REFLECTIONS

Queen's University Belfast

Centre for Educational Development

June 2015

We are exceptional

Motivating Student Learning

By Dr Kate Exley, Independent Higher Education Consultant

Motivation is a means to achieving a goal rather than an end in its own right and what motivates each of us in different situations is often a peculiar mix of 'carrots and sticks'. From the literature on the topic we also garner the view that motivation can be a blend of intrinsically or extrinsically situated factors (Ryan and Deci, 2000). Intrinsic motivation arises from an innate curiosity and is driven by an enjoyment and desire to learn, it is often long lasting and self-sustaining – I characterise intrinsic motivation as "I want to learn". Extrinsic motivation on the other hand is externally driven by a need to achieve set goals, e.g. to get good grades in an exam or to get praise and recognition from a teacher or peers. There are strong links here with Behaviourist learning theory, in which the behaviour of learners is shaped through the application of rewards and punishments, (e.g. docking marks for the late hand-in of an assignment or the award of an award or prize). I characterise extrinsic motivation as "I need to learn".

There has been a number of studies in Psychology that have sought to explore the relationship between internal and extrinsic motivation and, in the workshop I delivered at Queen's on 19th May, I summarised the work of Edward Deci who had two groups of students play a puzzle game. The first group was paid for each puzzle they solved and the second group was not. Deci found that the first group stopped solving puzzles as soon as the payment ended whilst the second group carried on solving puzzles, finding it intrinsically interesting to

Dr Kate Exley

do so. It would therefore appear that extrinsic rewards may actually reduce the likelihood of developing intrinsic motivation. However, very strangely research has shown that in some circumstance extrinsic punishments may actually serve to increase intrinsic motivation – a study by Wilson and Lassiter (1982) observing children at play who were warned not to play with a particular toy, then appeared to find the toy more desirable – I think I might even have used this 'reverse psychology' on my own children trying to get them to eat vegetables! So the relationship between the two is not straightforward.

I am also reminded of the relevance here of the first 'learning theory' I ever learnt about as a new lecturer – that of Deep and Surface (Marton and Saljo, 1976) and Strategic Learning (Entwistle, 1981). Many readers will be familiar with this work on different approaches and preferences to learning – and remember that these terms of Deep, Surface and Strategic are not attributes of individuals,

About *Reflections*

Reflections is published once a semester by the **Centre for Educational Development** and provides a forum for discussing learning and teaching initiatives in Queen's. We aim to balance articles from the various support units within Queen's with contributions from academic staff and guest writers.

In this issue, we lead with an article by Dr Kate Exley on Motivating Student Learning, based on her recent workshop at Queen's.

We also include articles by two academic staff members, Dr Stephen Kelly from the School of English and Dr Brendan Murtagh from SPACE on successful and innovative e-leaning developments in their areas. Prof William Scanlon and colleagues from EEECS provides a detailed discussion and evaluation of the new system of electronic attendance monitoring which has been instigated in the School.

A number of developments in the student support areas of Disability Services and Careers are also highlighted by staff from those areas, and there is a preview of the important HE Review process due to take place in the University in November 2015.

Contributing to the next *Reflections*

We would very much welcome contributions for our next issue of *Reflections* to be published in autumn 2015. Contributions can take several forms:

- **Articles** on an aspect of teaching and learning or student support (generally 500–1,000 words);
- **Shorter "newsflash"** items, e.g. reporting on a recent event or advertising a new venture or up-coming event (100-200 words);
- **Responses** to previous articles or to recent developments in H.E.
- Contributions can be submitted via e-mail to Linda Carey, (**l.carey@qub.ac.uk**) or **e.mcdowell@qub.ac.uk** in the Centre for Educational Development.

Linda Carey, Editor of ***Reflections***.

indeed one person may adopt all three approaches at different times in different circumstances. However, students may display these approaches in any of the courses we teach and considering what motivates them is interesting. Is the Deep learning student motivated by the challenge of mastering a complex and demanding subject, is the Surface learning student motivated by the fear of failure and is the Strategic learning student motivated most by the rewards and recognition that accompany success?

Thinking about students in university we are told by Barbara McCombs (1991) that to achieve optimal motivation learners must –

- See education as relevant to their interests and goals
- Believe they have the competencies to achieve goals
- Take responsibility to define and accomplish own goals
- Understand the higher level thinking and self-regulation skills that lead to goal attainment
- Develop processes to encode, proces, and recall information
- Control emotions that affect learning and motivation
- Achieve outcomes that signal success

I would add another – "See and be aware of the progress being made towards goals." Hence the current interest in providing students with on-going formative assessment opportunities and constructive feedback.

Asking colleagues in the room about the aspects of course design that they felt motived their learners, we quickly identified some common themes –

- 'Real life' examples and illustrations (of theory)
- Links to future goals and career options
- Assessment – both as a pressure to put effort in and a reward for that effort
- Presenting work to others and being 'visible' in one's work and achievements
- Being able to see improvement and the opportunity to use new skills and knowledge
- The ability to choose options, specialist topics or modes of study

An additional factor that was a little uncomfortable to consider was the effect of an enthusiastic 'teacher' or 'mentor' on learner motivation – the notion that enthusiasm can be 'infectious' was widely acknowledged in the room but the implications of this were discussed further. How did we, as teachers, share our love for our subjects and our passion for our disciplines and research interests? Seeing ourselves as potential role models the teachers in the room noted the strategies they used – to show how they solved problems and overcame hurdles and sought to illustrate their own enthusiasm by providing examples from their own work and experience in order to personalise the subject and tailor their teaching to the interests of their learners.

Motivating students to engage with our disciplines and subject areas we may employ a number of tactics –

- **Novelty** "I haven't seen anything quite like this."
- **Utility** "This is something you will use all the time."
- **Applicability** "We will be applying this in the lab. later"
- **Anticipation** "So what is the next step?"
- **Surprise** "I bet this isn't what you were expecting"
- **Challenge** "This is quite difficult but worth the effort."
- **Feedback** "Try this, you'll find out if you really get it."

(Adapted from DeLong & Winter, 2002)

When discussing practical ways of 'motivating' students in different teaching environments (in small seminars, in large lectures, during on-line learning and in one-to-one supervisory situations) colleagues drew on their extensive collective experience to generate a set of excellent examples.

A summary of useful general strategies included –

- Define course goals and support learners to identify their own personal goals
- Use students' background knowledge and interests to frame new information
- Show how topics and materials are relevant to learners
- Provide opportunities for active engagement and experimentation
- Ensure a 'safe' and supportive learning environment
- Provide frequent and constructive feedback and opportunities to put feedback into practice
- Provide support and structure for independent learning

To close the workshop I shared a couple of case study examples that showed how structured student peer activities could be used to provide support for the development of independent learning. I see peer support as being the half-way-house between 'taught' and 'independent' learning and believe it can provide a route to developing learner confidence and self-management skills.

DeLong & Winter, (2002) *Learning to Teaching and Teaching to Learn Maths*

McCombs, B (1991) "Motivation and Lifelong Learning". Eudcational Psychologist 26 (2) p117-127

Ryan, R. and Deci, E.L. (2000). "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions". *Contemporary Educational Psychology* **25** (1): 54–67

Wilson, T. D.; Lassiter, G. D. (1982). "Increasing intrinsic interest with superfluous extrinsic constraints". *Journal of personality and social psychology* **42** (5): 811–819

Higher Education Review

by Jenny Ainsworth, Academic and Student Affairs

The mission of the Quality Assurance Agency (QAA) is to safeguard the public interest in sound standards of higher education qualifications and to inform and encourage continuous improvement in the management of the quality of higher education. In furtherance of this mission, QAA undertakes reviews of higher education.

QUB was last reviewed by the QAA in 2009, under the previous process of review known as Institutional Audit, where the review team awarded a positive judgement of confidence in the University's management of academic standards and of student learning opportunities.

Higher Education Review (HER) is the new method under which universities are reviewed. All members of the review team are drawn from other higher education providers and the team will also include a student reviewer.

HER is concerned with all programmes of study at undergraduate and postgraduate level, including postgraduate research awards. The review will look at all elements that contribute to the academic experience of students.

The benchmark for the review is the UK Quality Code for Higher Education which sets out various expectations that all providers of UK Higher Education are expected to meet.

HER consists of two phases:

Written submissions

The University submits a Self-Evaluation Document (SED) which includes information on the University, how it has progressed since the last review in 2009 and sets out how we meet the expectations of the Quality Code. The SED will be supported by extensive evidence collected from across the University. The Students' Union also has the opportunity to submit independently a Student Written Submission.

Visit

The review team scrutinises the Self Evaluation Document and supporting evidence and the Student Written Submission. The team will then come to the University for the review visit, which will last between 3-5 days, where they will meet with a selection of staff and students to gather more evidence and to test the statements contained in the Self Evaluation Document. We will not know exactly whom the review team would like to meet until closer to the time of the visit.

Reviewers are asked to make judgements on:

i. The setting and maintenance of threshold academic standards;
ii. The quality of students' learning opportunities;
iii. Information about higher education provision;
iv. The enhancement of students' learning opportunities.

The thematic element of the review is additional to the four core judgement areas. It does not receive a judgement from the team but QAA will analyse the review team's findings on the thematic element across all reviews and produce reports that highlight good practice and make recommendations for the sector. The thematic element for our review will be *Employability*.

A report is produced by the review team which contains judgements and is made publicly available. The outcome of the review will determine how both our current and prospective students and other stakeholders will perceive QUB in comparison to other institutions. An unsatisfactory judgement would have a detrimental impact on QUB's reputation in the UK and internationally, negatively impacting on our ability to recruit students effectively.

QUB and HER

QUB will undergo HER during week commencing 23 November 2015.

The Higher Education Review Project Group (HERPG) chaired by Professor David Jones and comprising representatives from Schools/ Directorates and the Students' Union, is overseeing the drafting of the SED.

We are now into a crucial time of preparation and all staff have a key part to play in ensuring a successful review. Since we will need to provide evidence of how the entire University is meeting the expectations of the Quality Code in the SED, it is important to ensure that all quality-related documentation is thorough, accurate and accessible. QAA will be scrutinising a wide range of documentation including meeting minutes, module and programme reports and specifications and external examiners' reports. Samples and case studies will be selected from across the University so please ensure all documentation is fit for purpose.

This is an important time for the institution and provides us with the opportunity to showcase what we do well, and how we continually strive to enhance our services to students.

More information will be available in the run up to the review and staff who are likely to meet the review team during the visit will receive full support and briefing. The HER team would also be happy to discuss the review in more detail with staff at department or faculty meetings.

Further information on HER and the QAA Quality Code can be found on the Academic Affairs website:

http://www.qub.ac.uk/directorates/AcademicAffairs/ProgrammeApprovalandReviewIncludingHEReview/HigherEducationReview/

GradeMark: enhanced feedback that makes a real difference

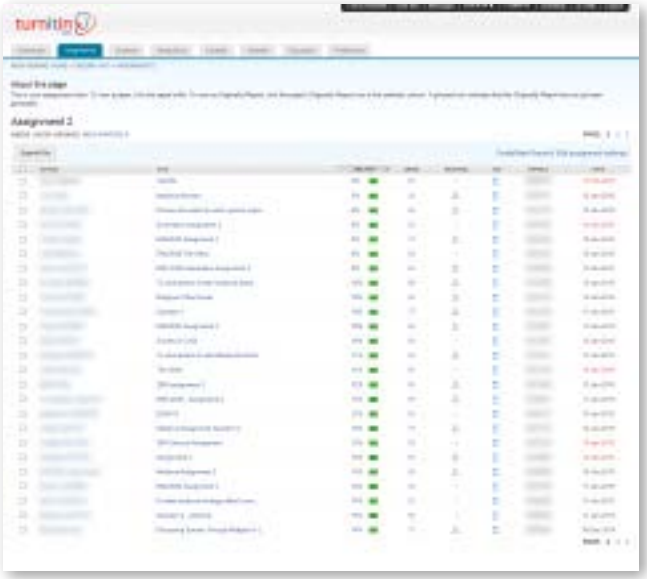
By Dr Stephen Kelly, School of English

I first encountered GradeMark as external examiner for English at the University of Huddersfield. When I bemoaned the limitations of Turnitin as a plagiarism checker with the exams officer for English at the School of Music, Humanities and Media there, I was immediately disabused of my assumptions: "TurnItIn is not a plagiarism checker!" but is in fact part of a larger suite of citation, assessment and feedback tools. As my colleague gave me a tour of GradeMark, my sense of the limitations of the feedback mechanisms we used to date at Queen's was reinforced.

It is assumed by some that enhancing feedback is a burden imposed by the NSS and other measures, and I heard a former colleague on occasion bullishly declare that students should *just know* why they garnered the mark they did. This, of course, is completely untrue. Providing students with useful and appropriate feedback is the final stage of a pedagogical arc which begins with the explanation, in week one, of any given module's learning objectives. For too long we have envisaged feedback as putting a cap on a module, with little sense of how feedback on one essay can inform a student's overall performance profile and development across his or her degree. Hence, when GradeMark became available at Queen's, I was extremely keen to pilot the platform at the School of English.

In 2014-15, we have been testing GradeMark on a Stage One and Stage Two module, with the assistance of colleagues at the Centre for Educational Development. The first-semester ENG 2040 Introduction to Medieval Literature saw around eighty students undertake two assignments via GradeMark; the second semester ENG 1006 had one hundred and forty students write two essays. Our current assessment practice involves students uploading scripts to QOL, which has regularly caused problems with file formats. Cash-strapped students often install the free Open Office platform but the .odt platform has limited compatibility and we have repeatedly warned students to use either .rtf, .doc. or .pdf formats – sometimes to no avail. When students do successfully upload their essays, they receive feedback via a web form on QOL. While this is a considerable improvement on previous feedback practices in English, the relationship between feedback and the essay being assessed remains abstract: having asked students about how they respond to feedback, they state that most often they just read the comment provided by the examiner and leave it at that. Few review their essays and almost none attempt to understand the mark they have acquired in relation to the School's assessment guidelines.

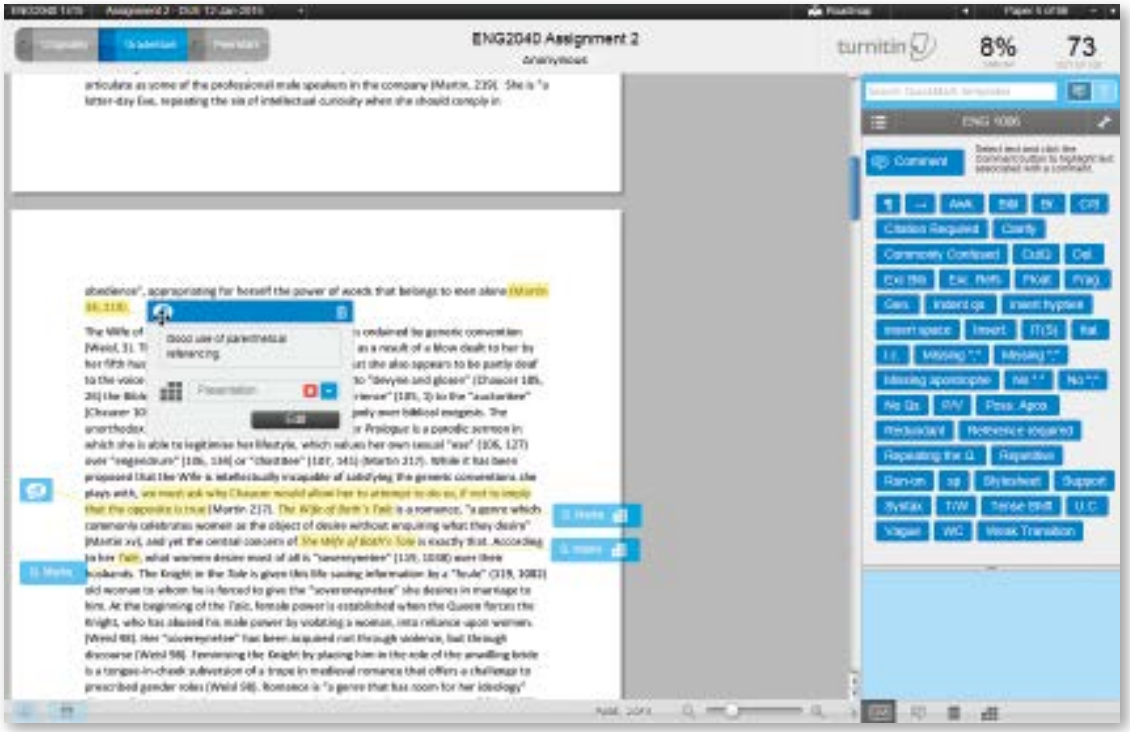
Class Homepage Assignment Screen



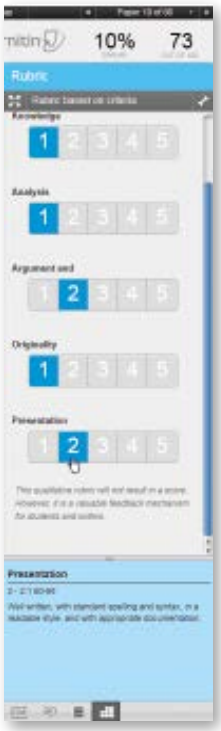
Assignment Inbox

The immediate advantage of GradeMark for students is that they can upload almost any file format they wish. GradeMark provides students with a preview of the file they've uploaded and they receive a receipt confirming that it was successfully uploaded, thus resolving a problem we had previously where students would occasionally upload incomplete drafts to QOL. In our reviews of GradeMark with students, they have highlighted this as a particularly welcome feature that mitigates the anxiety of assessment submission.

Examiners access essays in a module-specific directory and selecting an essay opens a marking window. The advantage of Grademark over other assessment mechanisms is immediately apparent: examiners mark up essays, which means that in addition to a qualitative general comment on the essay as a whole, students have both strengths and weaknesses highlighted on the script itself. If this sounds like a laborious business, the task is eased by the deployment of 'Quick Marks'. These are prefabricated comments, designed by the convenor and examining team, with a specific focus on technical



Script with Quick Marks



Rubric sidebar

aspects of writing, such as grammar, syntax, development of argument, use of citations, presentation, and so on. Examiners select a given sentence or paragraph and apply a Quick Mark where necessary, or they can write an open comment responding to a given point or issue.

Feedback has two further stages: once the essay has been marked up, a general comment is then produced. But in my view, GradeMark's most useful feature involves the calibration of marks according to the School's assessment criteria, under a menu GradeMark refers to as the 'Rubric'. Each Quick Mark can be mapped onto one or another of our assessment criteria, and as the essay is marked, the system collates feedback against each criterion. Criteria are banded between 1 and 5, where 1 applies to a 'fail' and 5 to a first class mark. This mechanism is particularly useful in cases of borderline marks. For example, where a student's essay has garnered a mark of 68 but has elements of first class work, mapping performances onto the Rubric allows an examiner to indicate which aspects of the essay (for example, 'analysis', 'argument', 'knowledge', 'relevance' or 'presentation') are first class, which upper second, and so on. This has usefully fine-tuned the sorts of marks I issue and has, I believe, made me a better, fairer examiner.

The marking process is a little more time-consuming than our previous practices, but the benefits for students are considerable. Responses to GradeMark have been universally positive and in some cases as an examiner I have seen students explicitly address problems highlighted in their first assignments in their second essay, with the result that their marks improve considerably. In the case of one ambitious and self-motivated Stage Two student, her first assignment was marked at 58 and her second at 73, as she had carefully addressed the structural and stylistic issues identified in her first assignment. When I met her after the publication of results, she stated, 'I couldn't have done it without GradeMark.' I can't think of a better justification for full implementation of the platform.

If and when that happens, it would be desirable to have GradeMark communicate effectively with our other VLE platforms: in other words, when a student receives her QOL login, that should function as her login to GradeMark too; when students sign up for modules, these should be auto-populated in GradeMark. Whether QOL and QSIS have this flexibility is open to question, but I can state with confidence that GradeMark is an educational platform which is genuinely fit for purpose.

The application of VoiceThread (VT) to large group tutorials

By Dr Brendan Murtagh, School of Planning, Architecture and Civil Engineering (SPACE)

VoiceThread (VT) is a web-based application that allows you to use media images, videos, documents and presentations as a basis of a discussion between lecturers, tutors and students (see http://voicethread.com/). It is especially useful for delivering online tutorials where there is a large group of students from different pathways on a single module. In Planning, we received technical support and development funding from the e-Affect team to pilot test the concept and have now mainstreamed it in our undergraduate BSc Planning programme.

Format of the VT tutorial

Voices, videos and images are effective forms of communication, especially for subjects such as Planning which are more visual, spatial and rely on a range of graphic media, maps and environmental perspectives. Students can access the information on their computer, tablet or mobile phone and make voice comments, type responses or even make a doodle drawing on the screen.

We initially designed four tutorials on a first year module (Spaces, Places and Plans) that involved students from Planning, Agri-food and Land Use, and Geography. These were conducted every second week and were interspersed with face-to-face tutorials. Each tutorial was effectively a 15-minute voiced-over set of PowerPoint slides formatted as a MP4 video file (although VT software will enable you to construct a range of formats for the presentation). This allowed us to embed short clips, pause, insert questions and leave space for responses. The images below are taken from a tutorial on conservation and heritage protection and the icons around the screen identify individual students and link to their (usually typed) contributions.

VT Screen for a tutorial on Conservation Policy in Northern Ireland

Participation and engagement

We evaluated the tutorials through a short e-survey, an analysis of usage patterns and a series of group discussions at the end of the module. There were around 12 students per tutorial and 6 tutorial groups that were subdivided by discipline. Interestingly, few students used the VT app to view it on a tablet or mobile phone with the vast majority watching on their PC (often with multiple reruns to deepen their understanding of the material). Taking the four tutorials as a whole, 42% (30 out of 72) made no comment at all and whilst the table below shows the average contribution was low, it did improve as experience and confidence with VT increased. In broad terms, participation rose to nearly seven comments per tutorial with the more engaging topics and better designed materials inviting higher participation levels (a mean of 12 would indicate that every student made approximately 1 comment per tutorial).

Tutorial	1	2	3	4
Mean	4.9	7.4	6.7	7.3

Student satisfaction

Students in general found the tutorials useful, effectively integrated with the lectures and well-paced. For example, 56% of respondents to the e-survey felt that they helped with their revision, 59% found the comments of other students useful and 50% indicated that they got more from each tutorial as they became more experienced with their use. Some of the qualitative comments also highlighted the flexibility, accessibility and ease of use of the resources:

> *I visited the tutorials each more than once, but just made one comment having researched beforehand. I liked engaging with new technology and liked that I could access the tutorial multiple times.*

> *It was clear, which made new topics easier to grasp than reading a paper for example.*

> *(I liked) the fact that I could go on and use it whenever I wanted. Also there was someone talking and not just having to read the screen.*

> *Had a week to do it, therefore not restricted by time (it was a) fresh way of learning.*

Some negative points, however, included that 69% of respondents felt that they were not sure what to write and found it hard to enter the discussion, and 69% said they preferred face-to-face tutorials. Others felt they were overlaboured or that they as students had little that was new to offer in terms of a comment:

> *I often took multiple re-runs before I had gathered enough information to make a comment.*

> *While I did find the VT tutorial interesting, I didn't partake in making a comment as the majority of the answers were the same and there was nothing really for me to add to them.*

> *Personally, I would prefer face to face tutorials as they would allow me to easily express my opinion. I think online tutorials are very time consuming and require internet access in order to present my comment/argument.*

> *The fact there was someone talking and information on screen at the same time, it could be confusing at times.*

Implications

Overall, VT provided an effective and flexible learning tool for our larger modules involving students on multiple pathways and we have extended its use at both Level 1 and Level 2. Students like the flexibility, its accessibility, especially as a revision tool, and find it comparatively easy to engage. As staff, we have also become more experienced in its use, moderating and stimulating the discussion and providing real time feedback to maintain engagement. It is comparatively expensive as the licence is around $1000 for 12 months and 500 individual users, so it makes sense to operate it at a School-wide or even Faculty level. It is easy to set up but obviously takes time and resources to assemble the initial materials.

The screencast literature stresses the importance of integration with other learning methods, including face-to-face tutorial and lectures, and on its own VT would be limited. However, in terms of engagement there was a comparatively high level of use of the case studies covered in the VT tutorials to answer examination questions, which was sometimes at the expense of reading the referenced texts (especially by weaker students). It was, for some, a shorthand revision method and there is a danger that if overused it could displace wider reading and critical thinking. Overall, our assessment would be that VT has significant potential as a tool in diversifying teaching, reaching students with different learning styles and capabilities, and covering material in a depth that may not always be possible in formal lectures.

Automating Student Attendance Monitoring

By Professor William Scanlon, Dr Simon Cotton and Dr Phil Hanna
School of Electronics, Electrical Engineering and Computer Science (EEECS)

Introduction

While it is not the only measure of student engagement, student attendance at lectures, tutorials and other events provides some indication of learning related activity. Poor attendance can be an indicator that a student has disengaged from their studies and so there is an important if not causal link between attendance and student retention.

From a student attainment perspective, many studies exist which demonstrate clear evidence of positive correlation between attendance and academic performance (Newman-Ford et al., 2008). A study into attendance and performance monitoring for first year students in Biosciences (Bevitt et al., 2010) has shown that early intervention resulted in improved attendance.

ActivCampus within EEECS

The School of EEECS has been investigating the use of attendance monitoring as a method of improving student engagement for a few years now (Hanna, 2009). More recently the School has been using ActivCampus, a wireless attendance monitoring system, to continuously and unobtrusively monitor and record student attendance in an effort to develop a more supportive, high quality learning environment. The technology allows the identification of students who are at risk of disengaging with their course through changes in their attendance patterns, providing both timely and targeted pastoral support and feedback to individual students about their attendance. The system was developed by EEECS staff and is being commercialised through QUBIS and has also been rolled out at the Ulster University.

The system has been operational within EEECS since the 2012/2013 academic year and extended year on year to the extent that it now covers nearly 800 first and second year Computer Science students. All first and second year modules are monitored with the system covering 13 different lecture theatres and laboratories such as Ashby GM/001 and DKB LG/115.

How it Works

The ActivCampus system is composed of a small key fob that students carry with them, coupled with readers that are placed in the rooms and areas to be monitored. The readers are networked to a server that creates a database of individual student attendance. The system is completely unobtrusive and uniquely captures both entry and exit times of students for timetabled events, regardless of the size of the class without any disruption or queuing, or input by academic members of staff. The system can accommodate lectures, laboratories or tutorial sessions which need to be taught twice (due to class sizes), including occasions they do not run concurrently. Module owners have the flexibility to allocate students to a particular occurrence of these learning events, or leave them open if preferred.

Students can see an overview of their attendance by module via a panel within their QOL homepage (Figure 1). The attendance panel utilises a traffic light system which can be set at modular level to quickly indicate good, average or poor levels of attendance. This can be expanded to view individual learning events (Figure 2), and the student can also click a simple hyperlink which will auto-authenticate their details through to the ActivCampus software where they can view and interrogate their own attendance record (Figure 3). The aim was to make the information easily accessible to and shared with students to encourage them to take professional ownership of their own attendance.

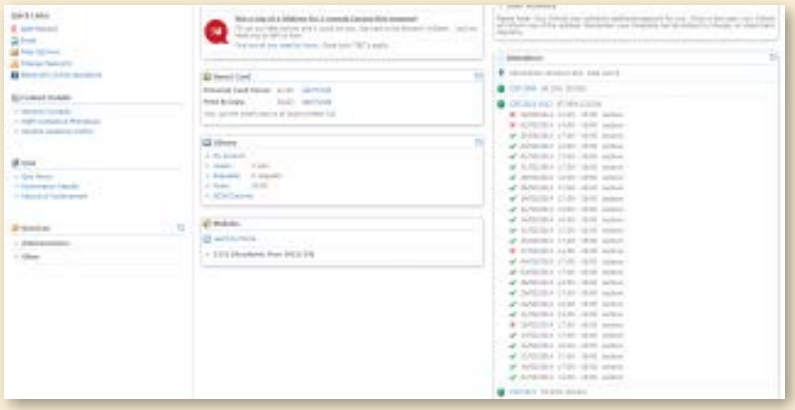


Figure 1: Example QOL Summary Attendance Panel (bottom right)

Figure 2: Expanded QOL Attendance Panel

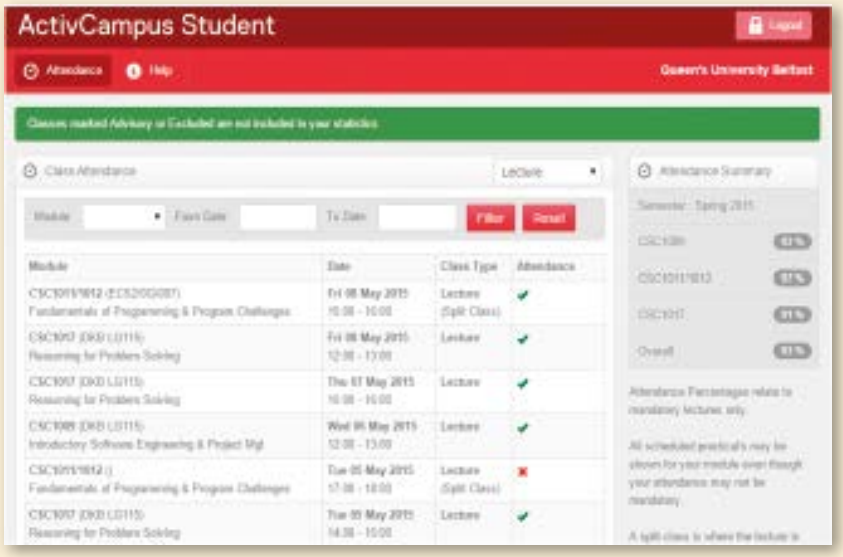


Figure 3: Student Page on ActivCampus

Effect on Attendance, Results and Withdrawal Rates

The average attendance across Stage 1 and Stage 2 has improved since introducing the system. It should be noted that while the introduction of attendance tracking has had a positive impact on attendance, other factors such as increased entrance grades and the appointment of new staff may also have had a positive effect. In the academic year 2013/2014 the system was not activated until Semester 2 and the attendance average was 45% across all Stage 1 and Stage 2 modules. For the current academic year (all of Semester 1 and until the Easter break of Semester 2) the average lecture attendance is 60%. Table 1 summarises the average attendance by academic year and stage. Note that these figures are a lower bound on attendance since the carrying of the key fob is *not* mandatory.

Year and Stage	Ave. Lecture Attendance	Change
2013/2014 Stage 1	52%	
2014/2015 Stage 1	68%	+31%
2013/2014 Stage 2	38%	
2014/2015 Stage 2	51%	+34%

Table 1: Summary Attendance by Year and Stage

Improving Student Attainment

One of the advantages of using electronic attendance monitoring is that the effect on student attainment can be readily analysed. Figure 4 shows the correlation between individual student lecture attendances across all relevant modules versus their examination average mark across the same modules. These results are for the Stage 1 cohort during Semester 2 of 2013/2014.

The results in Figure 4 are consistent with the previous year as there is a positive and direct relationship between average attendance and performance with the total cohort correlation coefficient greater than 0.6. The vast majority of those whose performance was less than the pass degree (<40%) had poor attendance below 50%. From another perspective, students who attended more than 70% of classes returned an average mark of 67% compared to a mark of 52% for those who attended 70% or less of classes.

Table 2 shows the impact on progression and withdrawal rates. In 2013/2014, the overall withdrawal rate for Stage 1 computer science

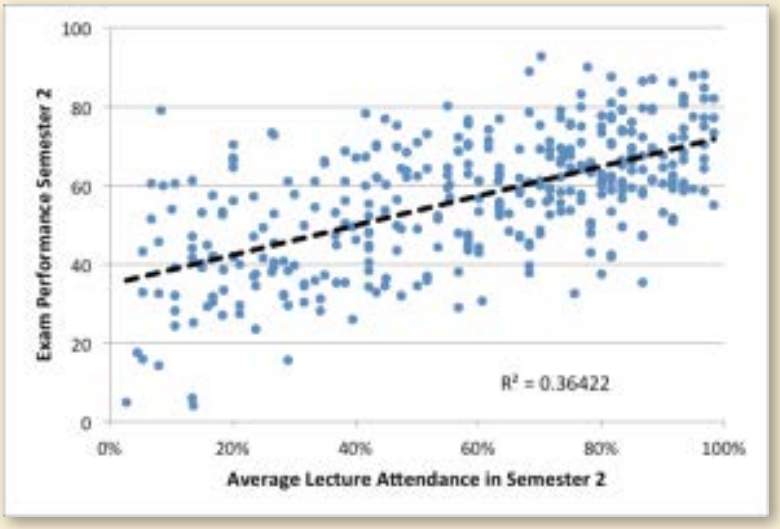


Figure 4: Student Attainment versus average attendance in Semester 2 2013/2014.

Year	Stage 1 enrolments	Non progressing	Withdrawn
2012/2013	284	18 (6.3%)	15 (5.3%)
2013/2014	383	27 (7.0%)	16 (4.2%)
%change	+35%	+11%	–21%

Table 2: Impact on progression and withdrawal rates.

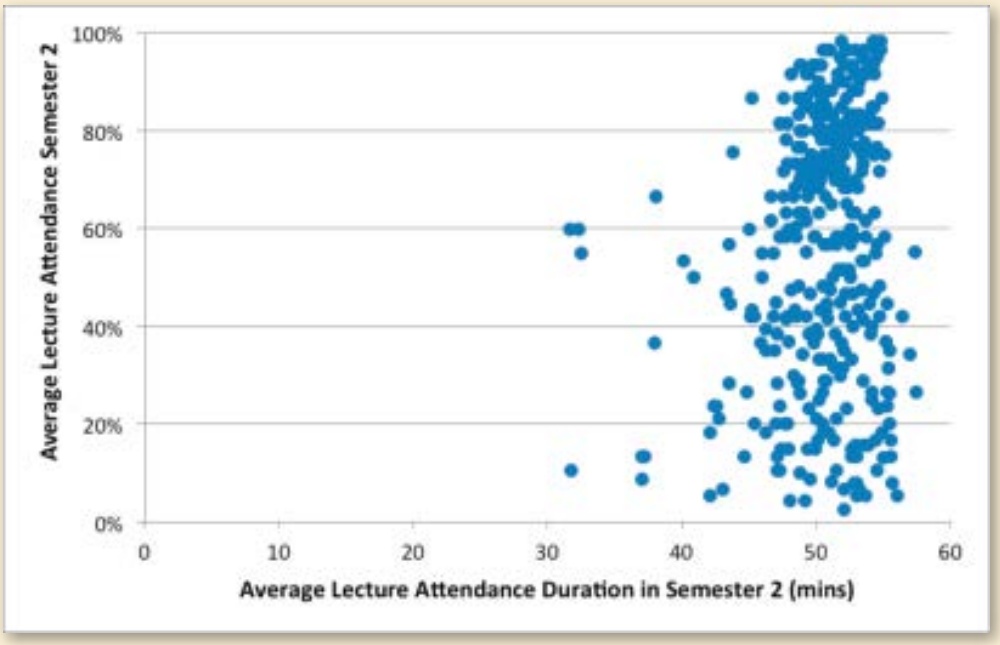


Figure 5: Analysis of Duration and Rate of Attendance Stage 1 Semester 2 2013/2014

courses had reduced by 21%. This is a significant change given the large (35%) increase in student numbers and a major change in the assessment of the core programming module at Stage 1. The increase in the number of students not progressing is due to the introduction of more demanding pass requirements for programming for all first year students.

Additional Data Analytics

One of the unique features of the ActivCampus system is that it provides rich data about the student's engagement with the programme beyond basic attendance at a learning event. The ActivCampus system operates continuously on a per-minute resolution and it records the arrival and departure time for each student attending each learning event. Therefore, the School is able to understand how long students are spending in labs and lectures, and if they are consistently arriving late or departing early. For example, Figure 5 below shows the results for the Stage 1 students during semester 2 2014/2014. The data is for 308 students who had attendance data for all three of the Stage 1 modules in this semester. The average rate of attendance and the average duration were calculated over 60 hours of timetabled lectures.

The same data set plotted as a histogram of attendance duration (Figure 6) shows that the vast majority of students are, for each distinct lecture, attending for the majority of the class. The distribution is heavily biased with a median attendance of 54 minutes and 98% of student attendances lasting 20 minutes or more.

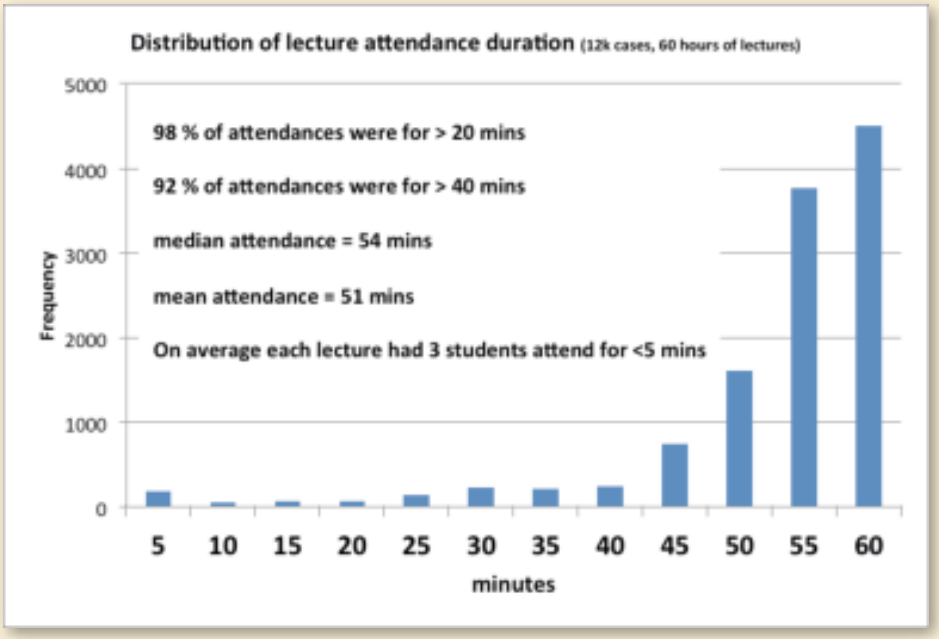


Figure 6: Distribution of lecture attendance duration - Stage 1 Semester 2 2013/2014

Conclusions

Overall, automated attendance monitoring using ActivCampus has been of significant benefit to the School of EEECS. It has helped to significantly reduce administrative workloads by automating the collection and collation of lecture and lab attendance in a scalable manner and provided easily accessible management information about students, modules, and programmes. Attendance rates continue to improve despite the enlarged class sizes. This has been reflected in the final withdrawal rates which have fallen. While it is focused currently on attendance monitoring, the ActivCampus system could form the basis of a more extensive student engagement system. Another inherent feature is the capability to distinguish students with Special Educational Needs, widening participation students and international students. While EEECS is not currently differentiating between these cohorts in terms of reporting, the system is technically capable of doing so if required.

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An evaluation of the impact of Non-Medical Helper Support on students with disabilities at Queen's University Belfast

by Claire Donnelly, Disability Services

Introduction

Non-Medical Helper (NMH) Support refers to the person support provided to students with disabilities at Higher Education Institutions within the UK. Queen's University Belfast (QUB) has a legislative requirement to ensure that students with disabilities have access to support services that put them on an even par with non-disabled peers. In 2008, QUB enhanced their provision for students with disabilities by creating the Queen's Register of Support Providers which allowed NMH support to be arranged within the University. By the end of 2013/14, the Queen's Register of Support Providers had been in operation for six academic years, and it was considered an appropriate time to carry out an evaluation of the service's effectiveness.

Since the establishment of Queen's Register of Support Providers the demand for NMH support has risen annually. At the end of its first year, the number of support needs were 424 for 290 students. By comparison, in May 2014, a total of 1173 support needs (+177%) were recorded for 732 students (+152%). The type of support students are offered is disability dependent. Some avail of specialist tutor support such as an Academic Mental Health (AMH) Tutor, an Autism Spectrum Disorder (ASD) Tutor or a Dyslexia Tutor. Other forms of support that are available include Note Takers, Proof Readers and Campus Assistants.

The aim of the project was to investigate how NMH support impacts upon inclusive learning and the student experience. Therefore, the following predictions were investigated:

Support Providers assist students in developing generic skills

1. NMH support utilisation will lead to better student experiences and academic outcomes, as evaluated by the impact on the eight key factors - transition, retention, engagement, progression, attainment, aspiration, empowerment and employability.
2. NMH support utilisation will be influenced by factors such as disability type, age and gender of the student.

Methodology

The predictions were investigated via a mixed methods approach. The quantitative section of the study relied on secondary data i.e. records kept by the Queen's Register of Support Providers and data accessible through the Queen's Student Information System (QSIS). 1071 data items were analysed by ANOVAs and Chi Square data analyses.

Twelve focus groups were conducted to consider the influence of prediction one on student experiences and academic outcomes. The participants included twenty-seven students, twenty-eight Support Providers, eight Disability Advisers and four Disability Officers who were recruited via an email invitation requesting voluntary participation.

As it was anticipated that the focus groups would not largely converge upon the variable of employability, a survey was constructed to determine the impact that NMH support had on transition to the workplace. As the target audience had graduated, the distribution of the survey was facilitated by Development and Alumni Relations who had access to email addresses for 532 of the graduates. The survey had 100 respondents.

Quantitative Results

The main aim of the quantitative analyses was to investigate prediction two. There was no support for the idea that NMH support utilisation would be influenced by age or gender. Yet, significant associations revealed that

support usage was linked to disability type. Students with dyslexia were less likely to utilise high levels of Tutor support in comparison to those with other disabilities. One suggestion for this finding was that those with mild dyslexia may not feel the need for Tutor support and perhaps just register with Disability Services to access reasonable adjustments such as extra time in examinations. Conversely, students with mental health conditions were more likely to use high levels of Tutor support than other students. A possible explanation was that, by registering with Disability Services, these students have accepted that they need help to deal with their mental health issues and as a result are more likely to take full advantage of support offered.

Qualitative Results

Prediction one, regarding better student experiences and academic outcomes, was supported by focus group and survey data. Thematic analysis uncovered five key themes – Person Support, Student Acceptance, Communication, Procedures and Systems, Mainstreaming Support. These themes were contingent upon the eight key factors outlined in prediction one. Person Support demonstrated that support worked well when a consistent and sensitive approach was in operation between students and Support Providers. Student Acceptance highlighted the importance of students' positioning on the process of acceptance and their subsequent utilisation of NMH support. Communication was key to a positive support experience, however often many intermediaries involved in the support process resulted in ambiguous communications. Procedures and Systems revealed that many aspects are working well within the current procedures however, it was noted that complexities within systems can be detrimental to NMH support experience. Finally, Mainstreaming Support refers to the process of making NMH support completely integrated into the normality of university life. The consensus between participant groups was that NMH Support needs to become more mainstreamed within the University. The aforementioned findings led to the following recommendations.

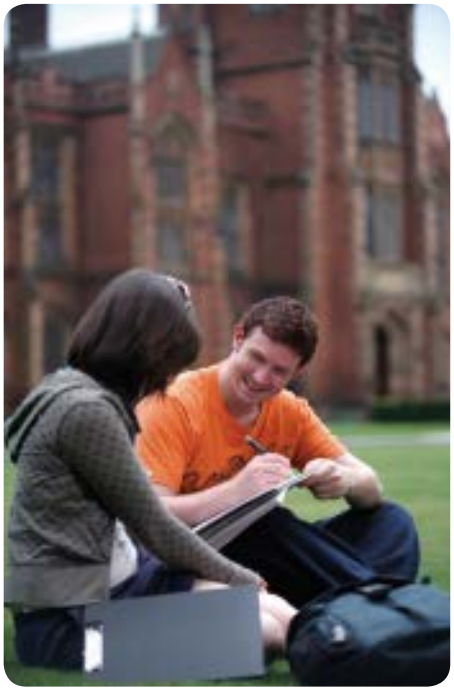
Suggested Recommendations

Potential improvements are presented within three categories – NMH Support, Systematic and Procedural, and Mainstreaming.

NMH Support suggestions include the exploration of collaborative working options between the Careers Service and Disability Services in order to support the transition of students with disabilities from University into the workplace. Another suggestion was the possible extension of the ASD Tutor role into the realm of "employability". It was proposed that tailored support packages are extended to all types of Tutor support. In addition, where possible, Note Takers with the appropriate specialised disciplines, should be assigned to STEM subject students.

Systematic and Procedural suggestions include making Support Providers aware of their assigned student's disability. A Review System would involve contacting students half way through the first semester and this would determine how well students are progressing with their NMH support, thus promoting the optimal service. It was proposed that Support Providers engage in a thorough recruitment and vetting process, involving the implementation of a new assessment procedure for Support Providers that requires the completion of mandatory practical tests. In addition, the implementation of an Electronic Work Record sign-off system would mean that Work Records are easily confirmed remotely, eliminating the need to meet face-to-face and non-communication issues. The potential of a support weaning-off system has been postulated so that, as the student progresses through their studies, their NMH support is scaled down. Due to the nature of some disabilities, the system would need to be selectively implemented.

Mainstreaming Support recommendations involve the promotion of acceptance in order to diminish the stigma attached to NMH Support. Moreover, the provision of services for Support Providers such as access to Wi-Fi, Queen's Online and Queen's email addresses would demonstrate the importance the University places on NMH Support. Additionally, one suggestion was that academic staff should be given access to information regarding whether or not their students are using their NMH support and this would allow informed decisions to be made with regards to coursework extensions.



Support Providers deliver tuition to students, on a one-to-one basis, at a public location agreed by both parties

Tackling the Terror through Career Guidance Consultations

By Emma Lennox on behalf of the Career Consultants Team at Careers, Employability and Skills

It is often surprising to discover that, for many students, the only thing more terrifying than starting university is the thought of finishing university. After years of climbing a structured academic ladder with clearly defined 'next steps', they are now faced with the reality and responsibility of setting their own goals in a real world setting. Options appear endless and choices overwhelming which, while exciting for some, can produce paralysis in others. In a campus of 24,000 students, how does a modern Careers, Employability and Skills service effectively respond to individual students who each have individual queries and concerns?

Guidance engagement at Fairs

One-to-one consultations have always been a core element of Careers Education, Information, Advice and Guidance at Queen's but the way they have been delivered has changed and evolved to meet ever changing student needs. After compiling service user feedback, several different options are now available to students to ensure each individual has access to the support they need.

Quick Query Appointments

This is an opportunity to discuss queries with a Careers Consultant for around 15 minutes, able to be booked at short notice and ideal for time-critical queries. An ideal option for feedback on a CV or application form, preparation for an upcoming interview or for careers advice and clarifying information.

Guidance Interviews

Using segmentation of courses to provide a more specialised service, this is an opportunity for a more in-depth discussion with the Careers Consultant linked to a specific School for around 30-45 minutes. The longer period favours a counselling and non-directive approach to guidance offering the opportunity to explore a range of career options or for discussing complex career decisions which may be sector specific. This option can also be booked for a role play mock interview.

E-Guidance

If a student is not on campus but needs support, this service enables them to connect with a Careers Consultant for advice and guidance. The student is able to enter into a dialogue with a Careers Consultant to resolve their query. This is a particularly popular option with students studying in affiliated or satellite locations and with those currently studying abroad.

Career Lounge Drop In

A new initiative in the Student Guidance Centre (SGC) HUB which offers students the opportunity to pick up self-help materials and information on subjects ranging from CVs and application forms to Psychometric Practice Tests and identifying employability skills. No booking is necessary and in a relaxed environment a Careers Consultant is able to guide students to be proactive and take control of their career planning. In the first three weeks of implementation over 1000 individual resources were availed of by students.

Careers Fairs 'Careers Zone'

Maintaining an active presence at regular Careers Fairs, several Careers Consultants make themselves available for drop in consultations at the Careers Zone. Queries can range from getting the most out of the fair and which employers to approach for their

Student Guidance Centre private interview rooms

Guidance engagement at Fairs

particular subject, to CV checks and general careers advice.

Crucial to the success of students engaging with one to one support is the newly implemented online career management system called "MyFuture". All Queen's students are given access to this system at registration and enrolment with nearly 23,000 students logging on and using the system since its launch. Assessing student engagement with the service allows consultants to evaluate different activity, what worked and what could be improved and how to move forward and adapt to students' needs.

But does this one-to-one approach actually work? Is it effective in reaching individuals?

In Semester One alone

- 1,000 students availed of 1:1 guidance consultations.
- 156 students used CV clinics at Careers Fairs.
- 3229 student email queries were answered
- 75 attended Career Consultations at PGT Fair and Autumn Fairs
- 600 student queries answered in the Student Guidance Centre Hub

However, most rewarding are the emails the students themselves have sent to their consultants after their one to one meeting.

'*Thank you for your recent help in preparing for a Skype interview with TLT. I'm pleased to say that I got through to the final stage of their recruitment process which is an assessment day at the firm.'*

'Thanks for all your help in relation to the Mercedes Assessment day that I attended last Friday. Mercedes AMG phoned me this week to inform me that I have been chosen for the Engineering Dyno Placement next year.'

'I am just dropping you a message to tell you that I got the offer from the company I interviewed with last Friday (Pramerica). Your advice was very helpful! Thank you very much for the support and tips! Have a great day!'

'Just letting you know that I was invited to all three interviews in England and got accepted to Liverpool Hope after interviewing there on Wednesday. Thanks again for all your help!'

'Just to let you know how my interviews went, I had my interview with Tyco on Tuesday, I thought it went well, they were so nice and friendly. They got back to me today to offer me the internship job! :)'

'This is just a quick email to let you know that I got a job at Allen and Overy. Thanks for all of your assistance.'

For more information on services offered by the Careers Advice Service visit **www.qub.ac.uk/careers**

Centre for Educational Development 9th Annual Conference 2015

Blending the Learning: incorporating technology in your teaching

Thursday 25 June 2015 Canada Room and Council Chamber

Keynote Speakers:

Professor Mark Brown, Director of the National Institute for Digital Learning based at Dublin City University.

The Digital Learning Revolution: Godsend or Gimmick?

Russell Stannard, Principal Teaching Fellow, University of Warwick

A real example of the Flipped Classroom

In addition to the keynote addresses the conference will include a showcase of blended learning examples at Queen's, presented by:
Chris Corrigan, School of Creative Arts
Dr Elaine Farrell, School of History and Anthropology
Dr Brendan Murtagh, School of Planning Architecture and Civil Engineering

Further details available from the CED website at **www.qub.ac.uk/ced**
Registration is via Queen's Online using iTrent