving the ability of both students and staff to integrate and communicate in culturally diverse contexts.

This study has generated a number of implications for embedding cultural education in the curriculum. Corporate goals must include supportive initiatives in the deployment of technological and financial resources to empower academics in the design of appropriate

pedagogic materials and media to aid education practices for cultural diversity to all students. Adopting new approaches to teaching and learning that respect collective wisdom and experience; encouraging student mobility; and using multiple assessment criteria will all help students to appreciate internationalisation and diversity. Some suggestions put forward by academics on methods of teaching and assessment included: study abroad trips, placement opportunities [international], work experience, case studies, role-play exercises, discussion of news items and film analysis.

To conclude, it is imperative for hospitality/tourism programmes to offer cultural diversity education for their indigenous students. Students will progress to become managers of the future in a multicultural climate so their educational grounding must prepare them to integrate across cultures at work.

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## **Understanding Law, State and Society: a practical pedagogic perspective**

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### **Introduction**

For the majority of law students the decision to study law is driven by the desire to become a solicitor or barrister, and their vision of themselves as graduates is often very traditional. The creation of a single honours law degree at Ulster has provided the Law School with the opportunity to create new modules to develop student insight into the role of law in society, and to expand their view of the vocations open to them post-graduation. Law, State and Society is one such module, developed as a 10 credit point first year module in line with objectives outlined during the law degree's validation process, to make first year law teaching more oriented towards 'law in context' and give it more of a 'socio-legal' flavour. The approach adopted within this module, which ran for the first time in 2008-09, encouraged student engagement and active participation in the learning process, as advocated by Graham et al (2007) who state that "a diverse body of educational research has shown that academic achievement is positively influenced by the amount of active participation in the learning process" (p.234). This note outlines the innovative nature of the module content and course delivery, and utilises student feedback to evaluate the extent to which the module objectives were achieved. It concludes with some thoughts on the role of academic staff in encouraging student engagement.

### **Module content**

The module aims to fulfil the brief of addressing 'law in context' by highlighting issues of current controversy where there exists obvious potential to bring to bear not only legal but also political, economic, sociological or other social-scientific forms of analysis. A principal objective is to open up discussion so as to get behind the technical analytic elements of any of these disciplines in order to generate discussion and critical thought on basic issues of social justice and the core connections between law, state and society. A

second objective is to situate discussions on the local connections of these elements within another set of potential discussions as to the connections of the local with the global. Inherent within this is the idea that the module should remain responsive to contemporary controversies and so it is expected that the course content will vary largely from year to year. A third objective is to ensure high levels of teaching expertise on the issues addressed, facilitated by either having the teaching team teach to their research interests, or by bringing in specialist outside speakers. Typically, the module would aim to include guest presentations for 2 or 3 weeks of the module, and, in support of the research specialisations of the teaching team, use films, documentaries and/or reports for the remaining weeks. To these ends the module has included the following thematic content from 2008-09 to 2010-11, the specific material of the 'lecture' session being complemented by some required and recommended reading.

## **Films**

The use of films as an educational resource is well documented both within law (Greenfield et al, 2001) and beyond it (Buchanan and Huczynski, 2004; Billsberry and Gilbert 2008; Smith, 2009; Ambrosini et al, 2009). Films chosen for the module have been balanced between the more 'traditional' law films, specifically demonstrating various workings of the legal system, and others that have been chosen to encourage debate in a wider context, illustrating less obvious connections between law, state and society. All films are followed by directed discussions and small group work feeding back into large group discussion. The films have included 'M', (*M*. 1931. Fritz Lang. Germany: Vereinigte Star-Film GmbH.) which deals with a serial child-killer in 1930's Germany being held to a form of popular justice by his criminal peers. This film stimulates discussion on key areas such as the rule of law, sovereignty, and the legitimacy of justice mechanisms. The film 'Twelve Angry Men' (1957, Sidney Lumet, USA: United Artists) has also been used, and is followed by discussion on the themes of the institutions of democracy, jury trial, social stereotyping, gender stereotyping and the nature of evidence. The showing of the films 'Hotel Rwanda' (2004, Terry George, UK/South Africa/Italy: Miracle Productions) and 'Judgement at Nuremberg' (1961, Stanley Kramer, US:



United Artists) has enabled directed discussion on the themes of international law and justice, the role of the UN, the institutions of the UN, patterns of globalisation and global justice, the meaning of genocide and the manipulative power of film.

### **Guest speakers**

The use of guest speakers has been a particularly successful aspect of the module. Speakers have included representatives from the Northern Ireland Association for the Care and Resettlement of Offenders (NIACRO) and Youth and Victim Support, each with different perspectives on aspects of victimisation, and speaker presentations have been followed by exercises and discussion on the themes of criminality, social exclusion, voluntarism, intentionality and access to justice. We have also had specialist presentations by the NI Human Rights Commission, the Committee for the Administration of Justice, the Children's Law Centre, and the Public Interest Litigation project, followed by directed discussion on the nature of human rights, the local qualities of human rights, the propriety of a bill of rights for Northern Ireland, and the role of law in protecting individual and group rights. Other topics built on some of these themes and have included issues of access to justice, international law and global political hegemony, and the understanding of, and need for, developing human rights protections in NI. Students were also given a presentation on the issue of university tuition fees by Professor Richard Barnett, allowing them to develop a legal framework around what is generally perceived to be an economic and political issue, at a time when the Minister of the Department of Education and Learning (DEL) was finalising his consultation paper on the subject. Finally, the NI Education Minister, Caitríona Ruane gave a presentation on the issue of post-primary transfer arrangements. This was preceded by small group discussions on the research reports and policy documents related to transfer arrangements and was followed by a lively debate between students and the Minister.

### **Reports and Documentaries**

As the module was running in 2007-08 the 'Eames Bradley' report on 'The Past' in Northern Ireland was published, amidst considerable controversy. The teaching team led a presentation on the report

and its reception by the Northern Ireland public, followed by directed discussion on issues addressed by the report such as 'Memorialisation', 'Recognition payments', 'The Legacy Commission' 'Education' and core interrogation of the supposed need for measures to address directly 'the past'. These discussions were also linked to discussions which arose from the viewing of the film 'Hotel Rwanda'. The film 'Judgement at Nuremberg' was used in 2010-11 to set up discussions on dealing with the past, including proposals to deal with the past in Northern Ireland, and this was followed by a guest presentation by Denis Bradley, co-author of the Eames-Bradley report, and a student-led debate. Documentary material was also used to address the issue of capital punishment, through a showing of the BBC NI documentary 'Last Man Hanging' (*Last Man Hanging*, 2008, BBC2, September 8, 9pm) which charted the circumstances surrounding the murder of Pearl Gamble and the subsequent trial, appeal and death sentence given to Robert McGladdery, the last man to be hanged for murder in Northern Ireland. This was followed by a debate between students and the director of the BBC documentary, Stephen Douds, and led to small group discussions on the issues arising from this debate.

## **Module teaching and learning arrangements**

### **Team Teaching**

As a way to develop the depth and breadth of the course, it was decided that the two lecturers involved in the module would team-teach, rather than each teach for three weeks of the six. While team teaching arrangements can be more resource intensive, in that it allocates two members of staff to the same teaching slot, the teaching team agreed to be credited with a reduced teaching allocation for this subject. This compromise reflects the strong view that team-teaching would provide students with a number of benefits including the legitimacy of contrasting academic approaches to topics as a means of understanding that the core of academic practice is cogent argument, rather than resolution or agreement, as well as requiring the lecturers to be responsive not only to the students but to each other, creating a greater vibrancy to the class discussions. This approach to the module encourages students to "actively explore ideas confidently with others; and learn to value

perspectives other their own” (Rush and Balamoutsou, 2006, cited in Trowler, 2010 p.1).

### **Large group sessions**

Because of the basic (in the sense of foundational) nature of the topics the module deals with, it was decided not to follow the standard practice of splitting the large lecture group of between 65-110 students into small seminar groups, but to maintain the integrity of the group and have an integrated lecture/seminar approach. There were several reasons for this decision:

- so that the students might have a sense of themselves as being part of a large conversation about their own place and role as the next generation of lawyers to take on the task of forming and administering the justice system in Northern Ireland, and to have the further sense that this is not a matter isolated from global political conditions;
- so that the students through large group interaction might get to know each other better and generate a sense of the ‘class of 2009/2010/2011’;
- To maximise the possibility that the fullest range of contribution to this conversation should be heard by everyone in the group, in particular since the exercises and discussions generated were directed towards opening up a sense of exploration and debate, rather than to tying down technical answers to particular questions as is more usual in law teaching.

### **Small group sessions**

In order to combine the benefits of small group teaching, in terms of accommodating the lively interactive input of a small group of people on a limited theme, with the benefits sought through keeping the large group together, the class was split into smaller groups to discuss a directed theme distilled from large group discussions. Each group was then invited to give feedback to the large group, in turn generating a wider discussion. The division between, and time devoted to, large and small group teaching varied from week to week. Some weeks, for example, began with guest presentations,

followed by large group discussions, and then smaller groups were used to develop deeper discussions which were fed back into a large group discussion. The fluidity of the format enabled the teaching team to respond to the level of interest generated in the topics under discussion, and to facilitate the most successful forms of student engagement with the issues.

### **Student evaluation**

Students were made aware that Law, State and Society was a new module, being taught in a slightly different way from traditional law modules and focusing on different skills and techniques than their core modules. The teaching team sought qualitative feedback on the module alongside standard module evaluations. This feedback took the form of general questions inviting all students to critically reflect on what they felt to be the most positive and negative features of the module and on how the module could be further improved. Feedback overall was very positive, covering a range of issues.

### **Group participation**

Encouragingly, the overwhelming majority of the students commented favourably on the group participation aspect of the module. While identifying the requirement to speak out in a large group as often intimidating, the majority of students felt that this aspect of the module was positive. In particular, a number of evaluations suggested that learning to speak in this environment boosted confidence, allowed for more views to be expressed and facilitated greater interaction. A small number of evaluations, however, stated that it was harder to ask questions in a larger group, although these students still identified the aspect of group participation as a positive feature of the module.

During the large group sessions there was often a disparity between the volume of contributions made by some students, which tended to reflect greater contributions made by the part-time students as compared with full-time students, a point highlighted in the evaluations. This was an aspect of the large group discussions the lecturers were aware of, and attempted to deal with through small group discussions which then fed-back to the larger group, as well as encouraging the 'younger' students to make more contributions, with the latter feature identified by students as being positive. The

small group work within the larger group was particularly well received, and evaluations reinforced this, with most stating that this was a positive feature of the course. Groups were allocated according to the themes identified by the students in the large group discussions, and students then elected to join whichever group discussion was of most interest to them. As the students did not sit within their usual seminar groups, over the course of the module they were able to interact with a greater range of students. This was also seen as being a positive feature, allowing them to hear different opinions. Others related this advantage beyond the legal issues within the course, such as ease of interaction with other students within and outside class. The feedback element of the small group sessions was also identified as being positive. This aspect of the course was also used by the teaching team to counteract the reluctance of some students to participate.

### **Team teaching**

The evaluations were uniformly positive about the team teaching aspect of the course, providing students with access to contrasting academic styles which was seen as making discussions more interesting.

### **Nature of the course**

The evaluations revealed that the use of media material was overwhelmingly popular, providing a means of bringing different topics to life. The use of presentations was generally considered to be enjoyable and informative, but inevitably some presentations were felt to be better and more relevant than others, and one student felt that some of the presentations were too much like 'lobbying'. Gradually a bank of reliably interesting and engaging outside speakers is being developed.

Overall the nature and content of the module were very well received, and evaluations suggest that the main objectives of the module were achieved.

### **Teaching team evaluations and conclusions**

#### **Module content**

The design of the module is that it should be responsive to issues

of current interest and/or controversy to engage the students in debates to which they are already attuned because of wider media attention. The content seemed to be received well or less well depending on two principal factors, one predictable and one not so predictable.

Predictably the interest of the students varied according to their perception of the qualities of the outside speakers who were brought in, and although reactions varied (according to the feedback) it is of course important to get the best possible external contributors, and to work with them on an appropriate presentation for the group (as regards length, content, interactive elements, and so on). With this in mind, the guiding factor remains our commitment to the material that we would like to see addressed.

Less predictable was the indication from the evaluation that a high proportion of students really did not like addressing issues about Northern Ireland, finding them either 'boring' or 'too sensitive' and much preferred the wider considerations of international law, global justice, etc. This does not of course dictate an automatic pandering to this view, but does give pause for thought as to the sensitivities of the (mainly local) student group, topics to be covered, and how best to cover certain topics.

A further advantage that can be identified was in highlighting the existence of the law degrees to a wider audience in Northern Ireland, in particular for those organisations approached to provide guest speakers who were unfamiliar with law provision at Ulster. It was also particularly encouraging that all of the guest speakers commented positively on their experiences of presenting to these law students, and the quality of the student contributions to the discussions. These networks of support are expected to generate ongoing interest from guest speakers and relevant governmental and voluntary sector organisations in the further development of law at Ulster.

The use of films and documentaries was also regarded by the teaching team to be a successful innovation, facilitating and encouraging students to develop their thinking on, and discussions around, different topics.

While the content was necessarily focused on 'legal' issues – broadly interpreted – the module demonstrates that innovation in course design can exist even within traditional, technical and professionally oriented subjects. Law remains a very traditional degree, with elements that require to be included to meet the demands of related professional bodies. Traditional teaching and assessment techniques will always be required within this subject, but the ability to innovate within this framework provides a complementary space for students to reflect on the very formal and technical issues they grapple with in other core modules, and to locate the need for legal knowledge beyond the standard goal of 'pass/fail'. There were no guarantees that this module would work as well as it has, or at all, but a broader vision of how knowledge can be shared suggests that, regardless of subject, calculated risks in course design are worth considering.

### **Course teaching and learning arrangements**

Overall, as the evaluations demonstrated, the module has been well received by students, and met the objectives set by the teaching team as regards benefits to the students:

- Students responded well to the different teaching methods and to the team teaching technique; comments were universally positive on this point,
- Students participated in large and small group discussions to a much greater level than is generally the case in core, first year modules. Indeed, the teaching team felt that the level of student engagement with the material was one of the most successful features of the module, and there was a definite sense that having the groups organise around themes each week (meaning that the groups changed from week to week) kept the interaction between students fresh.
- The development in overall willingness of the students to participate in large group discussions from the first to the final week was striking.
- The idea that the class would develop an overall sense of itself did seem to be gradually realised, and it was gratifying to read

in the evaluations that students became more aware of a wide range of opinions and had the chance to encounter a much wider range of fellow students than the normal seminar structure allows.

## Conclusions

For the teaching team this module constitutes a particularly enjoyable and energising teaching experience, and one that we would be committed to continuing and developing in future years. Clearly academic staff have a role to play in student engagement. As Umbach and Wawrzynski state, “faculty staff do matter. The educational context created by faculty behaviours and attitudes has a dramatic effect on student learning and student engagement” (2005, p. 173). Efforts devoted to innovation and student engagement may enhance both the teaching *and* learning experience, energising both staff and students alike. We would also argue that the benefits of Law, State and Society – in terms of developing student participation and confidence in larger groups – can contribute positively to student participation in other modules, and in this sense the innovation has a broader reach. It is difficult to predict a cross-over appeal of this method to other disciplines but in general terms, the approach adopted here is closely aligned to the first of Krause’s ten ‘working principles’ for enhancing student engagement, namely to “create and maintain a stimulating intellectual environment [in order to] stimulate discussion and debate, exploration and discovery” (2005, p. 12). Although it is difficult to separate out the nature of the content from the teaching arrangements put in place to deliver this content most effectively, it is striking that the innovations in teaching arrangements met with almost universal approval while the content met with a more mixed (although generally positive) response.

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## Senior Student Tutor (SST) workshops and their impacts upon first year examination performance

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### Introduction

Senior student tutors in the School of Environmental Sciences (SES), Ulster represent a form of vertically integrated peer tutoring similar to schemes first established at Glasgow Caledonian and Napier universities (Maguire *et al.*, 2003; Chirnside, 2007). Student-mentoring initiatives have a long history and were embedded in the Peer Assisted Study Sessions (PASS) programme at the University of Manchester, which was based upon the Supplemental Instruction (SI) model pioneered by the University of Missouri-Kansas City in the early-1970s (Packham and Miller, 2000; Topping, 2005). PASS/SI is an externally franchised and moderated scheme, which recruits pairs of (often non-subject specialist) students to act as peer leaders. These volunteers organise seminars and help to facilitate student-centred/group learning in an informal environment, often across a University wide spectrum of programmes. The scheme is focused upon failing modules; utilises feedback from leaders to teaching staff, and allows for regular meetings between PASS mentors to share their experiences (Hurley *et al.*, 2006; Ody, 2008). There is a growing body of literature in support of this type of student-to-student intervention (Ashwin, 2002; Glynn *et al.*, 2006), or what Boud *et al.*, (2001, p.4) called the process of: “students learning from and with each other”. However, as Parkinson (2009, p. 381) acknowledged, analyses of the effects of peer-assisted learning (PAL), “in the context of the HE system of the UK and Ireland (remain) relatively sparse”.

Our in-house scheme is different but no less ambitious and follows a path based upon constructivist theory. Focusing upon high risk assessment procedures (university examinations), it utilises senior student tutors to organise module specific revision workshops. The tutors share their experiences and shape the local learning environment by helping first year students to process information so that they can construct their own knowledge and understanding, revision strategies, and exam preparations (Longfellow *et al.*, 2008;

Condell and Yogarajah, 2010; Ning and Downing, 2010). In so doing, the SSTs look to foster interaction and co-operation between and with different cohorts; establish a strong, inclusive, collegial spirit within the School, as well as improving the educational experiences and academic performances for mentor and mentee alike (Stout and McDaniel, 2006).

First year students in the SES are enrolled upon a range of environmental science, geography and marine science honours programmes, as well as an associate bachelor's degree (ABD) in environmental studies. They study a common curriculum with six modules (containing four examinations) taken from earth, physical and social science based subject areas, together with a generic academic skills toolbox. Their transition to tertiary level education is supported by induction activities including pre and post registration contact sessions and an initial week long activity period, including an international residential field trip. This transforms into a studies advice tutorial system, and a longitudinal focus upon acquisition of personal transferable skills. Generic to all programmes, these include essay writing, education in the avoidance of plagiarism, referencing techniques, personal development planning and the use of Ulster's online Personal Development System. Additionally, students are involved in careers planning through the preparation and delivery of oral presentations, with all exercises being supplemented by detailed assessment and feedback.

With this background in mind, we set out to analyse the value of using peer-mentors to facilitate the preparation of first year students for their end-of-semester university examinations. Our aim was to determine if the SSTs were having a beneficial effect in an area of perceived weakness; the three hour, essay writing/multiple short answers, assessment.

### **Description of project**

As part of our extended induction process, in the final third of semester one, the SES employs several final year/postgraduate students to take part in peer mentoring activities. Individuals are recruited after a formal application procedure requiring submission of a curriculum vitae and covering letter outlining their suitability for the post. SSTs will have demonstrated good academic performance

in earlier years, are anticipating, or have gained high degree classifications (upper second/first), and have a sound knowledge and understanding of their subject programmes and taught modules. Crucially, each has at least five semesters of experience of the teaching and learning practice in the School. They act, therefore, as older and (nominally) wiser tutors. Our SSTs receive a small remuneration and undertake a training programme arranged in association with Ulster's staff development unit. Sessions are focussed upon small-group teaching, i.e. typically between 10 and 15 students per group, which allows each tutor to conduct a series of three, fifty minute-long workshops. With no fixed agendas, sessions are interchangeable and can include complementary (and formative) activities such as: description and discussion of VARK (Visual, Auditory, Reader and Kinaesthetic; see Fleming) learning styles, revision techniques, preparation and planning for examinations, discussion on the role of reading, evaluation of marking criteria, reviews of past papers, formulation of short answer plans, writing of practice essays, and/or observation and discussion of 'model answers'.

The workshops are a smaller-scale and shorter variation on the PASS/SI/PAL schemes previously mentioned. Our SSTs are subject specialists who can discuss modular work/course material with level four students but, more importantly, look to share their own received learning strategies. In an informal environment, they offer hints, tips and guidelines, which they have developed from their own experiences. SSTs are not expected to teach or provide 'definitive answers' but are encouraged to lead level four students to a point where they can construct their own understanding of what is required in both their exam preparations and responses to the questions posed. Attendance for first year students is compulsory for all enrolled on degree programmes in the School (including combined subjects students) and sessions are timetabled into the curriculum. Workshops are organised by the SSTs, although support materials, advice, and thrice-semester briefing/training, de-briefing/critical reflection sessions are undertaken in conjunction with the member of teaching staff overseeing the scheme.

## **Results**

Project evaluation was based upon a mixed-methodological

approach involving both quantitative and qualitative techniques (Tashakkori and Teddlie, 2003). For the purposes of this case study, statistical data relating to progression from level four, and covering the reference period from 2006-09 were analysed. Examination results sheets data were compared with attendance records compiled at workshops during the same period. Subsequent rates of success and failure amongst workshop attendees and non-attendees were collated. Investigation focussed upon numbers of examination failures (defined as <40 per cent) and first year module average marks as indicators of performance. Coursework marks were not part of the analysis. Qualitative feedback was received from first year students via an anonymous survey resulting in 68 questionnaires being completed and a response rate amongst workshop attendees (in 2008/09) of 79 per cent. Temporal and logistical constraints meant we were unable to ascertain the views of absentee students, not least because the confidential nature of the research negated their identification.

Any attempt to establish a concrete relationship between student-to-student intervention and outcome has to be treated with caution (Smith and Norton, 2007, p. 3), although it is acknowledged that longitudinal studies offer a way forward (Capstick, 2004). Given this caveat, Table 1 illustrates the relationships between first year attendance, or lack of attendance, at workshops conducted by our SSTs and their subsequent performances in examinations held from 2006-09. At the School level, we observed a steady increase in overall levels of attendance and in the average number of workshop attendances. First year student audience numbers increased from about 35 to above 80 per cent, and the average number of workshop attendances grew from 1.7 to 1.9 per student. This growth occurred as the scheme became embedded in the practices of the School, as tutor-training techniques evolved, and as those students who were mentored became mentors. These positive signs were reinforced by the numbers of examination failures amongst attendees at SST workshops falling from 1.2 per student in 2006/07, to 0.5 per student in 2008/09. In contrast, and in spite of the numbers of workshop absentees having fallen to less than 20 per cent, examination failures amongst this group remained consistently higher. In 2007, an average failure rate of 2 exams per first year student was recorded amongst absentees, although two years later this figure

Degree Programme	2006 -2007				2007 -2008				2008 -2009				2006 -2009			
	Wkshop att n & %	Avr att (ps/3)	No. exam fails (ps/4)	First year mod. avr. %	Wkshop att n & (%)	Avr att (ps/3)	No. exam fails (ps/4)	First year mod. avr. %	Wkshop att n & (%)	Avr att (ps/3)	No. exam fails (ps/4)	First year mod. avr. %	Wkshop att n & (%)	Avr att (ps/3)	No. exam fails (ps/4)	First year mod. avr. %
<b>Environmental Science*</b>																
Attendees	19 (68)	2.5	0.3	63.9	9 (43)	1.5	1.1	50.0	23 (85)	1.8	0.6	53.3	51 (67)	1.9	0.7	55.7
Non-Attendees	9 (32)	0	2	44.5	12 (57)	0	1.5	45.3	4 (15)	0	2.0	36.3	25 (33)	0	1.8	42.1
<b>Geography*</b>																
Attendees	13 (21)	1.6	0.4	55.4	36 (56)	1.5	0.4	57.6	39 (85)	1.5	0.2	57.3	88 (51)	1.5	0.3	56.8
Non-Attendees	48 (79)	0	1.2	49.5	28 (44)	0	0.9	47.0	7 (15)	0	1.3	41.1	83 (49)	0	1.1	45.9
<b>Marine Science</b>																
Attendees	3 (43)	1.7	2.7	50.6	0 (0)	0	0	0	16 (80)	1.7	0.8	50.0	19 (48)	1.1	1.2	33.5
Non-Attendees	4 (57)	0	2.5	31.8	13 (100)	0	1.5	45.3	4 (20)	0	1.0	53.3	21 (52)	0	1.7	43.5
<b>ABD in Environmental Studies</b>																
Attendees	6 (35)	1	1.3	41.3	10 (77)	2.3	1.2	43.6	8 (73)	2.5	0.3	59.8	24 (59)	1.9	0.9	48.2
Non-Attendees	11 (65)	0	2.1	42.5	3 (23)	0	0.3	46.3	3 (27)	0	1.0	39.0	17 (41)	0	1.1	42.6
<b>School of Environmental Sciences</b>																
Attendees	41 (36)	1.7	1.2	52.8	55 (49)	1.3	0.7	37.8	86 (83)	1.9	0.5	55.1	182 (56)	1.6	0.8	48.6
Non-Attendees	72 (64)	0	2	42.1	56 (51)	0	1.1	45.9	18 (17)	0	1.3	42.4	146 (44)	0	1.4	43.5
Total for SES	113 (100)				111 (100)			104 (100)					328 (100)			
Total (2006-09)																

Sources: Attendance registers at workshop sessions/annual Ulster results sheets, 2006-09

**Key**  
 att. = Attendance; No. = Number of; mod. = module; ps/3 = per student out of 3 workshops; ps/4 = per student out of 4 examinations

Table 1 : Attendance at SST Workshops and First Year Examination Performance, 2006-09

had fallen to 1.3 per student. Nevertheless, and in spite of the failure rate in both groups falling by 0.7 exams per student, workshop absentees were still between two and three times more likely to fail an examination than their attending counterparts. Non-attendees drawn from the environmental sciences programme, for instance, could expect to fail two examinations (out of four), whereas geography attendees only ran a one in five chance of failing an examination.

In terms of module average marks the discrepancy between the attendees and absentees was even more remarkable. By 2008/09, environmental science and geography workshop attendees were recording mean module marks between 16 and 17 per cent higher than their counterparts who had failed to attend any workshops. ABD attendees at 2.5 workshops per student; the highest average attendance recorded, were faring better still, with two degree classifications of marks separating them from the absentees. This was a significant turnaround from one year earlier, when ABD workshop attendees had performed worse than the absentees. Equally, marine science students were counteracting the general trend with attendance at workshops (whilst still being a positive experience), having a less marked influence on examination performance. These anomalies can be explained by yearly variations in terms of the commitment, confidence, inter-personal skills and performances of individual tutors, as well as fluctuations in the overall quality of individual year-cohorts.

## **Discussion**

At face value, there appeared to be a cause and effect relationship between engagement with the peer mentoring scheme and enhanced examination performance. Results showed that, between 2006 and 2009, a non-attendee would suffer almost twice as many examination failures as someone who went to the workshops. The message was, therefore, straightforward; participate in SST workshops, prepare for exams, and reap the academic and financial benefits of gaining higher marks and avoiding supplementary assessment requirements.

On reflection, however, the picture is more complicated. Of note, was the finding that amongst workshop attendees, only 16 per



cent went to three sessions and the modal level of attendance was just one workshop. Around 50 per cent 'dipped into' the first session and then failed to engage further. Formal feedback showed that this decay effect was due to first year students' prioritising other coursework commitments (accounting for 56 per cent of explanations), and to a lesser extent: sickness (16 per cent). Informal comment from the SSTs suggested the lapses were due to a lack of any marked assessment associated with the workshops. Critical evaluation also revealed that: "the Senior Student Tutorials ... were ... focussing too much on simple study and revision skills". This meant that a small number of students considered the workshop exercises to be repetitive and/or irrelevant (14 per cent; second highest ranked response to question: 'what was disliked about the scheme?'). This suggested that the examination preparation messages espoused by the tutors were already well rehearsed and embedded within first year students, prior to their arrival. Anecdotal discussion revealed that some students who started attending workshops and then stopped were amongst the most talented and self-confident members of their cohort. In one sense, they were the epitome of independent learners taking the view that additional workshop attendances would be superfluous to their particular needs.

Following on from this, a second discussion of those attending two/three workshops confirmed that the SSTs were engaging with highly motivated, risk-averse students; conscientious individuals who were responding positively to their elder tutors. For example, when first year students were asked: 'what they liked most about the SST scheme?' many stated that they enjoyed what was done in the workshops and how it was delivered by their peer mentors. Together in a discursive, group sharing environment, these first years felt comfortable in being able to learn from an older and more experienced individual (18 per cent of responses). Moreover, they liked the less formal atmosphere fostered by their tutors, believing that they had greater freedom to ask questions and discuss examination issues (18 per cent). Above all, being given the chance to 'practice' their answering technique before the real thing (the exam) took place was judged to be paramount (27 per cent). As a result, first years gained confidence from the scheme, were less

intimidated (than in a formal staff-led session), and were empowered with an arsenal of revision and examination techniques, which they could subsequently use to their advantage. In this instance, it can be argued that benefits accruing from going to most/all of the workshops were related to study skills being refreshed and reinforced in a formative pattern, thus contributing to successful examination performance.

Whatever the real explanation it is clear that we face additional challenges. First, the scheme has to explore ways of embracing the (nominally) weaker, non-attendees (who were drawn mainly from the marine science programme). Second, we have to find a means to improve the rates of extended engagement with all three scheduled workshops, since it is important to reward the diligence shown by senior student tutors in preparing activities. To this end, we are considering introducing an assessed element along the lines of a 'mock' examination exercise to encourage greater participation.

## **Conclusion**

There are no major reasons why this type of senior student tutor scheme (operating as part of a broader studies advice tutorial system) cannot be transferred to other Schools and Faculties in Ulster, or beyond. Schools suffering from progression problems that can be traced to weaknesses in examination performance could benefit. Equally, those seeking to improve collegiality and interconnectedness, within and between different programme, and year, cohorts can benefit from adopting this locally controlled, low-cost, small-scale, peer-mentoring, model. Special attention must, however, be given to encouraging attendance and then publicising the inclusive and formative nature of attending all scheduled workshops.

## **Resources**

There are several qualified PASS/SI Supervisors in Ulster, including the author, willing to disseminate information on the schemes mentioned in the article. In addition, there is a Peer Assisted Study Skills 10 credits module available under the auspices of the CPPD (Certificate in Personal and Professional Development). Useful web-sites include: The International Center for Supplemental Instruction [www.umkc.edu/cad/si/](http://www.umkc.edu/cad/si/) (accessed 09 May 2011)

and Students as Partners [www.campus.manchester.ac.uk/tlso/studentsaspartners/peersupport/pass/](http://www.campus.manchester.ac.uk/tlso/studentsaspartners/peersupport/pass/) (accessed 09 May 2011).

## Acknowledgements

This project was funded by a Student Transition and Retention (STAR) fellowship. Additional support was provided by the School of Environmental Sciences at Ulster. I am particularly indebted to the students and tutors who engaged with the process, Claire Guyer, and two referees for their comments.

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## **Promoting Reflective Engagement with Ethical Issues using Values Exchange: Case Studies from Computing and Management**

Norman Creaney, University of Ulster  
and Douglas Foster, University of Surrey

### **Introduction**

A commitment to ethical standards of behaviour is widely accepted as an essential ingredient of professional status. Professional bodies – such as the British Computer Society and the Chartered Management Institute (CMI) – typically reinforce this through their codes of professional conduct.

Recent developments serve to underline the critical need for ethical accountability in both computing and business professionals. For example:

- corporate/business scandals such as Enron (BBC 2002);
- viral marketing such as the Bavaria Beer ambush (Tucker 2010);
- privacy concerns such as those relating to Google Street View (Barnett 2010);
- publishing of sensitive information by organisations such as Wikileaks (*BBC 2010*).

Indeed, corporations have been challenging moral boundaries since the South Sea Bubble (Ferguson, 2003).

Of key significance in developing ethical sensitivity, is that, while introducing students to big corporate actors and to the global stage in which responsibility – or its lack – is played out, they do not come to see it all as theatre in which they have no part. The purpose of learning is to inform their own current and future engagement, and it is not only headline cases such as Enron and Wikileaks in which the professional needs to exercise ethical judgment and sensitivity. The ability to think clearly about human issues, respect for the views of others, the ability to negotiate and navigate conflicting viewpoints

and interests – these are the fundamental building blocks of many professional lives. Indeed it might be argued that they are also important generic employability skills.

Higher Education is recognising the need for ethically aware professionals. Spradling et al. (2009) report that in a survey of 700 undergraduate computer science programs in the United States, 87.6% of respondents said that they included social and professional ethics in their computing curricula. When asked, 90.9% of respondents stated that they “believe that [social and professional] ethics should be incorporated into the undergraduate CS curricula” (p.154). Further, Sims and Felton (2006) report a “renewed interest and focus on teaching business ethics” (p. 297) amongst Business schools, in response to recent corporate scandals. Professional bodies are also actively promoting the inclusion of ethical awareness training within the higher education curriculum (British Computer Society 2006, ACM/IEEE-CS Joint Curriculum Task Force 1991).

This paper presents case studies in the teaching of ethical awareness to computing students and to business and management students. A software tool called Values Exchange (VX) was used to support this teaching and a survey-based evaluation was carried out. The results are presented and discussed.

### **The value exchange software**

Spradling et al. (2009) report that lectures, group discussion, case studies and readings are the most commonly used pedagogic tools for the teaching of ethical issues to computing students. Other instructional methods were used to a lesser extent, but the survey did not directly ask about e-learning. This has been similarly echoed in the teaching of business and management students. We note Biggs' (2003) caution against being seduced by technology for its own sake, and are mindful of the need to remain focused on our primary purpose – education. However, before progressing any further let us outline the VX educational tool.

Values Exchange (Seedhouse 2009) is a web-based software system that is designed to help users explore attitudes to various issues. It is a flexible system in that it might be used in a variety of

different ways and for a range of different purposes. The description that follows reflects the way it was used in these studies.

A *scenario* that evokes or exemplifies an ethical issue is entered by the tutor. It should embody an ethical choice and include a *proposal* that resolves the choice. For example, the following proposal was attached to one of the scenarios used in this study.

“It is proposed that Gary McKinnon is extradited to the USA for his alleged crimes.”

Students then read the scenario description and are taken through an onscreen dialogue that allows them to express views in a structured way, by manipulating graphical objects. This includes *ring analysis* and *grid analysis* (Seedhouse 2009).

After entering their views into VX, students may browse the reports, which present graphical summaries of all the views that have been entered in relation to the current proposal. The statistics may be presented in a variety of different ways and broken down by a variety of different demographic categories.

Figure 1, below, shows the ring analysis screen. This allows the user to indicate the importance of aspects of the scenario such as *dignity*, *results* or *the law*, by adjusting the sizes of the corresponding wedges in the chart.

Figure 2, below, shows part of a summary report relating to ring analysis. It shows, for example, that those who agree with the proposal are more likely to cite the law as an important aspect of the scenario, than those who disagree with the proposal. Those who disagree, on the other hand, are more likely to cite human rights.

RINGS ANALYSIS

My feelings about this proposal:

RINGS

Dignity
Human Rights
Law
Results
Worries
Your Feelings

KEY

Use the checkboxes to add or remove wedges

- Dignity
- Human Rights
- Law
- Results
- Worries
- Your Feelings

What is the most important right in this case?

- The right to equal respect
- The right to the truth
- The right to privacy
- The right to be free
- The right to be safe
- The right to choose
- Other right (explain in textbox above)

How confident are you that the case proposal gives this right?

- Extremely
- A lot
- A bit
- Not at all

Figure 1: Ring Analysis

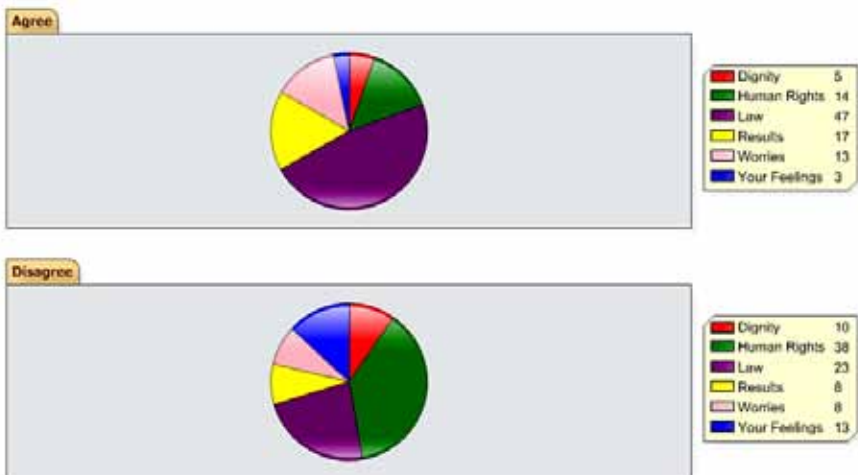


Figure 2: Summary Report



Summary reports such as these enable students to reflect upon their own views in relation to those of their peers, and to drill-down into the data on the basis of a variety of demographic categories.

## Methodology

We have a case of two small scale pieces of research being undertaken in different parts of the United Kingdom, at slightly different times, with approximately the same size samples, and attempting to evaluate the same educational technology - the Values Exchange (VX). This presented an opportunity to exploit a shared, if somewhat staggered, research moment. There is need for qualification and contextualization in terms of how comparable these two student environments are, yet with careful attention this should not obstruct “the moment” being exploited well.

## The Student Groups

Two groups of students participated in the study, broadly categorised as:

- Computing Students;
- Business & Management Students.

Key information about the student groups is given in Table 1, below.

Computing Students	Business & Management Students
<p>These were second year undergraduates at the University of Ulster, enrolled on one of the following courses.</p> <p>BSc (Hons) Computing</p> <p>BSc (Hons) Computing (Digital Games)</p> <p>BSc (Hons) Computing with Business</p> <p>BSc (Hons) Computing with Education</p> <p>All these courses include a compulsory period of industrial placement during year three.</p> <p>VX activities did not contribute to student grades. Participation in the evaluation was encouraged but not required.</p> <p>27 students participated in the study.</p> <p>12 students completed the evaluation survey.</p>	<p>These were final year undergraduates at the University of Surrey, enrolled on one of the following courses.</p> <p>BSc (Hons) Business Management</p> <p>BSc (Hons) Retail Management</p> <p>BSc (Hons) International Hospitality</p> <p>BSc (Hons) Tourism Management</p> <p>Most students, but not all, had already completed an industrial placement year.</p> <p>VX activities did not contribute to student grades, but participation in the evaluation was an integral part of the programme.</p> <p>17 students participated in the study.</p> <p>14 students completed the evaluation survey.</p>

Table 1: Key Information about Student Groups

While the computing students comprised the larger group, the numbers of students in each group who actually completed the respective evaluation surveys was similar. The proportionately higher number of business students may be related to the evaluation being an integral part of the programme.

The computing group had no significant, explicit prior higher education teaching of ethics. For the business group, on the other hand, the VX experience was embedded in a wider collection of activities called the *Ethics Academy*.

### **The Values Exchange Sessions**

Each group had two sessions relating to the VX. Sessions were approximately one week apart.

- In *session 1*, students were asked to read the scenarios and express their views on the ethical choice using the VX graphical tools – after which they were asked to browse the VX reports that summarise the views of the whole group.
- In *session 2*, students were asked to look again at the VX reports – following which they were asked to complete the feedback survey.

Further details of the organisation of the VX sessions and the experiences of the respective student groups can be found in Creaney (2011) and Foster (2010d).

### **The Feedback Survey**

Each group completed a VX Feedback Survey designed to assess the impact of the VX experience on students' reflective engagement with the issues. This survey consisted of the items listed in Table 2, below. The variations in wording used for each group are reflective of local context – but are sufficiently minor to allow reasonable comparison of the results.

Students were constrained to respond to each item on the scale: *Strongly Agree, Agree, Disagree and Strongly Disagree*.

Computing Students	Business & Management Students
1 I was surprised at some of the views, about the scenarios, that my classmates recorded in Values Exchange.	This question was not used with this group.
2 I have given further thought to some of the scenarios and related issues since using Values Exchange.	Influenced by using the Values Exchange, I have given further thought to the scenarios and/or related issues.
3 I have discussed some of the scenarios and related issues with my friends since using Values Exchange.	Influenced by using the Values Exchange, I have discussed the scenarios and/or related issues with my friends.
4 I have changed my opinion about some of the scenarios and related issues since using Values Exchange.	Influenced by using the Values Exchange, I have changed my opinion about the scenarios and/or related issues.
5 Using Values Exchange has made me more aware of IT related ethical issues.	Using Values Exchange has made me more aware of ethical thinking for business.
6 I do not think that that an IT professional really needs to be aware of ethical issues.	I do not think that a business professional really needs to be aware of ethical issues.
7 <i>This question was not used with this group.</i>	I have found my thinking about ethics clearer since using the Values Exchange.

Table 2: The VX Feedback Survey

Note that a number of the business student items start by saying “Influenced by using the VX”; this is simply to differentiate their self-reporting from the rest of the *Ethics Academy* experience.

### The Scenarios

In preparation for session 1 a collection of scenarios were created, in VX, by the respective subject tutors. Although some of the scenarios relate to specific laws there was no intention to teach the legal specifics – simply to engage the target student groups with issues that relate broadly to their subject area.

The computing scenarios are summarized below.

- Sally’s Choice – In this conflict of interests Sally is torn between telling the truth to a client about potentially dangerous software, and her loyalty to her employer (Creaney 2009c).

- Tom's Benign Virus – In this scenario, Tom, a medical researcher, creates a computer virus. He intends to release the harmless computer virus in order to shed light on the spread of harmful human viruses (Creaney 2009d).
- Gary McKinnon: Dangerous Terrorist or Harmless fool? – This tells the true story of the computer hacker Gary McKinnon, who hacked into US military computers, and is now the subject of a US extradition request (Creaney 2009b).

These were summaries of – and included HTML links to – publicly available materials (Creaney 2009a) on Google Knol.

The business scenarios are summarized below.

- The Boot Room and the Meaning of Life: top scientists and artists have gone to the Arctic to thrash out ways we, as individuals and businesses, can fight climate change; but is all this really worth it if we can't even keep in good order the little things of life like the locker room between the Arctic outside and the room where the discussions takes place? (Foster, 2010a).
- The Office of Fair Trading: it's just the Principle of it. The success of the Office of Fair Trading has been brought into question in terms of whether it actually manages to achieve its very end; but is it important symbolically, regardless of measurable effectiveness? (Foster, 2010b).
- The Gulf of Mexico Oil Slick: who should clean up? This scenario focuses on the impact of large corporations, but at the same time gets students thinking about other actors who may have had some responsibility for the incident, including the contractors, and even changes in US government drilling policy (Foster, 2010c).

## **Results of the Feedback Survey**

The results of the feedback survey are given in Table 3, below.

The pattern of responses is similar in both groups, and supports the view that VX is successful in promoting reflective engagement with

		Strongly Agree	Agree	Disagree	Strongly Disagree
1 I was surprised at some of the views, about the scenarios, that my classmates recorded in VX. (computing group only)					
<i>computing:</i>		0	9	3	0
<i>business:</i>					
2 I have given further thought to some of the scenarios and related issues since using Values Exchange.					
<i>computing:</i>		1	9	2	0
<i>business:</i>		0	11	3	0
3 I have discussed some of the scenarios and related issues with my friends since using Values Exchange.					
<i>computing:</i>		1	9	2	0
<i>business:</i>		3	9	2	0
4 I have changed my opinion about some of the scenarios and related issues since using Values Exchange.					
<i>computing:</i>		0	7	4	1
<i>business:</i>		1	4	9	0
5 Using Values Exchange has made me more aware of IT related ethical issues.					
<i>computing:</i>		4	6	2	0
<i>business:</i>		3	7	4	0
6 I do not think that that an IT/business professional really needs to be aware of ethical issues.					
<i>computing:</i>		1	2	6	3
<i>business:</i>		0	0	0	7
7 I have found my thinking about ethics clearer since using the Values Exchange. (business group only)					
<i>computing:</i>					
<i>business:</i>		5	5	4	0

Table 3: Results of the Feedback Survey

ethical issues. The partial response of the business students to item 6 seems a little puzzling – it is the only item with less than a full response. It is possible that the negation in the statement – “I do not think ...” – caused some confusion.

## Conclusion

Most students found the VX software can be used with a minimum of instruction, although there were a few comments from the business group, which indicate some usability difficulties. We feel that these relatively minor issues could be overcome by some brief support materials or activities.

The two groups experienced the VX in somewhat different contexts. For the computing students the VX was a relatively isolated experience, with few introductory or supplementary activities. For the business and management students, on the other hand, the VX experience was embedded within the wider Ethics Academy. Despite this, the results of the feedback survey are uniform across both groups – and supportive of the view that VX is successful in engaging students in the issues.

One of the goals of the teaching was to develop *reflective* engagement in the students. This would be indicated in cases where students:

- continue to think about issues beyond the formal class;
- continue to discuss issues beyond the formal class;
- occasionally change their views in response to further analysis.

These correspond to items 2-4 on the feedback survey and it is encouraging to see that the response pattern suggests a high degree of reflective engagement. The responses to item 4 (change of opinion) are less positive than the other two but we note that it is not necessary to see a high rate of opinion change, it is sufficient that it happens sometimes. These responses suggest attributes that are likely to be desirable across a range of professions and, it might be argued, contribute to student employability in a more general sense.

The use of VX was only one aspect of the teaching reported here; another aspect relates to the particular scenarios used. Some dealt with topical issues (e.g. Gary McKinnon, Gulf of Mexico oil slick) – others dealt with more specific professional situations (e.g. conflict of interest) – others deal with more generic legal and regulatory

issues (e.g. Office of Fair Trading). Some were lengthy and took considerable time and effort to create – whilst others were short and were created relatively quickly. They were designed, above all, to be engaging and relevant to the target student groups. It is our considered view that effective scenarios do not require a huge effort to create.

In addition to the results of the feedback survey, it was evident to both subject tutors, from informal communication and interaction with students, that they found the VX experience largely engaging and enjoyable. Taken as a whole, our findings would seem to suggest that the VX is a valuable tool in the development of ethically sensitive practitioners.

### **Acknowledgements**

We are grateful to SCEPTRe, University of Surrey, for allowing us to use their computing resources, and to David Seedhouse for his assistance in the use of the Values Exchange software. We are particularly indebted to Professor Norman Jackson for his part in helping to make this collaboration possible. We are also grateful to Karl Stinger for his helpful comments on an early draft of this paper.

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## Student involvement in course design and self-assessment

*Roger Moore, Professor Emeritus,  
St Thomas University, Canada*

In a delightfully provocative video entitled *Changing Education Paradigms*, Ken Robinson suggests that our current educational system is modeled on the mindset of the nineteenth century industrial revolution in which productivity and standardization are key elements. He proposes a new education paradigm, learner centered, in which critical thinking and creativity predominate. There have been many attempts recently to bring innovative, non-standardizing elements into the education system. Community Service Learning (CSL), Problem Based Learning (PBL), Inquiry Based Learning (IBL), Life Long Learning (LLL), and Chaos Theory (CT) might be included among these innovations, many of which can be linked closely to student self assessment.

If, indeed, teachers are to instill in learners a desire to embark upon and derive pleasure from a life long learning experience, then, from the earliest moment possible, teachers should be helping learners to develop a series of teaching and self-assessment systems, that will allow learners to teach and assess themselves rather than to come to the authority figure of the teacher for both knowledge and assessment. Unfortunately, this novel idea runs against the grain of many current education systems in which the educator, the authority figure, performs the multiple roles of judge, jury, and – like it or not – well-meant executioner.

In an article entitled “In the Beginning was the Picture, and the picture was in the text ...” I attempted to demonstrate how my own career moved from the early, transmissive, authoritarian model, through the interactive role, to finally arrive at the teacher not only as facilitator but as constructor of a do-it-yourself guide to self-assessment and thus self-sustainability in student learning. I started this teaching trend towards the end of my teaching career by inviting learners, in the first year of their university studies to participate in the construction of their own courses.

I would begin each first year class by circulating a tentative outline and asking questions like “What do you **expect** to learn in this course?” and “What would you **really** like to learn in this course?” Once the discussion was under way, I would then ask: “How would you **like** to learn what you want to know?” There is not much flexibility at the first year language learning level, but even so we would discuss possible changes to the course outline. We also discussed the value of the A, B, and C grades: what did an A grade represent? What did B and C grades represent? Then I would ask the students what sort of examination system they would like. Did they want an oral examination; did they want a single test (worth 100%) at the end of the course; how many tests **did** they want? We would usually agree upon a fairly flexible marking system: a test worth 20% every two weeks (six tests over a twelve week term) with the learners permitted to discard their lowest mark. This meant that sickness, or a tough work schedule, or a test conflict with other courses, was no longer a problem as learners could miss one test, and still maintain their grades. We also built in flexibility by allowing students to work on a project in the final month of term. This project, which might consist of a presentation, an essay, an online portfolio, or an oral examination, would be designed by the student and, if approved, would replace one test. Students who were highly self-motivated benefitted from these options.

I continued these discussions with learners at the second year level, and by third and fourth year, learners were very comfortable with them. While the grammar courses remained trapped in a more conventional paradigm, there was room for innovation in the translation and culture courses. In the translation course, for example, we moved from traditional literary translations to an open system in which students could choose and follow their own topics online and submit individual translation portfolios. We made similar changes in the culture courses and where we had previously demanded set texts and set topics, we moved into the world wide web and encouraged students to find and research their own topics. Thus, for example, in the four week module on Pablo Picasso, students were encouraged to choose their favourite paintings (or themes or periods) which they studied and analysed in depth. Some compiled online portfolios; others made web-assisted in-class

presentations. A new cultural course, Mexico Online, allowed students to build webpages instead of writing essays. There was a central text, but the questions from that text were researched online and the results were incorporated, week by week, into the web pages.

The second and third year courses also saw the start of student self-assessments. While I continued to grade the work at the second year level, students took on two slightly different roles. One was to check and correct each other's work; the other was to assess their own contributions to specific courses in terms, of understanding, critical analysis, preparation, work input, work outside the classroom, online research, and thoughtful participation. If their own self-assessment differed substantially from mine, we would meet and discuss where and how the discrepancies occurred. Students were also invited to choose and write a brief description of the work achieved by the one student in the class who, in their opinion, epitomized the type of self-teaching and learning and assessment to which they aspired. I was told on many occasions that these assessments of self and others were among the hardest tasks.

I constructed self-assessment rubrics and asked questions specific to each class. Initially, I must admit I had doubts as to whether or not students would answer these questions honestly. I did not need to worry: as students became accustomed to what for many was a radically different engagement in their work and study, they welcomed this chance to take control of their own educational environment and to become involved in courses designed to allow constant student input and to create instant feedback. However, as I soon discovered, total honesty was expected from the facilitator as well and once dialog replaced monolog, there was no turning back.

In the fourth year courses, students were ready and able not only to help in the planning of their instruction but also to actually assess and grade their own work. I would return student essays, in class, with all the comments carefully made, but with no grade attached to the essays. "Go away." I would say to the students. "Read the comments. When you have read them, come back to the next class with a sheet of paper commenting on my comments and giving

yourselves an appropriate grade.” This system soon caught on and I was surprised to see that in many cases students gave themselves lower grades than the ones I had secretly assigned to their essays. They also became more and more involved in their work. Finally, I responded to student requests for more research work by co-designing, with the class, a course in which the students completed a single research paper in four installments of three weeks each. At the end of each installment, I would return a corrected, ungraded installment of the paper, and students would (a) read the comments; (b) write a commentary analyzing the grade they gave themselves; and (c) incorporate the suggested changes into the next installment of their continuing research paper. This system worked well and I would recommend it enthusiastically.

A brief word on the World Wide Web: some of my acquaintances continue to demand that students visit only the library for research purposes and they refuse to permit any work to be downloaded or quoted from the web. Google and Wikipedia and online research are all banned. I, on the other hand, believe strongly that we must facilitate web use. We must assist students by helping them to access better sites and by helping them to achieve the critical tools with which to evaluate the sites they are accessing. After access and evaluation come accumulation and organization (the traditional bibliography); then come analysis, interpretation, and critical judgment. Finally, we move to the reproduction of arguments, the challenging of arguments, and the development of new critical positions. All of this critiqued and assessed by the individuals themselves.

While doing some research for this brief statement of my own personal practice, I Googled student self-assessment and, within 0.15 seconds I got 4,460,000 results. I also generated lists offering not just discussions on student self-assessment (SSA) but rubrics, forms, examples, checklists, strategies, templates, questions, and questionnaires, all for student self-assessment. The contents of the first ten articles alone opened up a whole new world. I take the following statements from just two articles: student self-assessment gives “both students and teachers a raised level of awareness of perceived levels of abilities” (Coombes and Canning, quoting

Mats Oscarsson) and “Self-assessment is the most overlooked, yet possibly most valuable aspect of assessment for students at all levels and in all fields” (Bruce). I rest my case.

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