QAA

The Higher Education Academy

Compendium of effective practice in directed independent learning

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Introduction

The examples of activity contained within this compendium address what for many students will prove to be one of the most challenging aspects of study at the higher level. It is a type of study at the very heart of university education, and is a crucial component for the successful completion of a degree. But, when it comes to its support and development, it is not always particularly well understood. This compendium helps to remedy this, and provides numerous proven examples of good practice from a wide breadth of fields, and from within a range of different institutions.

It is safe to assume that the learning undertaken by students after the lecture or seminar finishes, and when outside the laboratory, is tackled in various ways and to differing extents. But broadly speaking, this is 'independent learning.' However it is immediately necessary to note that independent learning can – and indeed does – take place during lectures and seminars etc., for instance if students are requested to form groups and reflect on an issue or topic raised therein.

But where and whenever it occurs, there is no doubt that many students encounter serious difficulties when undertaking independent learning – even if they come to embrace it. Most will have passed through an education system where the acquisition of information and knowledge consists of a more or less transparent process, tightly prescribed and closely directed. In many ways, the contrast with study at the higher level couldn't be starker. Here, the student is expected to identify, locate and digest material in a far more autonomous manner – so much so that they may often feel as though they have been cast dangerously adrift in very unfamiliar waters.

The aim of this compendium is to provide a range of examples of independent learning that will inspire others to review and refresh their own practice, which will help to ensure students are better equipped to engage in this form of study. As would of course be expected in this day and age, many examples incorporate the use of virtual learning environments (VLEs), and forms of 'blended' learning. Few are solely dependent on digital and, or, online formats – and in fact, most of the activity reviewed here place a stress on flexibility, accessibility and adaptability. That is to say, activities have been developed in such a way that they enable students to learn in ways they can personalise and tailor to suit their own preferred media and styles – whether these are computer or paper based.

Finally, a brief note on the way in which this compendium has been organised. Contributions have been grouped together using a basic epistemic framework consisting of four broad categories (drawing on the work of Becher and Trowler, 2002) – hard/pure, soft/pure, hard/applied and soft/applied. The first category contains disciplines that try to identify laws governing understanding - the foci of which are, comparatively tightly prescribed and use primarily quantitative methods. By contrast soft/pure disciplines are more qualitatively orientated, and study particulars rather than generalities. The third category – hard/applied – gains knowledge from the first, but seeks to use and practice that knowledge. Lastly the category of soft/applied refers to those disciplines that are dependent on soft/pure knowledge in order to address issues such as social change, cultural development and education. This organising method is, of course, far from infallible and some subject areas may sit uneasily in one or another category. But, points of overlap notwithstanding, it is hoped that the material compiled here is relatively accessible and easy to consult.

Acknowledgements

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A declaration of independence: British and American collaboration

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Description

To facilitate students' participation in the borderless criminal justice community, this project was developed by criminologists using Internet-based communication technology to help develop students' awareness of international issues. As well as developing students' understanding of contemporary policy and popular concerns around crime, a key aim was to enhance and develop students' independent learning skills.

The initiative brings together students who study criminology and criminal justice programmes into a shared virtual space. It is delivered as a short, add-in component, which lasts for six weeks. Supported by a range of accessible materials within the shared virtual space, students form small learning communities (typically ten students per learning set) and work collaboratively on a set of tasks relevant to their studies.

This learning experience can be inserted into an existing undergraduate module for students on a criminology or criminal justice programme. Students undertaking this initiative develop critical awareness and decision-making skills, together with discipline-specific awareness of crime and its causes. They also engage in professional communication skills (written and oral) and team working. There are many authentic contexts in which these skills might be developed but in this case the scenario is based around a crime scene. The students are told that, as part of their studies, they are going to be working as an international police team.

The academics take the role of Police Chief. The student-officers are given a scenario and told that it is their job, over the six weeks, to analyse the scene, gather and evaluate evidence, and present a report outlining their investigation and findings. Each student reports to a wiki-based 'office', which comprises around ten students (there are typically ten such offices within each project catering for approximately 100 students). The Police Chief provides regular reports and these, together with newspaper reports and witness statements, act to drive the narrative. Student-officers are required to work closely and professionally within their team and provide weekly reports to the Police Chief. As students investigate, research, and analyse the situation, they build a clear picture of what has occurred.

Academics on this project take a minimal intervention approach and the learning is self-directed. An induction session is used to initiate the project and weekly seminars can be held within each partner institution to provide academic oversight and answer any questions emerging from the self-directed study.

Three assessment points test the learning in this project:

- team work peer assessment – each week, students are required to assess the team-working skills of each member of their team (including themselves). They are provided with a standard assessment sheet containing ten team-working characteristics, onto which they indicate a score (zero to five). This helps them to produce a short reflection at the end of the project;
- final report – this is a learning-set group PowerPoint presentation. Students are marked on content as well as how professionally it is presented;
- in-class presentation – delivered in their home location.

A key argument is that students will only acquire the requisite level of 'digital maturity' if we take the time to consider what they need from us and relinquish control where necessary. At the level of the academy, universities need to cultivate their own digital maturity and provide the infrastructure to manage both the digital diversity of students, and the growth in demand from our students, while ensuring all staff are sufficiently skilled in their own understanding of learning technologies to enhance teaching.

Table 1: Results from 2014 student survey

The model described here has been delivered to students with a range of needs and abilities. One student with cerebral palsy once described it as her only experience of an educative level playing field. We regularly manage students living in different international locations (particularly when partners were from a number of different US locations in Pacific, Central, and Eastern time zones). The initiative first began as a response to meet the needs of students who had employment and/or family commitments, and we believe it continues to do that in an innovative manner.

Effectiveness

Access to high-speed broadband has been held as important to participation and experimentation in online environments. But the growth in hand-held devices (including web-enabled phones and tablets) holds a challenge to the hegemony of the traditional computer, plus there is tension in the divide between using online technologies for education and using technology for leisure. Many students claim above average computer skills but relatively few students claim to be digital content creators. Although many own a web-enabled phone, few use it to upload material to online sites (aside from social networking facilities such as Facebook and Instagram). Staying current with the technology and understanding the level of digital competency of our students is a key challenge to how we design and implement independent learning experiences that have an international collaborative approach at their heart.

Student feedback suggests that this is an effective learning tool. We conduct post-initiative student surveys every year. The 2014 survey has been completed and is currently being analysed. Initial results suggest that students recognise the value of the project across a number of criteria.

Promotion

Students are made aware of this element of independent learning through the usual mechanisms within their programmes, including option fares, module documentation, and VLE content – but perhaps most importantly by other students. Peer-to-peer communication is a key driver, particularly in institutions where programmes of study are not tightly prescribed by level. In the US, students who have experienced the initiative in the Spring semester are given the opportunity to take a self-directed study module later in the same year to help redesign the project; developing new storylines and creating new artefacts to help make this a truly student-created endeavour. A quote from a student on the 2014 project sums this up:

> Just keep this Wiki project going, it really is a fantastic experience. I was quite apprehensive beforehand given my skills with a computer but it was well explained and managed throughout.

A dialogical space for independent learning: later in the pub and first class club

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Description

Students are invited to engage in extracurricular activities in two virtual scenarios. Beginning with the 'First class club' students explore the content of the module through a series of additional materials closely related to the module's core content. In the seminars, activities are given to students to monitor their progress in their independent exploration of such content, and the development of conceptual links with the module's core content.

The second scenario is 'Later in the pub'. It is an open invitation to discuss additional materials to the core content of the module in an informal environment. Focusing on the real application and the implications of the use of tools and theories in the business environment. Here an informal conversational process expands the options for a critical analysis of core concepts outside the formal boundaries of the module. Additional material is provided (e.g. YouTube videos, additional case studies, etc.), pushing forward the development of concepts and the understanding of tools provided in the module (via forums and announcements). This often builds connections with the content of other modules and promotes the exploration of topics above and beyond the standard content of the module.

In general, these spaces are for the co-creation of knowledge because although the process is initiated by the staff, the conversation is then driven by the students' participation – either via the virtual environment or through their participation and comments during seminars.

In both scenarios ('First class club' and 'Later in the pub') staff provide material and incentivise the dialogical process through informal conversations, preserving the technical rigour of the discipline and the depth of the dialogue when exploring and developing a particular topic.

The seminars are the space to monitor the progress of students engaging with these independent learning scenarios and, during the lectures, some comments or notes are provided to tempt students to explore the development of these conversational spaces. The content developed in these dialogical scenarios is aligned with the key concepts of the module and the programme of study.

Results are mainly intangible, noticeable mostly through the quality and depth of the conversations of the students (frequency and depth of participation in seminars) and indirectly reflected in the quality of their formal submissions.

The development of academic skills is related to the non-structured space that provides an additional opportunity to engage in research. It also shapes their conceptual domain to be able to participate in technical conversations and creates an informal space to develop and present arguments – usually to critically evaluate the suggested problem/content provided for each week. The dialogical space takes place in a virtual environment via the provision of additional materials – for example, explorative questions, forums and blogs. Also, materials such YouTube videos, additional papers, and professional guides are recommended.

Feedback takes a summative form and is provided on demand. It can also be face to face during the seminars to those students who engage in these activities and explore in depth the problems/content

provided each week. Basically, the function of this feedback is to help students to build links with the content of the module

Finally, it should be noted that this is an open invitation in an open platform (university/module website), which helps to ensure that all the relevant students are able to participate in the module. Any student is free to access the dialogical spaces and catch up with the current discussions before making a contribution to the development of the current conversation. Even students who do not engage receive the benefit of this exploration as, during the seminars, when those who engage ask for clarification or feedback, this is provided openly on the platform. That way, students not involved in the conversation are informed about the conversation and updated with the conclusions emerging from the public feedback process.

Effectiveness

This activity extends an open invitation to access and explore in depth the content of the module via a non-formal co-creative process. It expands the conceptual domain of the students and helps to perfect their dialogical process within the rigour of the discipline.

The main weakness is that, by design, not all students will engage and receive the benefit of this exercise, and from a staff perspective time constraints impede an intensive engagement and monitoring of the individual performance of the students through this co-creative process. Furthermore, these constrains of time impose limitations on the feedback that is provided on demand, as not all students engage in this initiative.

Promotion

'First class club' is about raising the level of the content and practice providing guidelines that are of common use in top consulting companies – related with the topic of the module. Here we highlight the fact that theory and practice are in constant evolution and therefore it is necessary to develop skills in independent learning. 'Later in the pub' is about how to critically approach the practice and use of tools via technical conversations about real applications. Here, students are exposed to unfamiliar multi-disciplinary approaches to the practice and therefore motivated to understand that independent learning is a fundamental part of professional life, as real practice requires the exploration of multiple disciplines to deliver top performance.

Bridging the theory–practice divide: using psychological knowledge and personal experience to develop a sex education resource

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Description

Level six students are expected to develop an original sexual health or sex education resource for a group of their choice as their submission for the in-course assessment on a 20-credit option module – 'The Psychology of Sex and Intimate Relationships'. At level six, assessments on Psychology modules are required to have an applied focus in order to enhance employability and transferrable skills, with other Psychology modules at this level offering case studies, risk assessment reports, and service evaluations as assessments. This module is offered as an open option and therefore also available to students from Criminology and Sociology subject areas that have Psychology as a minor route in their degree programme. A maximum of 60 students are enrolled onto the module.

The learning outcomes for this assessment require students to critically evaluate and apply relevant theory and research into sexual behaviour to design their sexual health or education resource. In addition, students are expected to demonstrate enhanced written and oral communication skills and personal awareness through producing materials which are both appropriate for their chosen audience and sensitive to their needs and challenges. Their submission for the in course assessment includes the following elements: 1,000 word rationale based on relevant psychological literature; 500 word lay summary written to engage relevant stakeholders; and their original resource which can vary in length according to their choice of format.

Learning on the module is structured around study groups. Students sign up for workshops that are focussed on either sexual health promotion or sex education. In the workshops, students work in smaller groups to review existing provision and evaluate their own experiences. Students review existing resources which they collect between sessions and draw from existing online and institutional provision. Examples of materials collected by students include lesson plans, pamphlets, and online information. Staff on the module facilitate small group discussions in workshops and encourage students to share their own experiences of sex education and sexual health promotion with their peers. This enables students to engage with the diversity of current provision and reflect on the challenges of designing materials that engage, inform, and enable personal risk assessment. The resources developed by students on the module reflect both their own experiences and critical engagement with traditional sex education and sexual health promotion formats. Resources designed for this assessment have included online resources and apps for mobile technology as well as lesson plans based on problem-based learning, posters, and mass media campaigns (including proposed storylines for popular soap operas).

The independent nature of the assessment also enables students to base their choices on relevant voluntary and work experience. Students often base their choices of audience and format on current areas of concern or career aspirations. Recent assessments have addressed the needs of diverse, and often overlooked, populations including 'looked after' young people, older adults, and people with learning disabilities. Topics chosen for submissions have included contemporary issues which often reflect national policy developments and media campaigns. Recent selected topics have included testicular cancer self-examination and female genital mutilation. At the beginning of the module, students are provided with a template of key questions they will need to address in their rationale in order to facilitate independent learning and enable them to structure their independent study and literature search.

Lectures provide an overview of relevant psychological theory in relation to sexual health promotion and sex education in order to provide the basis for students to engage with both theoretical and empirical research literature outside of the sessions. Students also receive generic guidance around the relevance and skills required to write effective lay summaries, which is linked to current concerns and guidance from research funding councils and to developing psychologically literate graduates. In the formative assessment for this submission, students engage in peer-reviewing exercises focused on providing additive feedback to develop their proposed resources. For this exercise, students continue to work in the study groups they have established over the course of the module. In addition, they are provided with a template to enable them to structure their feedback and suggestions for improvement. Tutors on the module also provide feedback on the resources but are not present during peer reviewing. Although peer reviewing can be perceived as challenging, the emphasis for this exercise is to provide supportive and respectful feedback. Tutors return their feedback after the peer reviewing which often mirrors and supports peer comments and so reinforces the benefits of the exercise.

The module assessment is submitted online via Turnitin. Summative feedback is provided on all elements of the assessment and is designed to enable students to prepare for their end of course assessment. The end of course assessment for the module is a research report for which students have action research methodology to work with stakeholders to evaluate their original resource. Students work with key stakeholders including parents of children with learning disabilities; trainee teachers and youth workers on postgraduate programmes in the University. The assessment enables students to identify practical challenges in implementing their resource as well as receiving positive feedback from service users and providers.

Effectiveness

The benefits of this approach are that students are able to draw on a range of personal and professional experiences outside of the programme to develop their area of interest and resource design. In addition, the assessment enables students to demonstrate innovation and transferrable skills in the application of psychological knowledge to a wide range of educational and public health contexts, acknowledging the theory–practice divide through an awareness of policy and practical constraints on the design and implementation of interventions. Finally, through peer reviewing, students develop confidence in providing supportive feedback to their peers.

Feedback from module evaluations has revealed that the module is perceived as challenging but rewarding in terms of enabling students to tailor their work towards their intended career paths, and so demonstrate their understanding of sensitivity to the groups and populations they intend to work with following completion of their degree programmes. External examiners have also responded positively to the assessments, commenting on the originality and high quality of the assessments produced by students on this module.

Promotion

The module and assessments are communicated internally to potential students through an ‘option choice’ event during which students have access to vodcasts produced by students who describe their learning experiences on the module. In addition, previous module evaluations are also made available.

Business simulation: providing a bridge between academic studies and the 'real world'

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Description

As part of a programme review within Teesside University Business School, some five years ago it was agreed that a key new module on the Business Management programme would be 'Business Decision Making'. Within the module structure, a business simulation activity was seen to be valuable in addressing crucial programme learning outcomes. After reviewing a number of potential software packages, SimVenture was selected as the chosen software solution, given its combination of user friendliness, range of delivery complexity, and focus on educational support.

A number of learning outcomes were identified, including problem solving, use of statistical methods, understanding the nature of teams and team dynamics and, in particular, an appreciation of the integrated nature of the key functions and activities within a business.

The current, very successful, delivery method and outcomes are detailed below. Some of the initial weaknesses in approach, and the improvements adopted after reviews by the programme team, are shown in the third section.

After a general introduction to the module by the teaching team, and specific formative assessment and feedback on individual skills, the students are formed into small groups, usually numbering five members, who operate a virtual business, using the SimVenture software, as a 'Board of Directors'. This phase of the learning process involves the operation of the business for 12 virtual months, taking some four weeks of elapsed time. The initial activity and the methods of operation are quite closely defined by a combination of the software and the detailed documentation provided by the tutors. Although this might initially appear contrary to some concepts of independent learning, it is this structure that provides clearly understood boundaries within which the team can run their 'business' in any way that they choose – to strive to achieve their own targets, agreed as a group.

The assessed output from each student is in two parts. Firstly, the students can freely use the common material that is produced during their group review and decision processes, for example, financial and statistical data, customer and supplier reports, and board meeting minutes. In addition, students supply evidence of their own independent learning, with a detailed reflection on their role in running the company, the knowledge and understanding that they have gained, and their views on the impact of the process on their future job aspirations and employability.

A key and unexpected element of learning that has arisen from this process has been the awakening of the understanding by students of the different ways in which modern business can be conducted. The students are encouraged not to sit together around a PC to make decisions, but to share all the required information and then meet on appropriate days and times (whether this is a physical meeting in the Business School or Library, or by Skype or other electronic mechanisms). This has encouraged students to take a wider view of independent work and learning, and of inclusivity, in terms of team members, perhaps with employment or family commitments, or travel issues.

Staff role during this phase is to act as general advisors on the 'boundaries', with students strongly encouraged to make their own decisions and reflect in detail on the outcomes, whether positive or

negative. An interesting development under consideration for the future is to make students 'pay' for tutor advice, out of their virtual earnings.

Effectiveness

In its current format, this form of teaching and assessment has proved to be very effective, as evidenced by the following feedback from students:

> It was good to get away from all the books and do something different, and not getting assessed on the success of the business took the pressure off and allowed us to take a few risks.
>
> … felt it was a very effective way of practising working as a team. As we got into the game it was clear to see everyone was eager to do well which meant everyone put across their opinions
>
> … because we were the ones who had to make the entirety of the decisions the business made. As young people our previous experiences of employment in real life are much different, usually with us being told what to do.
>
> It didn't feel like work. I genuinely wanted to have a crack at it and see how well I could do.

The current delivery and assessment process has been the result of five years' refinement, where any initial weaknesses were analysed by the teaching team, and steps taken to overcome them. The key area of learning and improvement from the teaching staff perspective has been the practical aspects of delivery and assessment. Originally the students were allowed to form groups at an early stage and the overall assessment was based almost entirely on group performance, with marks being equally allocated across the group. The weaknesses of this approach were that some students did not engage with the initial software familiarisation, and hence made little contribution to the group activity, but gained equal marks despite their limited learning on the module. The refined process currently adopted is that students undertake the software familiarisation as individuals and receive formative feedback on their performance. They then move into the group stage with greater knowledge of the software and concepts. This enables them to play a full part as a member of an independent 'Boards of Directors'. In addition, the assessment is partly based on an individual reflective statement, underpinned by the overall group material, which again provides a clear incentive for independent learning.

Promotion

From the earliest contacts with students and potential students at discovery days and open days, a stress is placed upon the importance of independent learning, both to emphasise the transition from school/college teaching approaches, and to highlight the further progression into the world of employment where independent learning and development are increasingly crucial. This forms a key element of presentations to potential students and parents, and is also raised in any one-to-one discussions that frequently follow the presentations. Also, the business simulation software is an important part of discovery days and creates very high levels of interest and engagement from potential students as young as fourteen.

From the first days of the induction process at the start of year one, the importance of independent learning approaches are emphasised to students. Students are encouraged to manage, as far as is possible, their own learning experiences and outcomes. As noted above, this is achieved, perhaps paradoxically, by the creation of a more comprehensive overall support structure, including the use of a learning hub, which provides ready access to students for materials and practical advice to support key areas of their studies.

A key area of engagement with employers is the major emphasis that we place on summer internships and an optional placement year between years two and three. Students are encouraged, during interviews and assessment activities, to use the example and learning from the business simulation activities to highlight their practical business skills and their ability to operate as independent thinkers. We have received feedback from students who have found that the experience of business simulation, and the evidence of business thinking that they have been able to provide, has proved to be beneficial during the interview and assessment process.

Chamber music and ensembles modules

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Description

The Department of Music and Media at the University of Chichester is one of the largest university-based creative communities in the UK. All of the subjects focus on both applied and theoretical pathways and are engaged with the artistic world in all its diversity and excitement. These include undergraduate degree strands in 'Music Performance', 'Musical Theatre', 'Jazz and Vocal Studies', 'Community Music', 'Instrumental and Vocal Teaching' and 'Music Marketing', alongside media-based strands in 'Digital Film Production' and 'Screenwriting and Commercial Music'. Postgraduate courses include MAs in 'Choral Studies', 'Musical Theatre' and an 'Advanced Performance Programme'. Although the campuses at Chichester and Bognor Regis are relatively small, students and tutors number over 700 with further expansion (including new premises) planned for the coming years.

'Ensembles' modules operate throughout all undergraduate year groups. They are supervised by the Head of Chamber Music, Dr Adam Swayne. These modules not only comprise 30% of degree programmes for students taking performance strands, they are also vital in ensuring a healthy and vibrant sense of community that rejoices in its size, musical variety, energy and enthusiasm.

In these modules, students must undertake two department-led activities. The first is to participate in one of our six orchestras, eight choirs, or weekly rock and jazz workshops directed by a team of tutors. The second is to attend and (by rotation) administrate and stage manage professional concerts in a variety of styles (including classical, jazz, folk, rock, and music theatre) from our on-campus series. The students are assessed by attendance only, administered using a fun 'stamp card' system (which also guarantees students free coffee if they attend above and beyond the course requirements).

Having experienced professional standards in rehearsal and performance, students must then organise their own student-led initiatives. In an introductory session, they team up in groups of between three and eight, drawing upon the Head of Chamber Music for guidance and help where necessary. These student-led ensembles perform summative assessments that form 100% of the final grade. There is also a formative performance halfway through the course in which students receive written feedback to assist them in preparation for the final assessment.

Drawing upon the University's practical facilities, the students must organise their own rehearsal sessions and master the art of interpersonal communication, diplomacy and musical effectiveness between themselves. Although there are opportunities for students to receive tuition through staff tutorial slots, masterclasses, and drop-in sessions (supervised by the Head of Chamber Music) ultimately the onus is on the students to be enterprising enough to take advantage of these opportunities as there is no formal weekly lecture. The fact that so many of them do take advantage (we have 88 flourishing student groups, many of whom play professionally) is testament to the success of this formula.
The University's virtual learning environment (VLE) is a vital backbone of the course administration and structure. Using this device the Head of Chamber Music is able to help the students organize themselves into groups and co-ordinate with each other, as well as post information about the concerts they are attending and hosting. This enables students from disparate backgrounds and with differing needs (including disabled students and students that live far from campus) to communicate with each other easily, enabling high quality music-making to take place whatever the personal circumstances of each student.

Effectiveness

Results from the most recent feedback survey showed that many students understood and appreciated the value of organising their own rehearsals and researching music with guidance from tutors. The tutor-led ensembles were also cited as key to helping students adapt to new genres while encouraging the research, analysis and in some cases composition of new performance material. When asked to reflect on whether they had drawn positive experiences from attending and hosting concerts, students referred to the inspirational value as well as the inside-knowledge of how these are put together, including communication with professional performers, marketing experts and theatre technicians. Finally, with respect to transferable skills developed in and by the module, students pointed to performance skills, time management and people skills as significant areas. Ninety-three per cent of respondents rated the teaching and learning methods as good or excellent.

A challenge encountered by the nature of the course lies in keeping in touch with all the participants and supporting those students that, for any number of reasons, may find the communal aspects difficult to manage. On a practical level there are some administrative requirements, such as the submission of a 'group personnel form' and details of repertoire for assessment, that help the Head of Chamber Music keep track of everybody and identify any problems. On a more pastoral level, the importance of creating a supportive and friendly environment cannot be overstated, and the opportunities for one-to-one tutorials are crucial in ensuring that students are appropriately supported in their independent learning.

Promotion

The module handbooks demonstrate the value of independent learning and, in introductory talks at the beginning of each semester, the importance of this as a vital professional skill in the music industry is emphasised.

The Head of Chamber Music is also the lead departmental liaison manager with external partners including local businesses, charities and events co-ordinators searching for musical performances in a variety of contexts. In the last 12 months, University of Chichester students have performed at Fontwell Park Racecourse, at the Chichester Observer Business and Enterprise Awards, at the Otter Gallery and at the Murray Downland Trust. The most high-achieving student groups are put forward for these important opportunities, which demonstrate to a wider student cohort the value of their ensemble beyond a strong performance at assessment.

Dance theatre

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Description

Students on the Foundation Degree in 'Dance and Performance' have a minimum of 18 hours of contact time per week for the two-year duration of the course. The first year of the course aims to introduce a range of subjects; including dance techniques, voice, contextual studies, text in performance (acting), improvisation, choreography and devising. The range of subjects allows for students to be initially selected from a wide range of backgrounds and training practices. This in turn often fosters a more creative ecology; facilitating collaboration in both group and independent studies, celebrating difference, and creating a community of technicians and artists with differing interests and aspirations.

The skills that are developed in the first year are integrated across the spectrum of more creatively led modules (devising and choreography). Choreography introduces a range of practitioners (both practically and theoretically), after which students select a single practitioner and develop a piece of choreography using either the style or methods of the artist selected. This independent project is an example of introducing and guiding students' studies to be individually led and developed. This piece of choreography and a corresponding presentation whereby students detail their research process is presented for assessment at the end of the module.

In the second year, the primary focus is to enable students to advance their skills and also prepare for employment in the current creative industries. Apart from skills sessions, the majority of the modules are student led; key concepts and practices are introduced in seminar format at the start of the module, and the rest of the module is facilitated by staff – who guide the students' independent learning and the development of a fixed outcome (such as a performance or an employability portfolio). In this final year they are also introduced to alternative performance platforms such as site-specific performance, dance for camera, and show reels. Through a process of lectures, seminars, workshops and tutorials students are expected to develop a showcase and professional portfolio (web, film and paper) of promotional materials relevant to the current dance industry, a funding application, a piece of dance for camera and site-specific performance. The practical applications of the research and development process allow for students from a range of backgrounds to achieve and also provide a clear deadline with easily understood expectations for the students to work towards.

Over the two years, apart from the strictly academic modules, critical thinking and analytical skills are embedded in all of the subjects undertaken. These are applied in critical commentaries, detailed processes logbooks, independent research studies undertaken in order to produce creative responses and practical presentations. As the cohort is relatively small, formative feedback can be given in almost every session. The students are also able to contact staff in person or via email and receive responses to their queries within 24 hours. Summative assessment takes a variety of forms depending on the module; presentations, performances, critical commentaries, interviews and portfolios. Feedback is formally in writing and verbal, where students have the opportunity to discuss their progress on a one-to-one basis. All of these factors contribute to positive learner engagement.

The resources that are essential for the course include: rehearsal and performance spaces, libraries with excellent online resources, databases that are accessible, links to practicing industry experts and companies, and a body of guest artists.

In addition to the curriculum time, there is also scope for students to be part of a community choir, take part in external performance opportunities, be kept on agency books, and develop cross-course collaborations. As a performing arts school with acting, musical theatre and dance programs there is ample scope for this, and also a healthily competitive side, which often promotes better standards of independent learning.

Effectiveness

Over the past two years the external examiner feedback has been outstanding. The students have an excellent pass rate, their feedback is very positive, and they have often made comments about how they have enjoyed being able to do/learn something that they have never done before.

In the past two years students have set up their own charity event dance companies, acquired agents, undertaking work in education, proactively sought employment as performers (and often been successful), developed business plans, and set up community projects and summer schools.

Challenges are often found in the beginning of the first year, when students sometimes struggle to make the transition from a school-based education, which appears to produce learners who are only focussed on the learning outcomes that are immediately tangible and are afraid of being 'wrong'. Students feel especially afraid to tackle creative tasks such as choreography individually, and over the first few months of the course the main priority is developing their confidence while slowly withdrawing frequent low-level instructions, facilitating a more independent approach to their studies.

For a number of reasons, the intake of students that come to the Arden are often talented performers but lack writing and reading skills. This challenge has been overcome by using a variety of strategies, tools and resources. Healthy student relationships are imperative to the effective functioning of independent learning and collaboration. This can prove to be a challenge with certain cohorts of students.

Promotion

The necessity of independent learning is stressed during the initial auditions for the course, and this is subsequently maintained in tutorials and during classes. Independence is promoted as being a fun, informative journey of self-discovery whereby students can take pride in their own work. Students are repeatedly made aware that in order to find employment opportunities in the dance sector they will need to have motivation, independence and determination. As a portfolio career, dance artists will often need to uncover innovative new means of earning an income.

Previous graduates that have shown initiative and determination, and who are now in employment, are advertised on social media and the website and occasionally brought into talk to the current students. The course is timetabled so that students attend lectures and classes for three consecutive days, leaving two days per week for students to take part other projects, seek employment, and undertake personal research and development. This extends to an assessed module in the second year, where students are expected to find their own work-based learning placements for a six-week period.

A wide range of employers and professional bodies in the North West were consulted when this degree programme was recently rewritten, and the altered course reflects their recommendations.

Developing student independent learning skills in an engineering department

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Description

There are several established and linked projects in the University of Sheffield's engineering department that support the development of independent learning skills. Underpinning all these projects is one main theme, that is, the need to set high expectations of students across all their modules and activities. Consistency of expectation helps students adjust to and accept the high demand, and this is a key enabler for implementing objectives which require students to develop their learning skills and expectations beyond their school experiences.

The department ensures consistency of expectation by using so called 'year teams'. Any staff involved in the teaching of year one, and year two, students meet three times a year to discuss the teaching of that year group (pre-semester, post-semester, and at the end of the year). Meetings cover mundane details such as balance of workload (e.g. coursework deadlines and weightings), diversity of skills development (to ensure development is balanced) and student feedback/performance. However, more critically, these meetings allow staff to share views on how students are provided with a consistent and helpful learning experience; a key part of the meeting is that staff accept their role as negotiated contributors to the learning experience rather than 'masters' of their module who do what they want. This seems to work because the meetings are not top down but bottom up in any decisions that are taken.

One of the areas the team (and indeed department) accepted that was critical for engineers was the ability and confidence to learn independently. This could be stated more strongly as the need for students themselves to accept that independent learning skills are essential for their progress as professional engineers and thus something they must embrace.

Consequently, a major objective for the first year team, to be reinforced by the second year team, was to set in place a sequence of activities which:

- expose students to independent learning; and
- simultaneously convince them that this was an important part of their development.

The latter of these is far from simple because it is a major change to the culture they have experienced for 13 years in school, especially during the high stakes assessment of GCSE/GCE which were very much teacher led and more about knowing the right answer. Hence this issue is dealt with first.

Frequent repetition and reinforcement of the message is used to help students adjust to the expectation that they must be effective independent learners. All staff include aspects of independent learning into their modules so the message is being covered in six parallel modules at the same time. Moreover, a schedule of activities for the personal tutors includes discussion of this and related issues on a regular basis. The department also developed a 20-credit laboratory and professional skills module in year one for which about 30% of the credit is for professional aspects. Hence, lecture time and activities in this module are able to give more focussed attention than is possible within technical modules and, in particular, the department includes visiting industrial speakers (with related assessments) to emphasise the profile of graduates that the industry is seeking.

To some extent, the specific independent learning activities students undertake are secondary information for the average reader, as they need to be tailored to the specific programme and students. However, for completeness, students are given some illustrations of how independent learning activities have been included in the department.

Perhaps a very important point is to challenge students' mind set as soon as they arrive and hence the department has developed the 'intro week' activities to involve a number of independent learning challenges and thus get students expecting university learning to be different from school even before lectures begin.

In our case, a major successful project was linked to the learning of MATLAB software in year one. A switch to an independent learning mode of delivery, supported by appropriate resources, assessments and tutorials, changed student perceptions and learning from poor to very good. The fundamental approach is akin to 'lecture flipping,' that is classes take place in a computer laboratory where students can work together, or alone, on problems supported by a number of online videos, exemplar files and other resources. Face-to-face lectures occur about once every three weeks and are more of a question and answer format, thus student led.

Buoyed by the success of the MATLAB learning scenario, student positive response to podcast/vodcast recordings and also in response to growing evidence in the worldwide community, the department is currently experimenting with lecture flipping for more technical modules. Early data suggests that it is popular and effective with the majority of students although a sizeable minority do not like it.

Independent learning is embedded elsewhere but on a smaller scale to reinforce the message that this is an important skill. For example, one module in year two defines explicitly which topics will be assessed but not covered in lectures; this message is reinforced by including the topics in computer-aided assessment for the module which students begin about half way through semester. Secondly, for year three and MSc students, several staff developed an affordable piece of laboratory equipment that students can borrow (take home) all term to use for independent learning and experimentation in support of module learning outcomes. Thirdly, laboratories in year two are based more around an experiment, explore and explain approach rather than predefined laboratory sheets.

Effectiveness

Staff in the year teams have been conscientious in evaluating each project in the department and modifying the implementations as appropriate. Detailed discussion of the feedback is available in the bibliography, so only a brief summary is provided here.

Most students recognise and appreciate what the department is trying to do. Some typical quotes from feedback questionnaires include:

> Independent learning is clearly a theme that ACSE are looking to develop and I feel that this has helped me in my studies.
>
> I think this course has been very useful. It does require a lot of independent learning, but the lectures provided a lot of guidance.
>
> Really enjoying it.
>
> Enjoyable but challenging course.
>
> 'til now, the journey has been excellent!

I love our course.

Hard but interesting.

Everything is all right

The course as a whole was very instructive and enjoyable.

A brilliant experience to anyone who takes it.

It is a very demanding but an interesting course.

I have enjoyed it so far.

Enjoyed studying matlab, although very challenging for me I found the outcome of the hard work I put in paid dividends.

This module has given us the chance to sort out the problems that we have not seen before, that is the ability we need after university.

Studying through videos (in advance) helps us better when we can pause and sit with the new ideas for a while before continuing, whereas in the normal lecture environment this is not possible. It is also better when we can come back and re-watch the videos whenever we want for clarifications or revision.

Of course, a major challenge is that not all students respond well to being challenged and indeed where students from other departments sit in on our modules (therefore they are not getting the same consistent message) and we find that they in particular are much more critical of the high expectations feeling that somehow this is asking too much. An example of this dichotomy is evidenced in the following quotes from the same first year cohort (not in the authors' department).

Dr J Anthony Rossiter receives a lot of unwarranted negativity. The majority of students have no desire to put any sort of effort into their subjects and expect it all to be given to them on a plate. Dr J Anthony Rossiter provides great material through his lectures and videos, he is the best lecturer I've had by far. If you do as he says and watch the short videos on the schedule he provides then the course is very simple.

All the content was available online including lecture videos, which makes it really easy to review it at my own speed.

The course relies on students watching videos before the lectures, which does not work with less disciplined students.

Despite the fact that the content is available online it should still be taught in the lectures rather than expecting students to have watched the lectures beforehand.

Lower workload as it is difficult to find time to watch all videos, complete tutorial sheets and do online quizzes.

In summary, the authors have found that consistency of expectation is important where students need to develop practices that are different from those they are used to.

Promotion

Building on the brief communication and activities available in intro week, the main communication with students is through the laboratory and professional skills module, although staff will reinforce this message periodically in other modules. Moreover, professional issues are a frequent directed discussion topic within personal tutorials. A major reflective report in year one is another tool used to encourage students to think through and articulate the issues for themselves; this is peer marked so that students also gain the opportunity to read other students' points of view and reflect further.

Independent learning is a core engineering accreditation requirement and thus there is no need to further emphasise this to employers and professional bodies. Rather, they require students (and us, through programme design) to give good evidence of numerous professional skills.

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Environmental management

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Description

'Environmental Management I' (T219) is a second level module (FHEQ level 5) which integrates, in a systemic manner, the main principles of Environmental Management (EM) in conjunction with themes of personal responsibility, organisational practice and group work. The module has three blocks of material, but this note relates primarily to block three which deals with group work in EM. In block three, the students work on four areas. Firstly, they study issues relating to water in various global contexts; both in terms of quality and quantity. Secondly, they study and apply indicators in the assessment of EM issues. Thirdly, they qualify the use of indicators and provide a typology of their value by making use of the European Environmental Agency's 'Drivers, Pressures, State, Impact and Response' (DPSIR) criteria. Fourthly, and systemically, they apply a community/group-work methodology, 'Imagine', for indicator creation and assessment. The Imagine approach, which focuses on a case study set in Malta and involves issues of water indicators and DPSIR, brings the various elements of the block together.

Students take turns to lead one of four online events over the eight-week duration of the block. The students work collaboratively throughout the eight weeks. They have time to read and engage with the module material online but the four group events require the students to work with each other, taking it in turn to lead the events and facilitate each other. Students are not required to work synchronously (although they are provided with the means to do so via tools on the University virtual learning environment (VLE) and they can if they wish make use of Skype or similar external systems for face-to-face conversations). Students tend to work in online forums which are provided as part of the module's website.

Cohorts of 20 (or so) from the full population of more than 200 students are each provided with a tutor with whom they have three 'surgeries' over the eight weeks. These tutor groups are divided into two 'sub-groups' and it is these sub-groups that undertake the group work. The module also provides the students with two staff forum moderators whose role is to ensure the smooth running of the asynchronous group and sub group forums.

The group work required in block three of T219 is a requirement of both the module and the main qualifications of which it is a part. This also bears witness to the importance which EM institutes, such as the CIEEM and CIWEM place on teamworking, community and group participation. The group work is an important element in the tutor marked assignment (TMA) for the block and relevant to the overall module assessment.

The learning outcomes related to group work are:

- identify and assess the worldviews of stakeholders within environmental management situations (C4);
- assess and critically evaluate environmental management and systems concepts and techniques and provide an initial evaluation of your own competence in using them (C5);
- learn and communicate effectively about complex situations (K1);
- gather, analyse, and synthesize a variety of data to explore, analyse and make sense of complex situations (K2);
- evaluate and improve your own learning and resulting skills competency in environmental management (K3);

- make sense of a range of complex case studies in environmental management (P1);
- use some basic environmental management techniques (P2);
- explore a range of perspectives in a situation using systems concepts and techniques (P3);
- apply a variety of systems modelling techniques, including diagramming (P4);
- report on a situation and make initial recommendations emphasising the use of systems concepts and techniques (P5).

Students are supported to gain the academic skills to undertake independent learning via the structure of the online teaching and the support of tutors. For example, each of the four events is supported by a fully worked, real-world example taken from a similar context.

The teaching makes extensive use of a VLE. The block is based on a web site and this contains forums, wiki and shared learning 'display wall' tools. Further, the examples of teaching are supported by video and audio assets, many of which have been commissioned specifically for the block and which make use of the experience of experts from various fields, for example, a World Wide Fund for Nature (WWF) water specialist and an academic from the University of Malta.

Throughout the block, on a week-by-week basis, students are provided with activities and exercises alongside the four events. By use of these formative and summative devices the students build up confidence and skills in the various block study requirements.

The module team are very aware that students who study with the Open University often do so to be able to study at their own pace and in their own time. Group work requires a degree of rigidity within this flexibility because, even working in an asynchronous way, students need to correspond, share and learn together. To support this, the module requires each student to only lead on one of the four events taking place over the eight weeks of the block. Further, team leadership is encouraged, so that, even in this format, individual students can take a minor leadership role and still pass the module with a good mark. In terms of access, written descriptions of all diagrams and transcripts of all audio materials are provided. It is intended that all students, irrespective of access issues, have the necessary resources to engage in some group leadership activity.

Effectiveness

T219 is, at the time of writing, yet to complete its first presentation and to receive formal student evaluation or external examiner report. This needs to be kept in mind. All the following comments are derived from the module team's qualitative assessment of the first presentation and this in turn is derived from the assessment of the 'traffic' on the student and tutor forums.

Strengths

A significant percentage of the students have taken to the unfamiliar group work and seem to have enjoyed it and provided encouragement to each other. Mutual support (e.g. cover for events when the self-designated leader has been unable to lead), has been a strong theme of the presentation. So too has the willingness of some sub-groups to seek information beyond that supplied in the module and to include factual data and accounts discovered using their initiative. In summary, main strengths have been mutual support, groups working harder than the sum of the individuals, and exploring beyond the module material.

Weaknesses

The main problem for any module with a group work component is the group work itself. Historically students have not wanted to do this and have tended not to take modules where group work is a strong component. In the case of block three of T219 the module team are not yet clear on numbers but it would seem that a percentage of students have not undertaken the group work to the level which might be expected. Of these, probably between 10% and 20% may not have been engaged in the group

work directly at all, and may have spent the eight weeks 'lurking'. The module team have provided tutors with a framework for managing student TMAs, which are handed in by students who have engaged in no group work participation. This is achieved by allowing these students to submit responses to the three questions in the TMA but, because they have not undertaken the work as part of a group, the work is marked purely on the basis of the exploration of an Imagine analysis and reflections on this. The module team feel that this is a fair, if less than ideal, response to students for whom group work is clearly anathema or impossible for whatever reason.

Promotion

T219 is advertised on the University website to students as containing group work, and it is made clear from the beginning of the first block that students will need to work together in order to get the most out of the teaching. Our approach to Environmental Management is that it cannot be taught in a conventional top down, book-based manner but that students need to draw on their own experience and the experience of their colleagues and construct independent and collective views on important environmental issues – and also to understand the requirements of being a personal and/or professional environmental manager. In particular, through the use of *systems thinking* throughout the module, the module team emphasise the importance of taking into account the multiple perspectives of different actors within a particular system of interest in order to better identify and manage often complex and messy environmental situations. The module looks at EM from individual, organisational and community-based perspectives and, through all three, the attempt is made to get students to relate their learning to their own behaviours, those of the organisation for (or with) which they work, and communities of which they are a part. In other words, the team strives to make students take responsibility for their own learning, and their own practices resulting from that learning, through progressive encouragement of independent learning.

Facilitating independent learning through reciprocal peer coaching

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Description

Following the undergraduate review, in 2012 a new additional coaching psychology module was introduced at Westminster Business School, as an optional module for final year Business Studies degree students. Although providing a strong academic component, the module is primarily skills-based and driven by self-reflection, adult learning theory and fundamental coaching/mentoring skill development.

The primary aim of this module is to enable participants to develop the ability to critically analyse and reflect upon coaching and mentoring theory and practice. This involves engagement with various theoretical models and reflection on different coaching and mentoring practices. A key aspect of this process requires the participant to critically reflect on their own skill development in coaching and mentoring. The aim of the module is to enable students to gain practical experience in coaching and mentoring skills. This credit-bearing module is suitable for those students who would like to develop practical coaching and mentoring skills and equally share valuable professional experiences with other university students.

The module aims to:

- develop critical awareness and understanding of the different theoretical standpoints of coaching and mentoring;
- enable participants to develop an understanding of the links and tensions between theory and practice;
- appreciate the moral and ethical dimensions of coaching and mentoring in organisations;
- challenge learners' own orientation to coaching and mentoring through critical self-reflexivity;
- develop a mastery of practical skills of coaching and mentoring and learn how to apply them;
- create opportunities for participants to apply and practice the psychology of coaching and mentoring.

A review of the curriculum and revalidation of the undergraduate programme provided an opportunity to embrace alternative and contemporary methods of assessment. As a result, a reflective case study and portfolio assessment diet was introduced which permitted students to record their personal reflections and competency development with regards to the practical skills taught on the module.

Further, students were expected to take primary responsibility for their own learning. In practice, their studies were deemed to be a partnership between them, their peers, and the tutors of the module. Contact time was made up of timetabled activity and individual personal study. "Scheduled contact/activity time" (i.e. 'contact hours') involved interaction with, or supervision from, teaching and associated staff and the activities they set up for students. This is where students were introduced to new ideas and knowledge; shown practical demonstrations of coaching or offered guidance on assessments/assignments; or provided with personalised feedback on experiential exercises.

Within the Westminster Business School, independent learning is embedded into programmes of study at modular level. Alongside scheduled study, students are expected to undertake private or 'independent' study. This is a time when students are expected to reflect on their learning and practical coaching experience. It is a time without direct supervision from, or contact with, a member of staff and

makes up a large part of the student's academic study. With regards to this module it includes background reading, preparation for seminars, wider practice, the completion of assignments, revision and so on. Fundamentally, the independent learning on this module is facilitated by structured, reciprocal peer coaching, which can also be viewed as a form of peer-assisted learning.

Reciprocal peer coaching (RPC) is a form of peer-assisted learning that can encourage individual students to coach each other in turn so that the outcome of the process is a more rounded understanding and skilful execution of the task (Asghar 2010). RPC has an important part to play in formative assessment strategy as it offers the necessary scaffolding for students to work inter-dependently on goal achievement and feedback giving. Formative assessment can be used to measure students' achievement and at the same time it can be employed to aid and assist students in their learning. Thus, the assessment was devised to enable the learner to demonstrate a broad range of skills as per the learning outcomes, as well as encourage student development through experiential reflection.

The RPC relationship results in students writing up one coaching/mentoring relationship as an in-depth case study and constructing a reflective professional competency-driven portfolio. Both assessments require students to include a reflective commentary on their learning and development. The case study was the first formative assessment underpinned by a learning-orientated assessment process (Carless 2007), followed by the summative element in the form of the portfolio. Students were put into pairs at the beginning of the module and work as a reciprocal peer-coaching partnership for four to six weeks during the course of the module. This practical work is then reflected upon for the first formative assessment in the form of a reflective case study. Students then form two further new RPC relationships for the remainder of the module. This practical work culminates in the production of a summative reflective portfolio of competence.

Assessment is an integral component of teaching and learning on this module and promotes the achievement of learning outcomes, offering opportunities for new learning to take place through the feedback delivered. Fundamentally, the assessment diet plays an important role as it is designed to engage students, motivate them to learn and enable the learner to demonstrate a broad range of skills as per the learning outcomes, and to encourage student development through independent reflection on their experience. Formative assessment is also recognized as having value through the use of students as peer assessors (Bloxham and Boyd 2007).

The relationships are real-time/live relationships. That is, the pairings work with real-life coaching issues and undertake detailed peer feedback to and from each during the relationship process and prior to each assessment. This form of independent learning is supported by online tools and resources, physical learning space, skill development exercises, practical demonstrations, guest speakers and tutor support and feedback. Tutors engage with peer partnerships on a weekly basis to ascertain how the relationship is progressing, what stage the relationship has reached, how goals are being achieved and what the important learning outcomes have been. In addition, one-to-one supervision and group supervision is a key component of the learning process, which also feeds into the reflective element of independent learning.

Finally, reciprocal peer coaching or peer-assisted learning could be undertaken over Skype/FaceTime thus permitting students who travel a long way to campus to be fully engaged with the learning experience too.

Effectiveness

To try to establish how successful the RPC had been in relation to independent learning, a multi method phenomenological research approach was taken using 'snowball' and 'convenience' sampling strategies. Thirty-eight students completed a qualitative focused questionnaire survey asking them to reflect on

their experiences of reciprocal peer-coaching relationships. Content analysis resulted in the emergence of key themes including clarity, self-analysis and soft-skill development.
As a result of peer-assisted learning in the form of reciprocal peer coaching, the students were able to have a clearer vision for the future. The conversations had stimulated the clarification of their academic and professional development goals. For many level six students, they are facing the end of their degrees and so their attention often turns towards careers and jobs. The reciprocal peer relationships contributed towards the clarification of career goals and career development needs. Much of the independent learning undertaken that was inherent in the reciprocal peer-coaching relationships focused on the goals actions and success criteria attached to personal development planning and so clarity further resulted in students having a clearer focus regarding the direction that their personal development planning might take in relation to career objectives.

A further theme that emerged from these peer-assisted learning activities was an increase in self-awareness and self-reflection ability. Students became more aware of their strengths and weaknesses as individuals. They were motivated to learn about themselves and their shortcomings as human beings. Peer-assisted learning had helped the students to embrace and develop self-regulatory processes with the peer-assisted learning experience acting as a catalyst for self-reflexivity, self-regulation, self-efficacy, self-motivation, self-positivity and greater self-awareness.

Finally, the third theme resulting from the phenomenological analysis concerned the development of a range of graduate skills and attributes. The peer-assisted learning experience had acted as a catalyst for improvement. Students repeatedly commented on how they were utilising time more effectively, had learnt to manage their stress more effectively, building increased levels of resilience, and how their communication skills such as rapport building, listening, questioning techniques, and their ability to give and receive feedback had improved.

Promotion

Communication to current students on the importance of independent learning and its contribution to the overall success of the learning process, in the psychology of coaching and mentoring, are through the module handbook. Information is specifically mentioned on the nature, role and contribution of independent learning within this module and how this is broken down. To become an autonomous learner in the UK higher education system, students are informed that they must take primary responsibility for their own learning. In practice, students' studies are a partnership between them, their peers, and their lecturers which helps to shape and guide their studies. Students are introduced to new ideas and knowledge; shown practical skills in order to practise independently; offered guidance on project work; and provided with personalised feedback. This can be face to face or mediated through other channels.

Alongside students' scheduled studies, their private or 'independent' study is very important. This is the time that they spend learning without direct supervision from, or contact with, a member of staff and this makes up a large part of their studies. It is likely to include background reading, preparation for seminars or tutorials, follow-up work, wider practice, the completion of assignments, revision and so on. Some independent study on this module is structured in as a key part of student learning, but also includes the additional study they choose to undertake to further improve their learning.

This is a 15-credit module and students in general should be putting in ten hours of study time for every credit. For this module they should plan to commit 150 hours over the duration of the 12 weeks teaching on the module and its subsequent final assessment period.

The promotion of the psychology of coaching and mentoring is communicated to students who are potentially interested in this module, when they move from level five to level six studies, at the Module Choice Fair. This is an annual event held in the Business School where students can obtain more

information about option modules, thus aiding in their transition into the final year. This enables them to make these important choices better informed. Both members of staff attend and have a stand where module materials are made available giving an overview of the module for students to see. Individual conversations with prospective students are also held where further explanation of the nature of the assessments are detailed very clearly including the large contribution of independent learning.

Further communication of the RPC and the high levels of independent learning elements in this module have taken place by way of a presentation and posters for the last two years at the University of Westminster's Learning and Teaching Symposium. Those present at the session have chosen to attend this particular presentation since there are parallel sessions that run at the same time. Some of those who have viewed the posters, again, have chosen over lunch and other breaks to visit again to talk specifically about the nature of the work on this module.

Final communication and further promotion of this module is by negotiation with the Institute of Leadership and Management (ILM) in order to accredit the coaching hours that students have completed. This, along with the current mapping of the module criteria with that of the ILM will mean that students will gain a level five ILM vocational certificate, if successful. The final stages of this agreement are currently taking place. Students have indicated that they find the potential to obtain recognition from the ILM an added bonus leading to further engagement and motivation with the module.

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Flipping the classroom: on the road to independent, critical reading in first year English

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Description

'Flipping the classroom: on the road to independent, critical reading' is a project designed to help students navigate the transition from their A-level studies to the greater independence demanded of them while studying English at university. The project aligns particularly with three aims of the current Queen's University Education Strategy: "to deliver a high quality flexible learning environment that embeds intellectual curiosity"; "to redefine a framework for meaningful student-staff engagement which will … enable them to develop as independent learners"; and lastly, to promote employability through "critical thinking, adaptability, intellectual flexibility, enquiry, capacity to challenge and an ability to work in teams."

Independent reading constitutes the central challenge for students in the first year English module in St Mary's. Work began in the spring of 2013 to 'flip' the classroom, no longer relying on live lectures to model the reading skills that students need to acquire. Instead, lectures are now delivered online in two formats (video and automated PowerPoints) while classes are dedicated to developing confidence and critical reading skills in large and small group work and discussions. This arrangement has given students a more manageable 'ladder' to climb as they try to come to terms with some very demanding classical, medieval and renaissance literary texts.

A new virtual learning environment (VLE), Fronter, video lectures, PowerPoints with audio, an online plagiarism test, online marking, in-class reading quizzes, a regime of both online essay feedback and face-to-face meetings and in-class polling using personal devices, have all contributed to the new experience which is now the first year English module at St Mary's. Students have commented:

> The flipped classroom is like getting two classes for the price of one.
>
> It allows more time for discussion and asking of questions.
>
> I feel more prepared for class.
>
> PowerPoints are good because key words are on the screen.
>
> I can pause the videos to write down valuable information.
>
> I can learn at my own pace and don't feel rushed and under pressure.

Far from being just a different way of delivering the same material, the 'flipped' classroom has enabled teaching methods to be taken apart piece-by-piece and re-assembled so that it is now far more fit for purpose in terms of what learners require.

Students are required to watch lectures delivered on-line in various formats in advance of coming to class, and to read primary texts carefully and critically before class in order to prepare for a randomly-scheduled series of reading quizzes aimed at testing whether they have thought about the text critically. They are also required to have watched a series of presentations on critical reading in order to develop

their own skills in contextualising and analysing texts. Students also contribute to online discussions and wikis and complete an online plagiarism test.

Students work collaboratively and on their own. They are expected to work independently in preparation for class, where there is an expectation to engage with large group discussions and work in smaller teams.

Regarding the extent to which independent learning is embedded in the module, this example is a transitional phenomenon insofar as it is exploring a range of techniques designed to support independent learning. Options for embedding these sorts of techniques within the programmes of study in the future are under review. The project has attracted the attention of the local Regional Support Centre Northern Ireland (RSC-NI) unit who have supported and monitored it as part of their piloting of support materials for those undertaking e-learning initiatives.

The series of 'critical reading' presentations, which guide practice through the year, are mirrored at the end of the year by a series of 'exam preparation' presentations, which help students to take a more proactive approach to end-of-year revision.

To enhance the VLE, Fronter is used, which was specifically chosen for students planning to become teachers (many of the course's students are). It is used because of the employability advantages linked to understanding its idiosyncrasies, as it is the designated VLE for all primary and secondary schools in Northern Ireland.

Students are also given online support and presentations aimed at helping them to make the most of the library resources available to them in St Mary's and Queen's University. St Mary's also boasts the first full-time, peer-tutoring-based writing centre in these islands – and students are encouraged to make full use of this resource as another way to receive formative feedback on their written work.

With respect to feedback and assessment, there has been an increase in the amount of formative feedback which students receive, helping them to move in the right direction with confidence and increasing their ability to undertake a wider range of independent reading. Reading quizzes have proved popular as students receive a steady stream of feedback on their critical reading abilities in relation to key texts. They also learn the discipline of keeping up with readings before classes meet. After their first essay, each student is required to meet with the lecturer to review the essay in detail and agree three points to be addressed in their final essay. This 'contract' makes feedback more meaningful and holds students responsible for executing the advice they have been given. Students also make regular use of the college writing centre's peer feedback from trained student tutors.

Finally, it should be noted that St Mary's is a small institution that takes very careful notice of students who experience difficulties in engaging with the learning opportunities on offer in the college. Student Affairs takes an active role in advising students with attendance difficulties, disabilities, troubling personal circumstances and any issues that inhibit learning. Students with technical difficulties are supported by a highly-engaged team of ICT specialists to resolve the problem. These efforts have contributed to the consistently outstanding scores St Mary's receives every year in the National Student Survey.

Effectiveness

Student feedback has been very positive. One student reflected on the flexibility the blended learning model offers in terms of digesting the reading material:

> Online presentations and PowerPoints worked best for me, as I absorb more information when I am reading or watching them at home in a quiet place, independently, rather than in class. I preferred doing them by myself at first and then coming to class to have a discussion

> about the text and hear other people's thoughts and opinions on it. Plus if I did not understand any parts of the text I could discuss it with some of my peers in class.

Another student made the connection in her feedback between this type of learning experience and the future she was planning as a teacher:

> I think that the teaching methods have been very useful this year. Studying English has been especially useful. The way that education has changed over the years to the point we can use our phones for an online discussion has been brilliant. This is also useful for people in the class who do not speak out or leave comments and has made me realise that I must be as creative when I become a teacher making full use of IT resources that have been shown to me within the college. I have been able to use the various activities on my placement.

And, of course, the time freed up for greater class interaction was also appreciated:

> Class discussion and group work have been very effective for me this year and I find that I learn a lot when working with the class as we all have different ideas which we can discuss and share.

It was not only the added time that helped classroom dynamics. The constellation of techniques which informed the structure of class time worked together to make the group's time together productive: "The class voting system improved discussions as everyone had a chance to prepare talking points," said one student, while another felt that "splitting up into groups and taking different sections of an extract and then sharing this as a class is very useful." Even the new system of reading quizzes seemed to be a bonus for students: "Reading quizzes, whilst annoying at the time, were also an excellent way to keep me on track!"

The implicit comparison that resides within these comments, that is, a comparison with the traditional lecture format, came to the surface in three very pointed comments among the feedback. One student spelled out what she saw as the pedagogical advantage very clearly:

> I liked the way that we didn't just sit in class and be told all the answers, but that we had to go and research the texts and form our own opinions on them and this in a way has made it easier for me to revise, as I have a good amount of knowledge, thoughts and opinions on all the texts.

A similar appreciation of the increasingly Socratic nature of class time came from another student:

> For me, your teaching methods deserve an award because you try to create dialogue between yourself and students. Instead of lecturing and giving us all the answers, you use questioning to create dialogue and help us engage and find the answer ourselves.

And lastly, pulling no punches in making the comparison to the traditional lecture format, this student made a rather wry expression of gratitude:

> Thank you for making such an effort … the thrill of testing the speed of our own handwriting as someone dictates to us really wore off in early October.

The main difficulties, which were expected when the project was launched, centred on the technology itself. Students were being given several websites and portals to access in order to find material and to comment in online discussions. Experience from previous years and on different projects suggested that one should prepare for a wave of lost passwords, failures to connect, difficulties with PCs 'at home'

which are configured differently from those in the college, etc. It was very striking how, in just a few years, these sorts of problems have nearly vanished. Students in this module rarely encountered such obstacles. The occasional lost password was addressed by the college settling on a nominal charge for replacing them. That seemed enough to save ICT support staff from having to spend much time returning lost passwords to careless students.

In terms of media formats, the general conclusion arrived at, based on nearly unanimous feedback from students, was that for the purposes of teaching English Literature – obviously a text-heavy subject centred on the development of discursive, analytical writing skills – the videos for online lectures were less desirable than animated PowerPoints. The fact that PowerPoints were navigable by looking at the slide overview column gave students the ability to see the lecture from a 'bird's eye' perspective and then to swoop in on the areas needed. Videos – while unmatched for their ability to demonstrate real-world activities – did not enhance students' textual understanding as effectively as the slide presentations. Slides had the lecturer's voice accompanying them as well and, therefore, retained the personal touch that, students said, helped them to remain engaged with the presentation. (The physical presence of the lecturer in the video format was an element only a few students said they missed when lectures appeared as animated slides.)

Promotion

There are strong arguments to suggest that blended learning offers not only practical help to teachers and lecturers but also deep insights into one's own pedagogical strategies and objectives. Hence efforts to support students have been matched with equally enthusiastic efforts to encourage and support colleagues in updating their teaching methods.

A series of talks was organised in the college on blended learning featuring both top, local practitioners and one of the leading international experts on the 'flipped classroom', Jason Bretzmann, editor of the book *Flipping 2.0: Practical Strategies for Flipping Your Class* (Bretzmann 2013)

All staff in St Mary's were addressed during a training session on the merits of e-Assessment and flipping the classroom. The speaker was simultaneously attending a conference on e-Assessment and blended learning elsewhere – as the new method of preparing and presenting lectures digitally was deployed for this staff development session too. Despite not being presented in person, this talk was, according to feedback, the most engaging, informative session of the day (talk about doubling a lecturer's productivity!)

On the heels of that staff development session, unprecedented interest among staff has arisen in both blended learning and e-Assessment. Five staff members have come forward recently for further help pushing their teaching forward. One has now purchased a microphone, headphones and is preparing resources to go online: "It will be particularly helpful, as I teach languages," he said. "The need for repetition is greater than I can provide for my students in a live setting, so thanks very much for the help."

A research lesson study group has also been organised within the college, which gives staff a chance to meet and discuss shared problems with teaching strategies.

Lastly, the agreement of the organisers of 'Belfast TeachMeet' has been secured to hold their next conference here in St Mary's. TeachMeet is the most impressive, grass roots local gathering of top teaching practitioners you will ever encounter under one roof and St Mary's is extremely proud to be bringing such a dynamic gathering here for our colleagues and students to experience. These TeachMeets have been consistently strong in demonstrating powerful examples of effective blended learning.

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Fostering independent learning for English Literature undergraduates via an online learning community

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Description

Students enrolled on a final year English literature module ('Writers, readers, and spectators: fiction at work 1880-1915') participate in building an online learning community delivered through the institution's virtual learning environment (VLE), Blackboard. The online learning community is an assessed task that comprises 50% of the overall module grade. While grade-driven assessment can often produce superficial learning, the shape of this task encourages deeper learning that aims to transparently make connections between independent learning and performance. Its aim is to foster an enabling independent learning environment, through which collaborative thinking, research and peer-review are used in order for students to understand how independent learning feeds into the outcomes of the module.

At the start of the module, students are introduced to the online learning community by module tutors in a face-to-face session. Tutors and students use an open discussion forum on Blackboard to practice its technical, academic and social uses. This is supplemented by face-to-face discussion of the module's leaning outcomes and the role of independent learning. The online learning community assessment criteria details a twofold outcome:

- the depth of individual postings in terms of analysis, research and relevance;
- the quality of contributions in fostering and enhancing their own and others' use of independent learning.

Throughout the 12 weeks of teaching time, students respond to set research questions about the topic of study for each week. Tutors release these questions on Blackboard following face-to-face lectures and seminars, and they are written to enable focus on particular text and topics, but also to allow students to work creatively within the questions' parameters. Students use a discussion forum to debate ideas with each other, contribute research findings, textual and theoretical analysis, and thus refine their critical thinking through peer review. Materials on Blackboard and in the University's library are available for students to use as part of their task, but the forum also gives them space to develop strategies for researching some of the non-canonical texts that are set on the module, and for which there is not a great deal of supporting material. Hence, students build up a body of knowledge and skills throughout the module.

Students are given 12 opportunities to engage with the online learning community, and must complete a minimum of five weeks' worth of participation. Tutors do not generally intervene in the online sessions unless students need brief encouragement. A grade and detailed feedback is given each week to participants to enable them to use the feedback effectively and carry it forward quickly to the next online session. Indeed, timely feedback allows students to improve upon their use and quality of independent learning. However, students may participate in as many weekly sessions as they wish, receiving grades and feedback for each time they participate. Not only does this allow students to have greater opportunities to improve their understanding of the module and the role of independent learning, but also ensures inclusive practice.

Students less able to work in face-to-face study groups, due to family commitments, distances between university and home, or disability, are less likely to feel alienated from their peer group, or excluded from the opportunities to work with peers in their learning. The task aims to provide students with a

sense of control over their own learning and increase motivation and confidence. Work completed during the 12 weeks can also be used and refined in the final assessment, a standard essay. Students are thus guided to be able to recognise the role of independent learning for future assignments.

Effectiveness

Strengths

The strengths of the practice are evident in student feedback, external examiners' comments and attainment. Students have consistently praised the module for a number of reasons:

Effective independent learning:

> Discussing with everyone else online means I am challenged and challenge myself to think about how I use my time and how what I do when the tutor isn't there counts.

Inclusive practice:

> I can never get into library study groups, so I feel this is the best way to work with others for me.

Peer review:

> I was scared I'd look stupid, but everyone supports each other and we all learn so much.

Learning outcomes:

> I now fully grasp how my learning meets module outcomes.

Feedback and performance:

> I have got so much better at reflecting on what I write, because others respond to my posts. This has definitely improved my approach to assignments.
>
> I tend to think about my grades, but I got so stuck into this task I didn't think about them too much.
>
> The quick feedback from tutors was brilliant – really useful because you've not forgotten what've you said when you get your feedback!

External examiners reports

External examiners have praised the commitment and dedication of students in their participation in the online learning community, and for the effectiveness of the task in engaging students in self-reflection.

Student attainment

The average grade for this module has been at the 2.1 level. This is in comparison with a programme average of a high 2.2.

Weaknesses

The main weakness is that tutors are unable to replicate this environment for students who have extenuating circumstances and thus take the assessment during re-sit periods. While the focus on contributing to an online learning community remains in play for resists – students contribute longer research postings – the lack of peer review/discussion with a variety of students is problematic.

One other weakness is the resourcing needed to give such regular feedback.

Promotion

The module's focus on independent learning is promoted to students through departmental module fairs, where students decide which modules to choose for their next year of study. This begins the process of engagement so that students are clear about its nature before they enrol on the module. As students can be quite risk averse to new forms of assessment, it has proven important to discuss the intended outcomes of the module at this stage in their assessment journeys.

Face-to-face contact time, inclusive practice, feedback and grades all contribute to maximising engagement with the module.

Free choice of text for first year Literature assignment

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Description

At our institution there is an increasing need to promote and encourage independent learning. This need is cultural to some extent, but is also a direct result of the ways in which A-level courses are currently taught in sixth-form colleges. Some of our research in this area suggests that students who come here directly from these colleges have very different expectations of university study than those who join at a later date. This issue is compounded by the type of teaching offered at UCBC: groups are small and tutors are almost always available to students in a way which is just not possible at larger universities.

In order to try and encourage some level of independence as early as possible, the initial assessment for the 'Introduction to Literature' module undertaken in the first semester was changed. The module is a general introduction to studying and analysing texts of any kind and is a building block for all other modules. The assessment addresses the opening topic of the module (poetry), and asks students to produce a close analysis of a text.

In previous years, students were given a list of texts to choose from. However, last semester they were allowed to choose any poem, by any poet, from any time period. The only restriction was that this text must be 'literary'. All students successfully chose a poem and submitted their assignment to deadline.

Effectiveness

Initial responses to this assignment title were mixed. Some students enjoyed the freedom of choosing their own text, others were panic-stricken at the prospect. The latter chose texts that had been studied at GCSE or A-level and were clearly not appropriate, but were familiar to them.

When asked about the experience in a questionnaire, some responses were very positive with one student stating that:

> Choices enabled us to have a wider approach to assignments, enabling us to critically think about what we would write. They also gave us direction which provided us with the foundation which we needed in order to begin our assignments.

Another enjoyed the exercise, stating:

> We had the choice to pick the text we preferred and had more knowledge on and were interested in. I liked this as it meant I could choose something I liked and understood.

However, the majority of students were not happy with the free choice, and one commented that she felt quite out of control: "I felt thrown in at the deep end and unsure of what was expected." It seemed that this fear of selecting texts for themselves was a result of a lack of experience or knowledge and the lack of such exercises at A-level:

> It made it easier but I would have liked it if the lecturer chose one and developed on it more, rather than taking up lots of time trying to decide on something. I didn't know what to choose. In A-level we have poems chosen.

Again:

> Would have preferred texts to be chosen for us then you can focus on them specifically and not be too broad.

For some students the main concern was that they may choose the 'wrong' poems and therefore 'do the assignment wrong'. There was little appreciation that choosing the text was actually a PART of the assessment:

> Because of the free choice it made me feel as though I may be writing my assignment wrong. In A-level everything is given to you. For example, A-level spends six weeks analysing a novel now we spend barely a lesson. We never really had independent learning – if we did the teachers would give us something and ask us to read it so it was still given to us.

> I was extremely surprised as coming straight from Sixth Form was a shock as I was told exactly what I needed to do in extreme detail to get top marks and was 'spoon fed'. But I actually liked it like that. Here it is quite vague and although feedback is good, it could be better and tell us how we could improve. Now my marks are declining. Revision packs would be helpful, and when tutors say 'do wider reading' we are not exactly sure what that is?

This final quotation outlines that although there is some level of recognition that the approach of A-level tutors encourages dependency, the students actually prefer this to the stress and uncertainty of making their own choices. There is an inability to acknowledge that, to some extent, making the wrong choices is actually part of the learning process and will happen from time to time.

Promotion

Following this assessment, a further assignment (on a different module) was given in which students had a free choice of literary theory to apply to a text. Students did feel more confident in making these choices, but some still struggled to grasp the concept of independent choice, or recognised that it constituted a part of the assessment (i.e. selecting appropriate texts actually contributed to the mark awarded).

Independent learning also became a topic on a tutorial in semester two. Feedback in these sessions suggested that students did not actually understand the phrase, or indeed *how* to work independently. When asked to define independent learning, students gave the following responses:

> A task we must complete when told to do so for the next lecture. This enables us to carry out more research into fields which we don't fully understand.

> Going home and reading books or doing work the teacher gave you.

> That I undertake [on] my own (i.e. outside class/teacher) to reinforce what I have learnt or prepare for the following class.

What is striking from these three statements is that in each, the teacher still takes responsibility for the student's learning. It is they who 'hand-out' the work (and by definition it is they who decide what this work is). Again there is very little awareness of the need to begin to make decisions for themselves – or even mistakes, which are clearly not considered an important part of the learning process.

Some students defined independent learning as only another kind of 'homework'. Their understanding of the term 'independent' was that this was work that took place outside of the classroom, but that remained the remit of the tutor:

> Time to work independently after a lecture to reflect on what we have studied.
>
> Going away and doing your own research/collecting own information.
>
> Working on your own with no help from teacher and using our own initiative.
>
> Completing homework tasks and reading relevant textbooks.

Some of these comments suggest that students still associate independent with the teacher 'giving them something' rather than finding that 'something' themselves. This is a continuing concern for our department.

Improving Healthcare practice by independent learning (inflammatory bowel disease)

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Description

This level six independent learning module on inflammatory bowel disease offers full-time qualified healthcare practitioners the opportunity to develop the advanced knowledge, understanding, and skills to professionally care for a patient with inflammatory bowel disease. The module is delivered by a team of three: two clinical specialists from the local NHS Trusts and a senior lecturer from the University of Salford. Up to 15 students can undertake the module which is offered once a year and runs over one semester.

Using the virtual learning environment (VLE), Blackboard, the students work through three structured units of learning which include recorded lectures by specialist practitioners, questions and links to electronic up-to-date relevant modular reading material and university electronic reading lists and reference resources. Throughout the module, students engage in informal blogs and contribute to a mandatory online professional group discussion board. Clinical specialists are able to respond, and add to both blogs and discussion boards, which are monitored daily.

Monitoring student engagement is considered vital to the module and is taken very seriously. By using Blackboard, students who struggle, or who are not engaging, can be identified at an early stage and the appropriate support can be offered immediately. For success, close monitoring should usually take place with independent learning, although this should not be visible to students.

Individual student support for clinical progression is offered by two designated, part-time clinical specialists who are employed by the University of Salford on a sessional basis. Students' academic skill development is monitored by a Module Lead, a full-time Senior Lecturer from the University. As the University's student intake is international, Collaborate, Skype, phone, email, and face-to-face meetings are all utilised as required.

The students are invited to attend an orientation day at the beginning of the module, for a formative practice assessment day and for a final summative assessment presentation to demonstrate that they have achieved the module outcomes (although this presentation can also be undertaken via Collaborate, a Weblink through Blackboard). Online orientation and Skype and synchronous Collaborate support is offered if students cannot physically attend these days (asynchronous Collaborate is a useful tool to use for pre-recorded information).

At the beginning of the module students write short biographies together with their contact details, which are shared with all members of the group, thus creating a community spirit. An informal mode of communication is offered via a module blog, and students are encouraged to start with this and to reflect and express any concerns they have at the onset of the module. This gives students an opportunity to talk to each other and ask questions, and they are reassured in that most of them have similar feelings. Material release and completion is timed throughout the module and each unit is accompanied by a professional discussion board. Communication with clinical specialists is by synchronous means on pre-determined dates.

In the current healthcare climate many healthcare professionals are not able to commit to traditional university module attendance. Students who apply for this flexible independent learning module are

motivated to do so as it fits into their current working commitments, and the need to travel is diminished but they are able to make academic progress and gain appropriate specialist recognition. The module is also flexible enough to engage with international students and we receive applications from all over the world.

The module outcomes are specifically designed to be generic. They are:

- to develop knowledge and skills in inflammatory bowel disease patho-physiology and management;
- to develop assessment skills including diagnosis and treatment options in inflammatory bowel disease;
- to examine the role of the multi-disciplinary team in relation to inflammatory bowel disease.

As the students who undertake the module come from a variety of professional healthcare backgrounds, the academic assessment is by means of a twenty-minute presentation followed by ten minutes of questioning. Assessment presentations are designed to demonstrate critical skills in respect of their own specific professional and academic development throughout the module.

Formative assessment takes place on a designated (practice) assessment day. Students present in front of their colleagues and receive feedback from peers, lecturer and clinical specialist. By doing presentations in front of peers, students receive a variety of perspectives as to how the module outcomes have been met and find this day very useful.

Summative assessment presentations are undertaken with just the assessors, moderators and external examiner present. If the external examiner is unable to attend, presentations are recorded via Collaborate which can then be played back at their convenience. This also has the advantage of reducing university travel costs.

Effectiveness

The initial design and writing of the module materials was a collaborative effort from both clinical specialists, consultants, multi-disciplinary personnel, and a senior lecturer experienced in writing independent learning materials. It took over 18 months to get the course right as it had to meet both current professional and university validation standards and was dependent on professional commitments and personnel availability. There was an obvious cost incurred for the recording of the module lectures and an uncertain period as to whether the module could be developed (full development costs were sponsored by Shire Pharmaceuticals). The amount of time for the writing of good materials should never be underestimated. This is a still a dynamic process, but the materials are now flexible enough to be easily changed and updated as required.

The publicity materials for the module are disseminated by flyers through professional groups and advertised through the University website. Students are contacted via a waiting list once it is known that the module will run. There is no interview process, but candidates are approached if further information is required. To date this has been successful. It is also important to note that if a student application demonstrates no recent academic study activity, they are allocated designated protected study time.

To date, one module has run (with a second oversubscribed and imminent). In the first module, there was one non-submission due to illness and three referrals, out of a total of 15 students. All students subsequently passed. At times professional working interfered with academic work and the material completion time-release date was extended once during the module. Timed completion is currently under review, but it does have the advantage of giving students a structure to the module, which is considered very important for independent learning.

Students on the module provided very positive evaluations and the external examiner was amply satisfied with the recorded online assessments (saving them time and travel). Evaluation is ongoing and there is an open dialogue with students, many of whom talk to new applicants.

Promotion

Interested students are clearly advised that the module is an independent learning module with online supporting module materials and academic resources. The Student Life Directorate has developed a large number of study skills materials which the students take advantage of. They are advised to inform their employers that although this is an independent learning module, this design allows them to take flexible study time rather than be given no study time. Generally, students report needing one day a week to complete the necessary work. If employers need any more information about allocated study time, the module team will talk to them on an individual basis.

Independent learning at a distance: a collaborative experience for part-time professionals

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Description

This part-time MSc in 'Banking Practice and Management' is a selective, wholly online course delivered via a Moodle-based virtual learning environment (VLE). At the heart of the MSc are asynchronous discussion forums, synchronous online webinars and, for those students able to commit to regular attendance in London, the option of face-to-face workshops. The programme aims to be as flexible and collaborative as possible, while simultaneously maintaining a high degree of structure to support students' effective management of their own workload and eliminating the sense of isolation that can sometimes be experienced by distance learners.

All current MSc in Banking Practice and Management students hold full-time roles in the finance industry. The students aspire to rise to senior management positions in the sector by broadening and deepening their interest in, and existing knowledge of, financial services beyond their own institutions. This objective is even more prevalent in the aftermath of global events of the last seven years whereby the uncertainty and constant fluidity of the banking industry demands that its managers explicitly evidence strengthened competencies and academic credentials. The students all work in the same sector, are driven by similar motivations to study and are thus bound together by commonalities. Yet, their backgrounds are varied in terms of individual organisations, roles and nationalities, with finance professionals from locations as widespread as the UK, Africa, the Middle East and the Caribbean. Each learner is, therefore, able to benefit from the diverse knowledge and experience of his or her peers in an area of relevance to the group as a whole through the collaborative design of the course.

The programme's central resource is the online study guide, available via the course VLE. Updated prior to each delivery to ensure ongoing currency and industry relevance of the syllabus content, the study guide takes students week-by-week through every module. The guide provides essential contextual background, directs students to both required and optional readings and suggests a number of activities to support and deepen their understanding.

The study guide helps students to organise their work and manage their time by taking them through the module and the readings systematically, supporting the students' broadening interests and engagement with the wider debates and literature. As students work their way through the study guide, they are directed to read chapters from books or articles. These are normally available through the University's online library, *ifs KnowledgeBank*, or are freely available via the Internet. The readings are selected to offer a different (and sometimes intentionally contradictory) perspective on industry issues. Students may be invited to weigh up both sides of an argument and come to their own reasoned view.

The online study guide activities help students engage in personal learning by drawing on their own professional experience and making links between that and the topic they are studying. However, rather than students simply learning in isolation, it is critical that 'independent learning' also encourages collaboration. To this end, the study guide activities involve students reflecting on and evaluating key resources/readings (e.g. academic, industry or government reports, or media freely available), sharing those critiques, reflections and insights with their peers and responding (critically but constructively) to other students' comments. The guide also invites students to make short reflections in a blog or journal (which they are encouraged to share with the group and which, on occasions, contribute towards the programme's summative assessment) and link these to the reading in which they have engaged. Finally,

the guide asks them to research particular topics further (either using *ifs KnowledgeBank* or in students' own organisations) and to summarise their findings for the group.

A core pedagogic ethos of the course is the formation of a close-knit, interactive and supportive learning environment, with strategies for community building embedded throughout the programme design. The asynchronous discussion forums are very much seen as a 'safe' environment where students can engage in debate centred on the study guide activities, make mistakes and identify areas of challenge or weakness, without fear of being judged. Frequently, students will support their peers, perhaps by suggesting additional reading which may provide clarification on a particular point, highlighting a topical news item or drawing on their own professional experience. Both the face-to-face workshops and webinars also provide invaluable opportunities to engage and collaborate with the rest of the group and build on students' own independent learning; the workshops, in particular, allow students to gain additional insights through industry lectures, debates and discussions, often delivered by guest speakers from the financial services industry.

Finally, staff are key to ensuring a successful independent learning experience. Emphasis is placed on the blend of academic and 'real life' industry input into every programme, and the MSc in Banking Practice and Management is no exception. Academic module teams thus seek to develop students' theoretical knowledge and academic skills by drawing on each individual's professional expertise; questioning, encouraging and challenging students while providing ongoing feedback on their progress (the latter being critical to encouraging student achievement).

Although the above example of independent learning relates to postgraduate study, it is equally relevant to part-time professionals studying at undergraduate level. The Quality Assurance Agency for Higher Education's (QAA's) level six qualification descriptors[1] call for undergraduate students to, inter alia, demonstrate the ability to devise and sustain arguments, to show an appreciation of uncertainty, ambiguity and limits of knowledge, and to manage their own learning, making use of scholarly reviews and primary sources. Each of these can undoubtedly be attained by an appropriately designed independent-learning model such as the one described above. For this to work, it is essential to 'know your student' and put the characteristics and needs of the learning group at the heart of the course design.

Effectiveness

The programme's main strength is that students are able to draw on the diversity, depth and breadth of the group as a whole, in terms of both professional and academic experience, in order to scaffold their own independent learning. One student noted that:

> *ifs* University College attracts an extremely high calibre of students. As such you can learn masses from each other. On my course there is a head of credit, a CEO, a head of risk, an investment banker – all from different organisations. The learning opportunities are incredible.

Listening to student feedback is at the heart of this programme, and as one student observed:

> A major plus to this course is the small cohort and the fact that *ifs* University College really do listen to their students. It is guaranteed that the course you will be studying has been shaped and moulded by those that have gone before you; an educational environment like none I have experienced before.

[1] QAA UK Quality Code for Higher Education, Part A: Setting and maintaining threshold academic standards, Chapter A1: The national level [Online]. Available from: http://www.qaa.ac.uk/Publications/InformationAndGuidance/Documents/Quality-Code-Chapter-A1.pdf [Accessed 19 May 2014]

Since the MSc in Banking Practice and Management was launched in 2011, student feedback has informed, at all stages, the ongoing enhancement of the programme. For example, online webinars were introduced in 2013 responding to student feedback that the inclusion of additional synchronous discussions within the programme would support the embedding of various concepts and provide extra collaborative opportunities among the group. Webinars are recorded for students unable to attend in 'real time'.

Regarding weakness, the limited availability of study time is undoubtedly the group's biggest barrier, with the students' professional roles increasingly demanding longer hours and the meeting of urgent deadlines. Furthermore, many of the students have family commitments meaning that a strong personal support network at home and work is vital. The programme is thus designed to help students fit their study around their work and other life commitments, with the study guide and asynchronous discussion forums, in particular, enabling students to learn independently and at their own pace, while still encouraging that sense of feeling 'connected'.

Promotion

While not explicitly employing the term 'independent learning', the *ethos* of independent learning *is* communicated to students. From day one of the programme, students are asked to reflect on the critical and evaluative skills that are expected of them at postgraduate level and provided with guidance on how to develop academic and study skills such as time planning, reading critically, note-taking, online searching and referencing. Tailored online webinars and workshop sessions led by both the programme team and experts from *ifs* University College's wider academic community support students to build these techniques, which promote successful independent learning.

The programme's online discussion forums offer a strong 'scaffold' for students. This support is initially driven by the module lecturer(s). However, as the course progresses and students develop their own self-confidence – as well as trust in and a rapport with their peers – students increasingly take responsibility for their own learning by drawing on input provided by the group as a whole. Online blogging forms part of the summative assessment for two modules. For example, in Bank Risk Management and Regulation, students work independently to find information relating to global and national events taking place in the financial regulatory environment, with the blog bringing together those threads of investigation and acting as a record of students' thinking and insights. At three stages during this 15-week module, lecturers give students written formative feedback on their progress, with ongoing commentary from the student group considered equally valuable in encouraging independent learning.

The 15,000-word dissertation – the final element of the MSc programme – is the culmination of the students' independent learning 'journey'. The dissertation provides students with the opportunity to produce an individual piece of research in an area of their choice in the field of banking and financial services, under the guidance of an academic supervisor. Partway through the dissertation period, students are invited to orally present their research to peers and the programme team, thereby sharing the challenges and successes of their own independent efforts. Dissertations achieving a distinction are published via *ifs* University College's website and/or *ifs KnowledgeBank* (with the exception of any that are confidentially sensitive), with some students presenting the research to their employers (who have, in the majority of cases, sponsored participation in the study programme).

Independent learning in a student society

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Description

The purpose of this course is to enable students to learn and practise their advocacy skills. They meet on a tri-weekly basis and work in pairs in a competitive environment, presenting cases in a mock courtroom with a judge presiding. The judge is usually either a third year law student familiar with the area of law or a barrister with ties to the law school.

The students are given a legal problem and are required to present a case on it, this involves establishing the legal issues from a set of facts, drafting a skeleton argument, preparing a bundle of legal documents and presenting this case in a courtroom environment. The skills learnt are key to any future career in law or business and provide a practical side to the course that is otherwise absent from the standard LLB course with its more academic focus.

Intended learning outcomes are that students gain the ability to handle cases from inception to court as well as being able to present confidently in court, including dealing with judicial questioning.

Students are primarily expected to develop these skills through independent study and collaboration with their partners. The competitive atmosphere tends to ensure that they rapidly develop these skills and quickly learn from their mistakes.

Resources used to support this learning include the law library, legal databases such as Westlaw and Lexisnexis. The law school also provides facilities for the training, rooms for practise and finally facilities for judging.

Feedback is given at the end of each session and contributes to improving students' performance in future sessions via highlighting areas upon which to focus. The trials take place in the evenings to allow students to attend regardless of their lecture or seminar commitments.

Aside from the advocacy training offered, there is also a peer-mentoring programme run by the student law society. This programme matches up first year students with second and third year students to provide support on coursework and revision as well as advice on gaining work experience. It assists independent learning by improving collaboration between different year groups and tempering the initial difficulty faced by new students uncertain of the standard expected of them or unsure how to improve their work.

Effectiveness

Mooting increases confidence, enhances CVs and develops practical skills of legal thinking and research, analysis, teamwork and public speaking in an adversarial setting. Most learning is geared towards an end-of-unit assessment but mooting is an immediate challenge to learning, assimilation, synthesis and argument and is a dynamic medium for formative development of lawyers' skills.

Mooting helps you to appreciate that disputes turn on key points and if you find those key points quickly and efficiently you are developing essential lawyering skills – mooting helps you to do this in a practical way with the incentive of needing to get it right for a decision in your favour in a public environment. The advocate will become familiar with using primary and secondary sources of law, prioritising their

relative evidential weight in support of those essential key points and learning to present this persuasively and coherently.

Because most moots have time limits, you will also learn to differentiate between the relevant and the background material – some of the real world pressure is replicated in a safe but challenging environment.

This course also enhances student networking – the Society organises training by local practitioners so students are able to interact with working legal professionals from whom work experience opportunities are often forthcoming. Plus there is the first hand opportunity of finding out what is going on in local practice.

The course has several strengths, and has led to good performances in mooting competitions over the past several years. Secondly, students found exams easier in areas they had the training in due to the deeper understanding it provides. They also appreciate the importance of the skills it develops for the job market.

However, the course does have certain weaknesses. Firstly, it relies on student commitment to attend the programme, and around exam periods it can be difficult to maintain numbers. It also requires a considerable amount of work initially to adapt to the training, as students often have only limited experience with mooting, this can lead to students feeling that they are 'dropped in at the deep end'. However, it is the fastest way to get results in the limited time that students have to take part.

In summary, gaining mooting experience can have a positive impact on future careers. Application forms for legal professional courses, solicitors' firms and barristers' chambers often demand that a candidate can provide evidence of their advocacy or mooting experience while at university (over and above any of the more traditional areas of advocacy such as debating). Mooting may also help build confidence in public speaking, general research, and presentation skills. In other words, mooting experience can benefit every student whether or not they plan to follow a traditional legal career path upon graduation.

Promotion

Communication to students is via the student law society. It is initially advertised by the law school and is also advertised to potential students of the Swansea University College of Law on open days by members of the student law society committee.

The greatest promotion is success. Swansea University's Law School hosted the Welsh National Mooting Competition in 2013 as a consequence of being Winners in 2012. Success by Law Society students in National mooting competitions has led to an upsurge of interest for the Society's internal mooting programme, which attracts around 100 participants annually. The traditional 'word of mouth', plus presence on Facebook and Twitter all help with promotion.

Independent learning in a year three 'Professional Perspectives in the Creative Industries' module

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Description

Professional Perspectives in the Creative Industries is an optional module taken by year three single and combined honours Film, Radio, and Television (FRTV) students who are engaged in a degree that integrates theory and practice. Over 70% of the final year cohort usually opts for this module (last year this was 78 students). The second assignment, worth 60% of the marks, involves the students working in groups of five to eight, largely outside of class time, to research and prepare a five-minute pitch in response to creative industry briefs set by the Industry Advisory Panel (IAP). The IAP works with the programme to ensure effective links with the creative industries. The groups are self-selecting but we encourage the students to gather their group based on expertise rather than friendship groups. The most successful pitches usually come from the group where there is a wide variety of expertise as each contributor can add a different dimension to the pitch development.

The students choose from six briefs covering all aspects of the film, radio, television and digital domains represented in their degree programme. Telegraph Hill, a social media and multi-platform content provider, based in London, offers two briefs that integrate TV production, social media input and audience-generated content in (a) a dedicated music show for the 18–30 age range, and (b) an interactive reality TV for the same audience group.

Two film briefs are supplied by Footprint Films, an independent production company co-founded by one of our alumni, Jackie Sheppard, who specialise in stories dealing with issues of social concern.

An advertising brief, set by a freelance director (also an alumnus) who has worked with a range of large advertising companies, focuses on a well-known product where the students have to provide outlines for a radio, TV and online ad campaign.

One brief is supplied by Unusual Media, a radio and TV production company, specialising in radio features and run by another alumnus, broadcaster and comedy writer Jon Holmes.

The final brief is supplied by Jumping Astronaut Ltd. whose founder, Paula Moore, has worked as a media consultant on the module since 2011. The students are asked to pitch specific ideas for online content, using Instagram, blogging, video content, and Pinterest for Mermology.com, a ground-breaking site developed by Paula that utilises a compelling dramatic narrative to draw attention to the sustainability of the Oceans.

The students work together over an eight-week period to develop and refine their pitch ensuring there is evidence via social media or wikis of weekly meetings, tasks set and completed and a clear designation of responsibilities. The meetings outside of class time tend to increase in frequency around the dates of the mock and real pitch. All group members must contribute to the presentation of the pitch. The students do a mock pitch for the module tutors two weeks before the real pitch and receive feedback in order to recalibrate their pitches before they present to members of the IAP.

At the real pitch they receive feedback from the IAP and a strong sense of having responded to a 'real world' creative brief.

The students mainly fall within the 20–25 age range but each year we have a number of mature students who contribute a great deal to the group work dynamic.

Social media plays a crucial role in how the students organise themselves for the group work independent learning activity, and – in a sense – they create their own blended learning experience.

Effectiveness

Once the structures are in place and templates available through the student's virtual learning environment (VLE), CLIC Learn, responsibility for the creation of the pitch is given over to the group members. They gain experience in effective group work; not just how to work within a group but how the dynamics of groups operate. This is underpinned by work we do in the first term using critical thinking tools such as de Bono's *Six Thinking Hats*; the Stanford Institutes' 'needs, approach, benefits, competition/alternatives' (NABC); and 'strengths, weaknesses, opportunities, threats' (SWOT) analysis. Richard Sennett's *Together: The Rituals, Pleasures and Politics of Co-operation* (2012), also helps to underpin the development of the learning and teaching model for the module.

The students show evidence of their independent learning in the pitch production but also in the construction of the portfolio that accompanies the pitch. This portfolio has to be constructed by the team and includes: a copy of the brief; a copy of the pitch; critical thinking analysis of the format; research on the competition; mock pitch feedback and progression; records of meetings and actions with responsibilities; and peer/self-evaluations.

In evaluations of the module the students often focus on how much this type of group work has helped develop their confidence and improved their ability to work in groups. The big pay-off for the groups is that they pitch to creative industry experts who make their living from pitching. The students take responsibility for their own work in a way that empowers them and focuses their attention on the constructive use of their time outside the lecture room. The high quality of their portfolios and their pitch presentations is another marker of how well they manage their own work. This model of independent learning offers a number of pedagogic and life lessons about working in groups; about being able to take responsibility for you own decisions, and about preparation for the world outside the safety of the academic castle where pitching in groups is a crucial part of securing work.

External examiners have been very complimentary about the ways in which the module engages students in independent learning and at a recent revalidation of the FRTV Programme (March 2014) the team were commended by the validation panel for the approach to employability within the module.

Promotion

The programme team uses the 'Professional Perspectives' module as a case study in our visit and open day presentations to prospective students and their parents.

The module is presented during module option talks and there is specific focus on the scope for independent learning offered by the pitching exercise and portfolio in 'Assignment 2', which is worth 60% of the overall module mark. The students' engagement is maximised by outlining the opportunity to present to an Industry Advisory Panel who may, as has happened in the past, be able to offer them an employment, internship or placement opportunity.

The work of the module has been presented at learning and teaching conferences within the Faculty of Arts and Humanities, at a broader University level, and externally at a Higher Education Academy (HEA) Arts and Humanities Conference in 2013 (focused on independent learning and social media).

References

de Bono, E. (2000) *Six Thinking Hats.* London: Penguin.

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Independent learning in the training of young composers

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Description

Over 30 years the author has developed a (BMus degree) programme of teaching in art composition within the Western ('classical') tradition. This consists of three undergraduate years (of which he normally teaches levels one and three). These lead thereafter to the chance of an MA in music (composition) and, in many cases, PhD in composition. In this pathway's progression formative critical judgement is intrinsic to the process, since the learner presents creative work in progress, on an increasingly elaborate scale, for critical response from the teacher. Final assessment is summative, but the work assessed at that point has been developed independently with constant formative critical input.

This learning embodies the truism that with freedom comes responsibility. Creative working of individual musical material is often termed 'free composition' (i.e. that without specific limiting instructions such as characterize exercises), but freedom brings with it the responsibility to assess and implement materials as a learner; it is the handling of this freedom and responsibility that characterises the training of the developing composer.

Learners are given creative musical assignments which, because there can be no specific outcome, require open paths of individuated thought. It is a cardinal rule of these composition groups that the 'intended outcome' of composition tasks cannot be specified in advance; if the learner does something worthwhile, it will come from outside what can have been anticipated. The whole point of artistic training is to equip people with context, processes and tools for working and then to let them put these to use – not to specify the detailed content, which inhibits the very decision-making that is intrinsic to creativity. It should be noted that this principle is as true of very simple student exercises in year one – devising a rhythmic pattern or chord sequence – as it is of composition of large-scale works in year three.

Four principles underline the learning of this discipline:

1. Art is not what you know – firstly, we are surrounded by cultural products, examples of replication according to successful formula. But art is, by contrast, that which is unknown, harder to grasp, resistant to easy quantification.
2. New art is unknown but its materials are known – composition is the fashioning of familiar materials into new forms, so learners should take a fresh look at stuff around them, rather than trying to split the atom.
3. No-one can compose in a vacuum – all art is about context, with decisions made against the back-drop of work that is already there to inform, so it must be familiar. Ignorance of the past is no basis for making something new.
4. Hearing is believing – music is created to be sounded. Where possible, new work, even the simplest exercise, should be heard, and the emphasis is on producing written scores of professional clarity and getting professional artists to play them for learner groups.

For composition study learners work individually, though collaborative work could be envisaged. Staff input is formative, to give critical response to the work in progress, but this feedback itself depends on where the student composer has 'gone' with the assignment. The conversation with every learner will be different, because composition is all about context; there are no 'rights and wrongs' (away from technical specifics), and every situation requires different strategies.

Learner support for this independent working rests in part on the formative critical response (above) that is given through the process, but the main support for individual creative work is inbuilt, by means of preliminary activities – exercises, studies on smaller scale, study of contextual works – that feed into and set up the individual tasks. It is important to stress the last of these training aspects, the study of existing repertoire, which means that audio and library (musical score) support is central. Published scores of modern musical works are often ridiculously priced, yet the experience of seeing the musical text as a set of notated instructions to the players is transformative for learners.

The importance of insisting on creative work without the safety-net of prior, defined 'intended outcomes' is clear from the very fact that it challenges new learners in the field – maybe more so, today, as the school curriculum induces greater reliance on specified outcomes that, for the real world of artistic creative work, offer little preparation; if the music already existed, there would be no need to create it, so by definition this undertaking is one without the reassurance of the 'safety-net' of a defined outcome. Therefore, for learners reaching university, the taking of responsibility for creative outcomes is long overdue if they are to evolve individually as composers. Once the imaginative threshold has been breached and learners face taking ownership of their own material, they are empowered to pursue their own artistic development – something that by definition cannot be achieved without independent learning.

The composition toward which these learners are being trained is, by its nature, highly individuated in expression. For this reason, every task, from the first homework exercise onwards, must offer a multiplicity of learning outcomes rather than a 'right answer': two learners may respond to an assignment to produce a chord-sequence with quite different responses which, in both cases, offer valid manipulations of the given material. This responsibility to fashion viable content according to given parameters grows, exponentially, as the learner gains in confidence and sophistication through the process; it is the balance of freedom with artistic responsibility that offers the path to an individuated practice.

Effectiveness

The key evidence for the effectiveness of independent composition learning is the record of several generations of high-performing students since the 1980s who have specialized in the pathway and gone on to further study and practice: for example since 2003 a successful specialized MA Composition has run, largely fed by intake from the undergraduate experience set out above. This MA, in turn, has furnished at least ten PhD composers among our research community in the last decade.

The weakness of this, in terms of learner engagement, is that not every student wants to face the difficult territory of individuated working; the prevalent reliance on clear-cut, highly structured learning in schools curriculum proves impossible to leave behind for some, discomforted by the lack of verifiable outcomes and heavily drawn to replicating what is already in their experience. Pursuing creative disciplines is not for everyone, but the training is so replete in transferable attainments that learners who feel the discipline is not for them also reap wide benefits, even while not taking further composition courses in the pathway.

Formal recognition for the author came in 2009 with a Sustained Excellence Teaching Award from the institution.

> My eyes were opened in first year – I learnt a lot in second year – I felt confident in third year. (Graduating learner)

> I consider the depth and detail of feedback given to students to be in many cases exemplary. (External examiner's final report, MA in Composition 2008).

> We were impressed and delighted by how all the students could clearly HEAR what they had written. It was satisfying to give performances that represented a true, final act of realisation rather than the exercises in proofreading, computer software techniques and other irritants we have encountered elsewhere. (Ian Buckle and Richard Casey – visiting piano duo, 2009).

> This is a really good exam paper and I very much like the timing advice and helpful hints given. (External Examiner to BMus, 2014).

Promotion

The nature of the independent learning is communicated to the learning community in class at the outset of the pathway. Much of the first semester is given over to setting out these new values of independent thought and artistic responsibility that govern the wider artistic world, but are not acquired in the learning environment from which these students come.

Learners are urged that the great works of music to whose study they (as students of a BMus course) have committed came into being not as productions of a previously established template but through individual thinking, built on a basis of acquired technique. The fact that great works of art show autonomy, individuation and extension of what was at that time experienced becomes apparent only with study, since anything familiar in our culture will have come to represent normative behaviours; the learner has to rediscover its newness.

This message is also conveyed annually by the author in open day presentations to visiting applicants, parents, and teachers – to make clear that university learning of compositional practice involves initiative and imagination and is a process in which the learner takes responsibility.

Instant feedback on self-assessment questions

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Generic (part-time, online distance learning), Open University

Description

The Open University (OU) has many years' experience in delivering distance-learning programmes to students across the UK, and increasingly throughout the world. At the heart of this provision are learning activities that promote independent learning among students who are usually studying in geographical isolation from their peers.

Since the OU's first courses were presented in 1971, self-assessment questions (SAQs) have formed an important part of the learning design.

In the early days these SAQs were delivered in printed form and were simply a set of questions for the student to work through with answers to compare against their own. To be most effective, the practice required students to be disciplined enough to come up with their answers before looking at the provided responses. Many students admitted that they often just read the answers without making any attempt at answering the questions themselves.

Forty years on, all OU students are required to have Internet access which allows the learning design to incorporate websites, which include interactive teaching materials.

Many OU modules now have online SAQs. These can be interactive and offer the student instant personalised feedback to help them to identify gaps in their knowledge and understanding.

After completing a section of study, students are directed to attempt the SAQs related to that topic. Students are offered a number of questions selected from a large question bank. A range of different question types are available including multiple-choice, drag-and-drop and free text answers. Once the student submits an answer they are given instant feedback, which is directly relevant to the answer that they gave. The student will have several opportunities to refine their answers, each time being given directive feedback. If the student still does not have the correct answer once they have reached the maximum number of attempts for a question, the feedback will direct them to review a particular section of the module material. Once the student has submitted a correct answer, they can be given the option to answer another similar question, or to move on to the next topic.

These interactive SAQs are used for both formative and summative assessment. On modules where the SAQs are formative, students can complete the questions as often as they like throughout the module. Many students use them both as they progress through the module materials, and as a revision aid when they are preparing for exams or end of module assessments.

On some modules the SAQs are formative but compulsory. This is achieved either by setting a threshold of zero as the pass mark for this assessment object, or requiring students to submit some written reflective evidence on their SAQs performance as part of another longer piece of assessment.

When the SAQs are part of the summative assessment, the student's grade is calculated according to the number of attempts it takes them to achieve the correct answer. Summative SAQs are usually available after the submission deadline, to use for revision purposes.

Giving students the opportunity to engage with the SAQs as they work through their module materials allows them to assess their own progress and attainment of the learning outcomes. The student is then able to identify areas of weakness where they need to review or undertake further study. Some students also use the SAQs at the start of a new topic to test how much they know before they begin.

Having a bank of questions, which are randomly presented to the student, ensures there is an opportunity to test their understanding several times. This reduces the danger that the student has achieved the correct answer by luck rather than judgement – for example in the case of multiple-choice questions.

On some modules, associate lecturers have access to data showing which students have attempted which questions, and their achievement. This allows associate lecturers to keep an eye on student activity to ensure they are making progress through the material, and identify where they are having any difficulties. Where a student has had several attempts at questions relating to a particular learning outcome, associate lecturers will be able to see that they are struggling and intervene to offer additional support.

All OU websites are tested for accessibility and are designed to work with commonly used adaptive software in order to support students with disabilities. There are, however, problems for students who have limited Internet access. For example, as there is no Internet access available in prisons, our offender learners are unable to take advantage of the interactive SAQs, and are sent paper-based versions.

Effectiveness

The students are more likely to engage effectively with the self-assessment questions if the answers are not revealed until after they have submitted an answer. If the answer is incorrect they are given helpful suggestions and the chance to have several attempts before being directed to review the relevant module material. This encourages them to review, reflect, and try again.

Feedback suggests that these interactive SAQs are effective both at helping students to consolidate their learning and also as a motivational tool. Distance learning students often find it difficult to judge their progress against the learning outcomes, as they do not have as much opportunity as campus-based students to compare progress with their peers. This system of giving instant feedback allows students to know when they are making progress.

Giving instant feedback is an important improvement to the learning experience. If the student is simply given the correct answer they may not identify where they had gone wrong. When students are encouraged to try again they will revise their approach to the question presented, hopefully improve their methodology, and be better prepared for similar questions in future.

Promotion

OU students are aware when they register that they will need to undertake a significant amount of independent study. However, they still need support and encouragement.

The increasing use of website analytics and monitoring of student interactions allows us to identify patterns of behaviour and intervene when students are perceived to be at risk of failing or withdrawing.

The SAQs are regularly signposted throughout the module. Students are directed to them at relevant points in their study, in addition to being able to access them directly. Frequently, associate lecturers will also direct students to attempt the SAQs, particularly prior to face-to-face or online tutorials in order to identify areas where students need most support.

Studying part-time and at a distance requires students to manage their time and organise their lives in order to both meet study deadlines and continue being effective in their other life roles. We encourage students to highlight this when they are engaging with employers as part of their suite of transferable skills.

Integrating research-informed teaching within an undergraduate diagnostic radiography curriculum

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Description

The research-informed teaching experience (RiTe) at the University of Salford combines research with teaching within the BSc (Hons) diagnostic radiography curriculum for year one (level four) and year two (level five) students. RiTe is a week-long inquiry-led activity, although for year one students this culminates in a weighted summative assessment. A clinically based scenario is used within RiTe to get students to investigate the relationship between the exposure acquisition factors used in x-ray imaging and the effect these have on image quality and radiation dose. This scenario was selected because, as a qualified radiographer, there is a professional requirement to have the knowledge and clinical decision-making skills to generate radiographic images that are fit for purpose while ensuring all radiation doses are kept to a minimum.

The students work in small self-directed collaborative learning groups, within which they manage timetabled tasks, conduct their research and draw conclusions from their findings. RiTe includes supportive material via tutorials by academic staff and PhD students. PowerPoint (PPT) presentations, guidance manuals and podcasts are made available via the online learning platform, Blackboard. Procedural information is also provided in the form of a student handbook. The process is supported by a facilitator – a member of the academic team – and task supervision is by both academic staff and PhD students.

The intended learning outcomes for the students during the week are:

- to be able to discuss what is meant by image quality and the key concepts of radiographic image quality;
- to be able to discuss what affects radiographic image quality;
- to be able to demonstrate the effects of changing key radiographic exposure factors on image quality and radiation dose;
- to be able to state and explain the experimental design and data analysis by the guided review of related literature and collaborative group work;
- to record the outcomes of experimental work, taking the diagnostic quality of the images acquired and dose into consideration via collaborative group work;
- to interpret the data collected and analyse this with regards to the effects of radiographic image quality and radiation dose via collaborative group work.

Students are also asked to identify an exposure factor combination that provides optimum image quality with the lowest possible radiation dose based on their findings as a group.

The students undertake three days of RiTe within the clinical skills lab, using X-ray equipment and phantoms, and are required to undertake a self-directed literature search on the first day. The last two days are spent in allocated rooms or learning spaces, in order to analyse the results from their research and draw conclusions. At the end of the week there is a plenary session where students give a PPT presentation of their research and findings, followed by student-to-student and academic staff-to-student discussions.

RiTe also forms a summative assessment for year one students in the form of an experiment report based on their results and findings during the week. However, they are also required to consider what further work they could have also undertaken. The assessment and feedback from this can be used by the student as part of their development in clinical assessments; for example, objective structured clinical examinations (OSCE) and as knowledge towards their final, year three evidence-based study. Currently, for level five students there is no assessment. However students are encouraged to prepare a self-reflective presentation of what they have learnt during RiTe, as part of the plenary session on day five and this helped a number of students to identify areas of weakness for further learning along with ideas they may wish to further explore for the their level six research dissertation.

A novel aspect of RiTe is that it is timetabled during the students' practice placement block. In this way we are trying to show students that research is not just an academic exercise (to be carried out during academic time and for the purpose of supporting assessment), but that real-world research is something that all practitioners should be involved with. The fact that we give the students a clinically-based problem to solve related to their experience and vocational training aims to link theory with practice and to communicate why research is important (evidence-based practice). Therefore, RiTe not only facilitates student learning, but also involves them with research within the discipline of diagnostic radiography.

RiTe is timetabled from 9am to 4pm in order to support those who may travel from long distances or have family commitments to ensure that all students are able to fully engage with all aspects during the week.

Effectiveness

Student feedback has been very positive. Evaluative research with a year one student focus group and year one cohort student survey demonstrated that students found RiTe to be a valuable, relevant and worthwhile learning experience.

Both sets of research data confirmed that students felt RiTe had helped to facilitate their understanding and knowledge of the effects of manipulating X-ray exposure factors on image quality and radiation dose, as well as increasing their awareness of the role of research within radiography/developing their research skills. One of the key elements identified by both the focus group and survey data was that of collaborative learning by the students during RiTe. This was achieved by the students undertaking their learning within small groups using a self-directed learning approach supported by guided learning and sharing knowledge with their peers.

Findings have shown that the method of delivery of RiTe may also have the potential for students to develop team-working skills, which is essential for effective healthcare practitioners.

Anecdotal evidence suggests that having undertaken RiTe in years one and two, year three (level six) students have found RiTe useful in helping them to design their evidence-based study as part of the methods of enquiry module.

However, encouraging some students to fully engage in the process does require particular attention and commitment to ensure successful student engagement. It is important to ensure that there is clarity in the tasks set – otherwise this can hinder the independent learning process. Students may become confused as to what they should be doing or what the intended learning outcomes are from the session and this can lead to issues with group dynamics or individual student participation with group tasks.

Promotion

Results from the focus group and survey have been published in discipline-related magazine articles and peer-reviewed journals in order to disseminate findings to a wider audience. RiTe is also highlighted during marketing and open day admissions sessions.

Students are also encouraged to submit posters or oral presentations based on their research within RiTe to a major discipline-based conference. Promotion is achieved through funding which allows students to attend without having to pay the registration fees.

As part of a University-wide seminar chaired by the Vice Chancellor (VC), experiences and findings of RiTe were disseminated in order to promote and share these to other health-related disciplines within the University. Students on the Radiography course were also invited to attend along with clinical tutors from hospital placements sites. Two third year students gave a presentation about their experiences of RiTe and agreed that they found RiTe to have to been a positive learning experience during their course.

It is also hoped that RiTe will foster a desire for lifelong self-directed learning. This is of particular significance within the health service as strategic drivers are encouraging the use of evidence-based practice to improve patient care and service quality.

Make a difference … to Social Work education

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Description

This example of independent learning was designed to contribute to Salford Refugee Week 2014 'Different Pasts, Shared Future', which focused on children and young refugees. The students involved had the choice to work individually or collaboratively in project teams and had been fully informed of the University's work with refugees through its community initiative 'Our Home Our Salford.' This potential additional component of learning is introduced at the interview stage, in lectures and via guest speakers.

'Our Home Our Salford' mirrors the concept of 'insider' and 'outsider' (Boyce Davies 1994) in community engagement and makes a link between experience and knowledge.

The concept of 'inside and out' is an interesting one in terms of 'the borders' within life and particularly within education in the work undertaken with refugees and asylum seekers. The idea of 'migration' and 'borders' can be used as a metaphor to explore what Boyce Davies, (1994, p. 1) describes as the "in between space that is neither here or there." This feeling of displacement and not belonging is not unusual in the work that has taken place with the migrant community (Hesk and Osuji 2012). The student feedback is that experiential learning has enabled students to understand the complexities of the "invisible boundaries" experienced by excluded groups.

Our Home Our Salford has involved stakeholders and created a hub of community activism within the social work directorate where students and lecturers have worked together as partners.

This experience has helped to identify that young people from refugee communities are often weighed down by adult responsibilities and are socially excluded (Cunningham and Cunningham 2014). This has resulted in young people negotiating with agencies on their parent's behalf and facing a lack of opportunity to engage in activities with their wider peer group.

The affective element in experiential leaning means that students can begin to see the relevance of theory to practice and how learning emerges from activity. In our project for example, students were able to begin to understand intersectionality and the impact when "multiple oppressions" connect (Crenshaw 1989)

The groups of students were invited to bid for small pots of funding through the University's Make THE Difference Scheme (Salford University 2012). The intention was that the students should shape the activities. However, staff support was available to signpost them to potential partners, provide consultancy and some outline requirements to guide and focus the experience. This recognised that although there is a synthesis between doing and thinking, the process of reflection is purposeful and needs to be facilitated from beyond the immediate experience (Boud, Keogh, and Walker 1985). The students were provided with the following framework:

1. The activities should be informed by some form of learning or consultation undertaken with refugee and or other youngsters.
2. This should help inform the activities, project or campaign that should involve refugee and local youngsters.

3 The activities, project or campaign should engage youngsters in ownership and contribute to the planning of the activities, project or campaign.
4 The students were asked to find ways of capturing their learning, the young people's learning and any wider learning.

In addition to the above the students were encouraged to reflect on the work undertaken by keeping a record of the intervention, developing plans and timelines and recording the learning that informed the activity as it progressed. Kemmis (1985) discusses the importance of the synergy of reflection and action combined stating:

> reflection is not a purely 'internal', psychological process: it is action- orientated and historically embedded … because reflection goes on in the head we are inclined to think of it as an 'internal', purely psychological process. To do so is to ignore the very things that give reflection its character and significance: to split thought from action. (Kemmis 1985, p. 141)

In order to aid this process the students were asked to keep a log and think about their own learning journey by focusing on two elements – skills required and gained, and knowledge needed and accrued.

The students had varying levels of life experience and educational histories that they could draw on to inform their activities and incorporate into the process of reflection. This reflective process drew on Boud, Keogh, and Walker (1985) who identify the centrality of evaluation in helping the students make sense of new knowledge through association, integration, validation and appropriation.

The negotiation with other agencies such as the funding body, schools and housing organisations provided lots of 'natural' interventions that would require them to respond to challenges.

The clear emphasis they were given to involve the young people concerned and draw out their own learning ensured that there was a focus on the quality of the experience rather than a focus on outputs. The expectation was that the students would learn from the experience of working within teams, a key part of the role of becoming a social worker including the need to share responsibility, collaborate, delegate and problem solve and learn from each other and as a group (TCSW 2012). The celebration and bringing together of projects at the end was designed to provide an opportunity to learn from each other and to publicly acknowledge the contribution of students and young people.

The staff role as mentors was to guide, listen and ask questions to prompt reflection on higher critical levels. Knott's (2010, p. 10) belief is that "reflection needs to be critical involving critical thinking and critical self-awareness and leading to ethical practice." It was therefore recognised that students would benefit from sharing their experience so that learning became embedded and something that students could draw upon and relate to future learning and activities. This approach to learning encouraged students to understand the importance of process, thinking beyond the narrow confines of a subject and encouraged an open and questioning approach that is necessary within social work as in this sphere: "Learning is a process whereby knowledge is created through transformation of experience." (Kolb 1984, p. 38).

Moon (2005, p. 41) cited within Knott and Scragg (2010), adds to this notion by asking us to recognise "the importance of emotion in the process" of reflection, and shares the perspective that "this is not always recognised."

However it is clear from the student perspective (documented at the end of the article) that although they recognised that they learnt a lot of practical and soft skills arising out of the activity, a greater depth and level of support was required from lecturers to meet some of the broader learning

objectives. The contingent and uncertain basis of experiential learning means that perhaps formal points of communication and learning need to be factored in at the beginning.

Effectiveness

The activity is not a programme requirement but instead required students to demonstrate and develop intrinsic motivation (Biggs and Tang 2011) and a growth mind set (Dweck 2012). These are necessary dispositions if students are to become independent learners. This was vital as it ensured that students were central to the process of learning and created the possibility that this would result in change and the way they viewed themselves and learning. The projects were discrete activities that provided a structure to guide the learning and experience but also allowed the students control over the time and commitment provided especially given that they were still attending formal learning and undertaking practice placements that are a core requirement on social work courses. The projects provided the basis for students to be creative without being encumbered by performance frameworks that inform traditional placement experiences within the statutory and voluntary sector.

Therefore, in a very real sense, left to their own devices they experienced learning that is messy, contingent and contextual (Schon 1983). This approach removed the divide that often exists between theories; something taught in university and practice; that takes place 'outside' within communities of practice beyond the university (Lave and Wenger 1991). It also provided the opportunity for students to experience that learning takes place all the time and is the product of their activity and not simply teaching (Holt 1984, 1989). This enabled them to view learning as much broader than narrow academic skills but something that embraces emotional, practical and affective dimensions that include soft skills and leadership.

The limitations of time and other commitments meant that it proved difficult to hold briefing meetings and the groups of students came on board in a somewhat piecemeal fashion. In hindsight, we needed to be clearer about agreeing, communicating and sharing the learning outcomes from the outset rather than simply focusing on the activity.

This initiative contributed to a positive interaction between staff, students and service users (young people). An invaluable component of the participation was that students had to confront the issue of how to engage young people in the process of learning. In the process, they learnt about methods and approaches to participation that engage young people in learning (Shepherd 2002).

The projects resulted in an increase in students' awareness of legislation, policy and the experience of refugees and asylum seekers. There is evidence that students were motivated to read more and tried to make sense of their experience. The students had to address new issues, for example, in respect to participation and think through a range of methods of intervention that engage young people. The framing of a bid forced students to express ideas and proposals that were underpinned by evidence. The learning and deepening of knowledge has flowed out of the activities. For example, a lecturer accompanied a group of students on a visit to a local housing provider and there followed a discussion about the importance of networks and social capital, resulting in a discussion of Bourdieu (1977). As a result the students asked to be directed to appropriate reading and began to draw links with the wider curriculum.

There were also numerous examples of students sharing their anxiety and doubts. This provided an opportunity for students to recognise the affective dimensions and begin to realise that dealing with this is part of the learning process.

Promotion

> It is my firm belief that research does not exist of and for itself, but should bring useful knowledge into the world of everyday personal and social practices, and should help us all find ways of living more peaceful and productive lives together. (McNiff 2013, p. 2)

Experiential learning enables lecturers to become learners alongside students and service users. The students are exposed from the first year to the concept of experiential and reflective learning. This is important as, historically, concerns have existed about the effectiveness of social work education. In 2009 the Social Work Task Force remarked that:

> [We] heard from many sources that initial education and training is not yet reliable enough in meeting its primary objective, which must be to prepare students for the demands of frontline practice (Munro 2011, p. 86)

Students are engaged by providing different ways of learning by working closely with professional practice and the wider community. Hogan argues that 'learning with understanding' relates the teacher to their subject matter as a 'voice' rather than a body of established knowledge, 'something active, something that addresses us and calls forth a response' whether it be 'a quickening of interest, an aversion, a perplexity, or a range of other cognitive-affective stances, and in varying degrees of complexity.' (Hogan 2010, pp. 52–67)

This appreciation of uncertainty, that is contested and contextual, promotes both learning and reflective social work practice. When teachers conceive of their subject matter as a voice it appeals to their students "sensibilities in a way something conceived simply as a body of information to be transmitted to students cannot" (Hogan, 2010, pp. 52–67).

The Social Work Department works with other parts of the University. This includes Nursing and Midwifery, Social Policy, the Student Life Volunteer Coordinator, and the enterprise team, while beyond the University it is part of a wide network of partners including housing organisations, statutory teams and third sector community groups. For example, the current initiatives include students partnering with a local housing trust to build long-term, young people-informed provision and working with a Child in Care Council within a local authority to promote the voice of children.

The students are provided with 'tasty morsels' to enrich their learning, recently a placements road show was held, where invited agencies and students on placement provided a realistic viewpoint of life in practice. The very positive yet unknown aspect of this was that a lot of the team managers, chief executives and social workers who attended had themselves studied at our University … coming full circle to re-invest in our current cohort.

A digital platform is provided by our internal virtual learning site, using wikis to create and stimulate debate, and the use of Twitter to link students with campaigns, wider learning and issues. This focus on divergent learning (Hudson 1968) is supplemented by film and book clubs. In this way students have become aware of organisations like Women's Aid and campaigns in woman's immigration centres.

Elliot (2013) argues the importance of revisiting the need to be student centred, not to lose the notion of how important it is to be innovative and to re-create the 'buzz' that will have touched us all and moved us towards lecturing in higher education. This ensures that there is always recognition of the importance of "teaching that 'nourishes' rather than takes over the student's individuality" (Elliot 2013, p. 11).

The students' experience

The following account has been provided by five of the students who took part in the two experiential learning projects under discussion between March and July 2014.

Throughout, the project has created platforms where we practiced and developed active listening skills and different forms of communication. As the project progressed we allowed it to become service user led and focused our efforts on facilitating the young people's participation. This was possible because we were not under the glare of the University and lecturers, and it did not matter if mistakes were made or if something went wrong as we were not being assessed. We also enjoyed the element of teamwork and recognising the different skills each of us contributed.

The project required us to address the practicalities of promoting social inclusion. This is a term we had explored in lectures but we need to apply this to practical activities so all youngsters we worked with were included. Therefore we used art, posters and Post-it notes, as these were a helpful tool to encourage equal participation, especially because there were some dominant people within the group, and others who struggled with spoken language.

> I was able to determine that it would be when, where and how we would like it to be … no restrictions. If I could be a single mum do my assignments when my daughter was in bed … this project has not affected my grades, in fact it's enhanced my skills and knowledge as a potential social worker. (Student involved in Home and Away project).

A further learning outcome we observed during the group setting was how power dynamics can influence situations with regards to the group's goals and objectives.

A key theme throughout was the importance of education to the young people. In this context we explored how the United Nations (UN) Convention of Human Rights (1948) conflicts with the UK law on Human Rights (1998) and policies on immigration. Article 26 of the Universal Declaration of Human Rights (1948) states everybody has the right to further education, however the UK laws and policies place restrictions on equal access to education when it comes to refugees and asylum seekers. By examining this conflict we got a stronger understanding of the impact of legislation on people's lives. Another example was how we linked our experience of practice and knowledge and theory from our lectures to increase our understanding of social capital and how it helps individuals to move on in the community. The timescale for the project was quite rushed and we would have liked longer. The initial session was very helpful but after this we felt we were kind of doing it on our own, although the staff were available to provide advice and practical support.

We experienced the importance of trust and developing effective relationships and how this relates to engaging and promoting change. We were also able to witness how ideas and actions led to changes in the confidence and skills of the young people with whom we worked. It also created new networking opportunities and has influenced future provision so has made a difference way beyond our own learning and is something we can draw upon in future.

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Making Medieval History digitally at the University of Lincoln

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Description

The 'Making Digital History' project at the University of Lincoln involves getting students to produce online resources that teach others about the work they have been doing in the curriculum. It has been assessed across all levels of the curriculum and in different types of module and through collaborative and individual work too. The key aim is to shift students from consumers to active producers/communicators of historical knowledge to audiences beyond academia.

Students (*c.* 100 in total) work in small groups on a core first year module (East meets West: Conflict and Coexistence in the Medieval Mediterranean, c. 500-1250) throughout the semester to make digital learning objects. This is undertaken using a freely available tool called Xerte. These learning objects can incorporate a range of texts, images, audio, video, multiple-choice questions, and other interactive elements (e.g. drag-and-drop labelling) and are intended as a venue for the students to teach online audiences what they have been learning about a specific primary source of their own choosing during the module.

Students work collaboratively, in groups of three to five, although one student chose to work on the project individually (and was allowed to produce a slightly shorter piece of work as a result).

Regarding the roles of staff, they deliver content-focussed lectures and lead seminars in which students discuss assigned readings (mainly short primary source extracts). This content is supposed to feed into the development of the Xerte objects (i.e. the lectures generally provide context, while the primary sources are supposed to form the basis for the Xerte objects). In terms of the Making Digital History element of the module, staff have two roles – firstly, as trainers in the use of the Xerte tool; leading workshops alongside (paid) student ambassadors to demonstrate to students on the module how to use Xerte. Secondly, they act as a point of reference if students have any technical questions about Xerte or content-related questions about how to present material.

Regarding the ways in which this example of independent learning is linked to – and embedded into – the programme of study, the basic approach is to refer to the independent learning in all module documentation, to mention it in lectures in order to keep students on track, to run a seminar on using the Xerte tool, and to provide ongoing online support via the VLE and (especially) the blog. The Xerte object that the students produce is supposed to build on seminar work. It is envisaged that the independent learning represented by Xerte is fully embedded in the module and some revisions will be made to delivery next academic year (2014-15) to make sure that this is the case (e.g. an extra seminar where students present 'work in-progress and a small initial assessment, worth 10%, where students submit a plan/storyboard of their Xerte work).

The module has five main learning outcomes – upon completion students will be able to:

1. demonstrate a critical understanding of the history of relations between East and West during the Middle Ages, with specific reference to Sicily and Spain;
2. evaluate critically some of the main primary sources and historiographical debates surrounding this subject;
3. work independently and collaboratively, using various sources of information, in preparation for seminar classes and coursework assignments;

4. approach, analyse and employ primary and secondary sources in the construction of historical argument;
5. demonstrate the ability to research, write and present reasoned evidence-based arguments in oral, written and digital formats.

There are no specific learning outcomes aligned to the Xerte task because it should be embedded fully in – and supportive of – the overall learning experience on the module.

The activity is supported by the measures outlined below. In terms of history-specific skills, the Xerte object is meant to encapsulate the learning that students have done about primary sources in the seminars (so that they are able to explain it to others and to work together to create engaging interactive resources that teach their audience what they have learnt). The Xerte task itself is thus a carrier for the development of academic skills (e.g. ability to present information clearly; teamworking; creativity).

Regarding usage of a virtual learning environment (VLE), Blackboard is employed to form a repository for support information such as lecture slides and written guidelines on how to use Xerte, how to present a Xerte object and how to submit it for assessment. Here there is a twofold process: (1) they 'share' the Xerte object privately with the tutor, who then marks it; (2) they submit a word processed document containing the text of the Xerte object through the Turnitin system that is embedded in Blackboard. This is intended to check for plagiarism and to act as formal proof that the deadline for submission has been met.

With respect to other resources, a blog has been developed which contains a section on how to use Xerte, with various examples, including a Xerte object that outlines the features that students are recommended to use together with any potential problems they may encounter.

One of the seminar sessions early in the module is dedicated to teaching the students how to use Xerte in a face-to-face session. By the end of the session the students have seen the interface and have had a hands-on opportunity to make a basic Xerte object for themselves.

Student ambassadors also run office hours on a weekly basis so that students can ask questions about Xerte, and a student ambassador email account was set up. In addition, short segments of a number of lectures were devoted to providing students with guidance about Xerte, about how they should be progressing through the task, and how to submit their Xerte objects. In reality, students did not ask for a great deal of support and we believe that is because they figured out solutions to many of the problems that they faced collectively, within and between groups.

Turning to types of assessment, the Xerte objects were assessed summatively at the end of the module. Formative assessment only really took place when students made a specific effort to come to office hours and discuss their work (which a few groups did), or when they asked questions at the end of seminar sessions. Next year, we intend to include at least one more seminar specifically devoted to 'workshopping' and/or presenting Xerte 'work in progress' to encourage the students to learn from one another and to give a formal avenue for formative assessment and a 'check-point' where to make sure that students have formed groups and started to work on the task. In addition, and for the same reason, a mini-assessment of a Xerte plan/storyboard will be incorporated early in the semester (week 4 or 5), which will be worth 10% of the module grade.

The digital nature of this independent learning activity means that students who have accessibility issues of various kinds are able to work on it away from university at their own time and pace. The Xerte object is constructed in a virtual space and so students can collaborate online. Students are put into groups at the start of the semester and then exchange email addresses in class. The tutor then follows

up to make sure that they are in contact with one another. Next year we intend to include more opportunities for the groups to come together in class as well as digitally and independently (e.g. dedicated seminars). The provision of student ambassadors (with office hours and email), as well as a range of online support resources, also enabled students to work on Xerte in a more flexible way.

Effectiveness

In summary, the approach has involved creating resources that support independent student work online (outside of the VLE), both individually and collaboratively. It is effective because (most of) the students like the idea of producing things that other people will look at, which also impacts positively on their motivation and the quality of what they produce. It gets the students thinking about communicating through media other than essays and oral presentations. It is also clearly developing relevant skills for their careers.

All of students who completed the module also completed this assignment (One student preferred to work on his/her own). All passed at above 50% level, most received marks of over 60%. Student engagement was high, and the group-work element seemed to work well in terms of encouraging students to work together to solve problems. Some of the work was really outstanding and many of the difficulties that staff and students encountered were the result of the first iteration of both module and technology use (both module leaders were new to teaching at the institution and Xerte as well).

Below is a summary of some of the data that was collected (our staff and student reflections).

When responding to the question: "Are there any areas in which you think it benefitted student learning more than others?" a member of staff responded:

> Team-working; presentation skills (in terms of structuring and presenting information to others); creativity – in terms of thinking about how to present material in interesting ways online (rather than on paper or in person).

Another commented that:

> Students developed their skills in the critical analysis of sources; inter-disciplinary approach; interactive learning/sharing of knowledge; transferable skills of different types: communication, time management, group work and leadership, technical skills.

Fifty-seven out of 81 students responded positively to the question "Do you think that your ability to present information in concise and interesting ways has improved?" (70.4%), while 67 out of 81 students who responded thought that the experience of using Xerte had impacted positively on their ability to work in teams (82.7%).

Staff responses indicate that Xerte, and the approach adopted in this project, developed students' creativity:

> I think that it helped (some of) the students to think about how they present information to others, to consider that they might be producing material that engages with an audience beyond the teacher. I think some of them are already aware that the Internet and technology can help them to do creative things and to build up a profile and skill set that might help them in their studies and in life after university.

Another member of staff stated:

> Some of them really managed to produce excellent and engaging digital objects, relying on excellent materials and creating others from scratch (pictures, for example). Some of the students who had achieved mediocre results in more traditional forms of assessments managed to excel in producing their digital objects.

Student responses to a post-module survey, delivered online and that asked them specifically about creativity and learning, indicated that creativity had been enhanced too, with 22 out of 24 students responding positively to the question "Do you think you were creative in developing your Xerte artefact?" Selective responses to the question "Do you think your creativity has changed as a result of developing the Xerte artefact?" included:

> Thinking outside the box more. Making more of an effort to satisfy the audiences needs in creative/interesting/interactive way.

> It made me think about the different techniques and methods I could use to support and enhance my written work.

> Challenged my idea that historical sources are just texts, made me consider pictures, photos etc.

> Not entirely, the programme was quite hard to manoeuvre in terms of the design and look of the object. There were some interesting different mechanisms, but overall it was hard to find appropriate ones given that it was a group project.

Promotion

The initiative was funded by the HEA and JISC and so both organisations have been active in disseminating the project through their channels, such as JISC's monthly Xerte Friday webinars, as well as 'Changing the Learning Landscape and Digital Literacy in the Disciplines' project events by project officer, Terry McAndrew.

The project has been presented at a number of conferences and seminars, notably the HEA conference (July 2014) and a number of history-specific events (e.g. History UK and History Forum events).

The project funded staff and students from Lincoln to attend workshops and conferences and so they have been able to make contacts and disseminate our work informally.

The project has a website/blog (http://makingdigitalhistory.co.uk/), Twitter (https://twitter.com/MakDigHist) and Facebook (https://www.facebook.com/makingdigitalhistory) accounts, which are actively updated and report on this and other digital history teaching projects at Lincoln.

The project made use of Xerte mailing lists hosted by JISC and the University of Nottingham to share what we have done (and to pose technical questions when we have hit difficulties) with others who are using Xerte (both teachers and technicians).

The project team plan to produce at least one publication based on this project and other digital history teaching work at Lincoln and a proposal for the paper 'Making historians digitally: online approaches to inquiry-based learning in history in higher education in the UK', was accepted for the volume: *Inquiry-Based Learning for the Arts, Humanities, and Social Sciences: A Conceptual and Practical Resource for Educators* (John Carfora and Patrick Blessinger (eds.), Bingley: Emerald Group Publishing Ltd., 2014).

The work associated with the project has been disseminated to students via all of these means (especially social media), but also in lectures and seminars and via the VLE.

Making sense of language learning

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Description

This case study presents two interconnected and innovative projects lead by the Language Centre, virtual exchange and e-portfolio use. In the first, language students are supported in connecting remotely with native speakers of the language they are learning using synchronous and asynchronous technologies through virtual exchange. Now a mature project in its fourth year it involves over 900 students. A second, complimentary project implemented e-portfolio assessment for over 100 students of languages. The virtual exchange enables students to collect and reflect on examples of interaction to incorporate these in an e-portfolio that presents their language-learning journey. Students can work collaboratively and independently. The virtual exchange development has been supported by Erasmus funding and is included in the schemes of work for all Warwick's students of French. The e-portfolio is available for five languages (French, German, Spanish, Chinese, and Japanese) at post A-level and contributes 20% to the final assessment mark. Virtual exchange participation provides a practical forum to test their language development and follow up their interests.

The learning outcomes of such activities include:

- increased self-awareness and communication skills;
- greater understanding and application of language learning strategies;
- increased digital literacies and development of transversal skills.

Support available includes two face-to-face sessions, access to online help, video tutorials and a student handbook with assessment criteria. Private e-portfolio space is provided for collection of artefacts (such as submitted homework, forum posts, etc.), curation and presentation of the collection is via Mahara. This is accessed through the virtual learning environment (VLE) Languages@Warwick. Technical affordances facilitate the use of voice, images and video for interaction. Students can also upload their own resources as evidence of autonomous learning. A short video clip gives examples of previous e-portfolios but we are careful not to present a template – students need to engage in deep learning in order to present a convincing narrative of their language-learning journey that is suitable for their audience. The Mahara tool also makes peer sharing easy so they can get help and insights from each other. Staff feedback is limited to just one review point during the year.

The open access area is a physical open space equipped with Wi-Fi available for face-to-face sessions and private study. The institution also provides a range of comfortable open spaces where students can access Wi-Fi and use desktop computing.

The virtual exchange and e-portfolio projects provide opportunities for extended informal learning and formative assessment with peers and native speakers providing feedback. Language tutors encourage and demonstrate examples of interaction in class. This in turn supports language development, which is assessed through summative exams at the end of the year. The chosen technologies are accessible and platform independent as far as possible, with all support and resources available online.

Effectiveness

Both of these intertwined projects have been evaluated every year and the feedback used to inform their development. Our external examiners have complimented the projects and their contribution to

the Centre's offer. The development of the e-portfolio project was supported by external consultant Dr Alison Le Cornu who said the project has at its heart:

> the desire to develop students' abilities to reflect on the way they learnt and how they could improve, coupled with a conviction that gaining increased technological skills would stand them in good stead for future employment.

The students have been very appreciative of the learning that has resulted from engagement in them. The projects have been widely disseminated. Student feedback in the e-portfolios reflects a deeper awareness of how to manage their learning:

> A fellow student and I 'partnered up' … These weekly discussions fulfilled my ambitions to use speaking as a means to improve my writing. In general we debated current events and issues which I will be able to quote in my essay in the exam. Equally it was very useful to see how different their viewpoint was looking in on English issues, such Scottish independence.
>
> When I first heard that it was necessary to make an e-portfolio of my francophone journey, I thought it would not be a very useful exercise. However, I am pleasantly surprised as to how it has given me the chance to reflect and analyse my language learning process overall. It has enabled me to structure and plan the way that I learn which is something of a first for me, and I want to try and incorporate the methods that I used here in future learning.
>
> Overall, I am very pleased with the work I have done over the year and am proud of the progress that this e-portfolio displays. I feel that in tracking my progress and in really thinking about how I learn and the best techniques for me I have learnt a lot about myself, which will be invaluable for all of my language learning in the future.

Implementation has developed an effective community of practice among the tutors involved and has accelerated tutor adoption of technology-enhanced learning. Student feedback through the e-portfolio has helped to contribute to changes in teaching practice.

The challenges have included:

- arriving at a shared understanding of the underlying concepts across an international group of tutors;
- convincing students of the importance of self-directed learning;
- supporting students in making their learning processes explicit and personal rather than providing a template or sets of examples to follow.

These are addressed through close collaboration across the language teams and through a single shared set of written documents which are reviewed and updated annually, and shared spaces in our online environments.

Promotion

Both of these projects have face-to-face launch meetings with students where the importance of language practice is emphasised. It is explained that limited class time for language learning requires them to take advantage of additional self-directed learning opportunities in order for their practical skills to evolve and to help students identify gaps in understanding to bring back to their tutor. These sessions are informal. They are run on a drop-in basis with refreshments provided.

The outputs of the projects have been widely disseminated to both academic and lay audiences through journal articles, conference presentations, newsletter contributions and social media channels such as twitter and YouTube. Their application is relevant to many areas of activity beyond language teaching

and they have been received with interest by the educational technology community, and by those beyond the UK.

Prospective students are told of the virtual exchange arrangements on open days and our website and Facebook page carry links and photos sharing the events and connections made. The project lead is very active in promoting the importance of skills development and lifelong learning, has produced resources for language learning strategy development and is a member of the heutagogy community of practice. She collaborates with the institution's careers service and is a fellow of the Institute for Advanced Teaching and Learning. She is also a certified member of the Association for Learning Technology.

Essential to the success of these projects is the clarity of shared communication and vision, so messages are agreed with the staff team in advance and resources, such as presentation slides, are shared across language teams for adaptation for their own languages. Team meetings are held during which practitioners share their experiences and reach agreement on actions.

ManUniCast: a community weather and air-quality forecasting teaching portal

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Description

The number-one attraction for students who take Atmospheric Science classes is weather forecasting. Active learning through repeated practice in forecasting is the best way for students to gain experience and improve. Weather forecasting also encourages critical-thinking skills, involving the highest levels in the cognitive domain of Bloom's taxonomy (e.g. application, analysis, synthesis, and evaluation). In addition, forecasting contests and discussions of the current weather can motivate student learning, inspire better grades and result in improved forecasts. Finally, weather discussions help close the gap between the knowledge-seeking professors and the goal-seeking students because an otherwise sterile set of equations illustrating complicated physical concepts comes alive when being used to illustrate the current weather in the news or out the window.

In contrast to the US, where governmental weather and air-quality data and model output are free, raw weather data and forecast model output from the UK Met Office is highly restricted. Such models are the cornerstone of modern environmental prediction (weather, air-quality, ecological, hydrological, and climate). Thus, UK students' inability to see such output on a daily basis, let alone interact with it, is a severe disadvantage to preparing them for a future career where such models are commonplace.

As a result of this gap, we saw tremendous potential for a real-time weather and air-quality prediction model produced by the academic community and available for teaching and research. With the help of grants from the Higher Education Academy (HEA), design and programming assistance from the e-Learning Team at the University of Manchester, and support from the IT Services Research Infrastructure Team, the project team built the web-based portal ManUniCast (Manchester University Forecast). It was released in its beta version in November 2013 and an app for mobile devices became available in August 2014.

The team's site is an educational test-bed to explain to students and the public how weather, air-quality, and air-chemistry forecasts are made using real-time predictions as examples. This site is believed to provide the first freely available real-time predictions for the UK. The team offers a suite of products from horizontal maps, time series at stations (meteograms), skew-T-log-P charts, and cross sections to help students better visualize the weather and the relationships between the various fields more effectively – specifically through the ability to overlay and fade between different plotted products.

ManUniCast (http://www.manunicast.com), and its predecessor Uniweather, is used by third year environmental-science students in a Meteorology module in four ways. First, the model is used in the weekly weather discussions to illustrate the structure and evolution of weather systems. The animations of the model output help convey the real motions of weather systems in a way that static images cannot. Second, the archived forecasts from the portal are used in a homework assignment that gets students looking at model forecasts and observed data to see how well such models forecasted the past weather. Third, ManUniCast is a resource for the MetCast forecasting competition that the students participate in (Schultz *et al.* 2013). Fourth, students perform their own research project on a case study of a real weather event from the past. This research project gets students critically evaluating the model forecasts on a subject of their own choosing.

For the research project, students are asked to describe the weather (using meteorologically correct terminology), explore some aspect of the case, and then closely evaluate how well ManUniCast performed with the forecast on that day. The intended learning outcome is to get students to understand that these models can be useful, but they are never perfect. When they are not perfect, the students see the types of errors that the models make. Students create a draft of their project and submit it to the professor for initial comments. The students then revise the draft and resubmit it for their final grade. This process instils higher-level thinking skills on a case of their choosing. The feedback helps them improve their own writing and develop their scientific report-writing skills.

Effectiveness

Although there were some concerns about whether students were ready for this kind of research project, the results were better than expected. In written evaluations, students reported that their writing improved (65% of students), their ability to understand and interpret the weather on their own improved (78%), and feedback on a draft helped them improve their report (82%). The success of this project gives the students hands-on experience with weather data and preparation for the rigour of scientific writing that they will later experience when writing dissertations.

Implementing this innovation has not been without its difficulties – within an educational system where extensive feedback has traditionally not been given and scoring systems are rigid. Nevertheless, feedback has been positive. The external examiner of the Environmental Science programme was so impressed that he took the assessment back to the University of East Anglia (already the 'strongest in the world' according to the UK's Chief Scientific Advisor). Students – at first shocked by the number and detail of the comments they received – also recognized the value of this feedback.

> Assessment method is fair and fantastic. Challenging but do-able if you put the effort in. This is the best assessed class I've ever taken and would thoroughly recommend it to other students – and advise other lecturers to take note of this!
>
> Fantastic feedback on essays and real guidance on scientific writing – the first useful guidance since beginning the course [BSc Environmental Science].

Student evaluations support the importance of the forecast contest to their learning. For example, one student said ManUniCast should be continued, "as it gets students talking about it outside of class."

Impact on the students is evident through my 2012 University evaluations of Meteorology: 4.49 (out of 5.0). For comparison, Faculty of Engineering and Physical Sciences and School averages are both 4.05. The author has been nominated thrice for student-led teaching awards, winning each time within the School of 45 academics (Best Teacher 2012 and 2013, Best in e-Learning 2013) and twice within the Faculty of 500 academics (Best Teacher 2013, Most Innovative Use of e-Learning 2013). Nominating students wrote:

> The feedback he gave us on our work has been the best we have received in the three years I've been at the university, which enabled us to go on and produce some excellent pieces of work for not just his course, but for many other ones too.

Promotion

The importance of the report to students' scientific and communication skills is always emphasised. The following is taken from the syllabus:

> What skills I hope you will learn:
>
> - obtaining a basic understanding of how weather happens;

- understanding how weather forecasts are made;
- developing the ability to read and interpret weather data and maps.

Writing assignment:

Because the ability to read and interpret weather data and maps is one of the skills that I hope you learn in this course, you will have the opportunity to investigate the meteorology of a day of your own choosing. Please pick a day (e.g. your birthday, a weather event you remember from the past) with interesting weather (e.g. precipitation, wind, snow), and explain the weather as you would to a nonspecialist audience such as the public. Use graphics from the internet portals that were discussed in class and in the homework assignment. The form of your answer will be a short written essay. If it helps frame the assignment, imagine that you are delivering a weather broadcast for television. More details on this assignment will be provided.

Midwifery PALS

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Description

Working in pairs, second year student midwives at Sheffield Hallam University (SHU) run study circles for first year student midwives during the first seven weeks of their course. These sessions follow an established structure of warmer, agenda setting, activity, and closer. They are planned, designed and co-delivered the by the peer-assisted learning (PAL) leaders. The agenda is always open to negotiation but the leaders attend sessions with activities planned. While the sessions are subject-based there is a proviso that no new material is to be introduced in PAL sessions and the focus is very much on the learning process rather than the product. Initial two day training in facilitation and communication skills gives students the skills to effectively lead group-learning sessions. Once training is completed, these senior students are responsible for supporting the academic skill development of their more junior colleagues, both in the sessions and when working independently. Staff consisting of a member of staff from central services and a lecturer on the Midwifery course deliver the initial training. In addition, staff meet weekly with the senior students to provide ongoing support while sessions are running, and classrooms or meeting rooms are provided for groups to meet throughout the year.

Later in the year, further sessions are organised on an *ad hoc* basis (shifts permitting). The programme sees a move from organised timetabled sessions led by senior students to autonomous self-directed study groups with students working with others in their year. The scheme is now approaching its third year, and has involved newly qualified midwives returning from their first year in practice to run study sessions for third year students. This has included running mock job interviews and sessions on CVs and application forms to help students applying for their first jobs.

This voluntary programme is embedded in the course and is run by student midwives addressing the challenges of their course. The topics of the study sessions are decided by the students and sessions are scheduled around the first year timetable. As a health course, attendance for all other modules is compulsory and so although attendance is voluntary the scheme benefits from featuring on the timetable. Attendance currently averages 90% for the first few weeks.

The programme was initially established to improve peer support for learning, and to support development of student autonomy in the context of a challenging degree course where students spend a large proportion of their time working independently on placements. A fundamental challenge was the fact that first and second year students are only together on campus for six weeks in the academic year. Further challenges that we are still exploring include the use of technology to support PALS on placement and build on initial successful face-to-face learning. Similarly, we are still trying to make our reward and acknowledgement consistent with wider university schemes, such as the Hallam Award, and to this end are introducing digital badges that fully recognise the range and extent of PAL leader ingenuity and commitment. Finally, we are still striving to be fully inclusive in terms of delivery and recruitment.

Effectiveness

The scheme was evaluated as effective against a number of criteria. With high attendance it appeared popular with students, and seemed to make a positive contribution to induction. This was borne out by small-scale research conducted among first years at the end of their first few weeks on campus, when they were asked what had helped them most:

> PALS and peer support. It's been a bit of a rollercoaster, I feel (from speaking to my peers and PALS) as though I just need to hang on and it will all start falling into place, the transition period is stressful, information seems to go in one ear and straight out the other, although this is improving. It's been great speaking to the second years – they were able to reassure me that the way I'm feeling is normal, I look at them and I'm impressed at how knowledgeable and professional they are – there seems to be so much 'growing' taking place in the first year. Without speaking to them I think my morale would be a lot lower.

Research later in the year indicates how positively the scheme is viewed:

91% students said PAL sessions:

- increased my confidence in my ability to do this course;
- helped me take responsibility for my learning;
- clarified course concepts.

79% students said PAL sessions:

- helped me make friends;
- helped me understand what was required on placement;
- developed my group working skills.

75% of students said PAL sessions:

- helped me speak up and contribute in class;
- helped me with assignments and exams;
- helped me understand specific lecture material.

These figures are drawn from a questionnaire delivered to a cohort of 55 first year midwifery students with a hundred per cent response rate.

These results confirm how educationally focused and purposeful the PALS sessions were. While independent learning is explored during training and the focus of session planning is on ensuring active student engagement, it is heartening to see this emphasis on task-based approaches to learning bearing fruit. These results confirm our observation of PALS sessions conducted in the first semester, where leaders repeatedly demonstrated their own understanding of the need for independent learning, gently prompting novice learners away from an anxious focus on 'the answer' to a discussion of how they best manage this question themselves. There were also many discussions about how to manage learning on placement and effective learning strategies for new forms of assessment (OSCES, dissertations, etc.). These results indicate that PALS sessions were an effective forum to model independent learning strategies and this is what first years believed they drew from participating.

Additional broader impacts are reflected in student comments, such as this from a final year student: "PAL has bridged a gap between the year groups in midwifery, aiding the development of a course community." This reflects the positive effect the scheme has had on the whole course, by having students working purposefully across year groups and also in a collaborative role with staff. This appears to impact on the tenor of the course, subtly breaking down the barriers between students, staff and year groups and making a positive contribution to course cohesion.

Similarly, there were a number of unplanned and unlooked for benefits that were extremely significant to the students themselves. For example, "The PALS sessions really have been great – being able to ask questions that aren't really appropriate to ask your teachers and lecturers and get a grasp of things from

someone who has already been there." It is difficult to overestimate the importance to the students of a peer-led learning space, and the effectiveness of the scheme's creation of "a safe place to get it wrong."

Another unlooked for benefit was the realisation that the opportunity to act as role model is empowering in itself. The leaders take very seriously their role as mentors, senior students and facilitators of learning. When asked why you would recommend being a PAL leader to a younger student, one leader said "because the students need to feel inspired by well-organised and achieving students." Leaders seem to grow into their role very rapidly, conscious of their responsibility to more junior students. A number of course tutors remarked through the year that acting as a PALS leader appears to noticeably improve their confidence. This has led to a number of significant benefits to working as a PALS leaders explored by each cohort. A number of them have been awarded gold and platinum Hallam Awards on the basis of this work. They have presented their work at the local learning and teaching conferences every year, recently published an account of their experiences in the University's online journal and have been invited to another local university to speak. One PAL leader has represented SHU at the Higher Education Academy (HEA) Student Voice committee, and two have been nominated as Student Midwife of the Year (Nursing Times 2014) on the basis of their work as PAL leaders. Being a PAL leader offers an open-ended opportunity for the students to contribute to their course.

Promotion

Student PAL leaders promote the scheme during open days to new students as well as addressing senior staff at faculty committees and external conferences. They have been employed as researchers, and have published their own account of developing a PALS scheme. By devolving to the students the responsibility for the promotion of the scheme in a supportive environment, we were able to offer the students further opportunities for practical skill development. In addition to these means of promotion, they themselves have been the greatest advocates for PALS in their behaviour and demeanour as enthusiastic and positive young professionals-in-training.

Newcastle Business School undergraduate consultancy project

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Description

This final year business and management undergraduate level six module (30 credits) is very much about the student taking responsibility and being independent learners while being supported (directed learning) to be successful in enhancing individual effectiveness and employability skills by locating the learning and development in an organisational context. The module also promotes personal and group development, commercial awareness, and a range of inter-personal, intellectual and practical skills and knowledge centred on – and demonstrated through – a group-negotiated real-time work-based project.

Students work in groups of four to five partners in a 'consultancy firm'. They complete a real, live consultancy brief that requires them to produce a client report and make a formal presentation.

The consultancy firm has been approached by a client (via the module tutor) and are required to provide advice to the client. This will involve all partners of the firm working with the client (supported by a Newcastle Business School mentor) to refine the client problem/issue into an agreed consultancy brief (in terms of objectives and deliverables). They need to consider the following when formulating the brief:

- scope of problem/issue in terms of objectives and boundaries;
- proposed methods – to be used to address the objectives in order to determine appropriate recommendations. They will need to consider the proposed research methods and sampling approach and the reasons for their choice;
- resources and areas of support – they need to identify resources and areas of support they anticipate may be required to complete the consultancy brief from the client organisation and mentor (supervisor);
- project timetable – they need to carefully plan their timetable for the project to ensure they are able to write a 5,000 word report by the hand-in date and are ready to make the formal presentation to the client and mentor. They would be expected to use a timeline to help them with time management.

The client problem/issue requires the undertaking of appropriate desk (secondary) research such as market reports, financial reports and academic journals for theories, as well as suitable primary research (agreed with the client and mentor) for internal and external analysis.

The students (firms) have regular weekly meetings with the mentor and logs/action plans are kept – some of the meetings are timetabled activities (to help facilitate independent and directed learning).

The partners of the firm work on the brief to produce a high quality and professional looking written consultancy report. The second group task is to present the key findings and recommendations to the client. Each partner of the firm contributes to the formal client presentation, which should be 20 minutes, and will include the use of ten (maximum) PowerPoint posters or slides. Each partner of the firm is expected to be prepared to answer questions and take part in a discussion following the presentation.

The module also requires students to undertake individual tasks. A literature review (3,000 words) is produced by each partner (on a different aspect of theory related to the client project), which includes some evaluation of how this theory underpinned the client project.

Each student (partner) also maintains an electronic learning journal. In the journal they include their reflections on how their firm/partners have worked together on the task. A peer-evaluation form is then completed. This material forms the basis of the individual reflective learning statement (1,000 words). They are also expected to evaluate how this module has enhanced their employability.

Support is provided to the students prior to them starting work on the live client project; they are timetabled for lectures/workshop sessions including personal development, teamwork, presentational and consultancy skills. In terms of physical resources, the department is in the process of investing in a dedicated 'business clinic' room which will enable the students' independent learning by allowing them to meet, store materials, and practice presentations. The virtual learning environment (VLE) supports their independent learning (with supporting materials) and provides the platform for their e-learning journal. Library and online resources are important in terms of secondary sources that need to be accessed as part of addressing the consultancy brief. These resources will be utilised both for directed learning in terms of advice from the firm's mentor and in an indirect form by students developing through their experiential and independent learning as they take responsibility for their project. The library and online resources are also vital for the students' individual literature review, which will be a mixture of directed (by the mentor/academic staff) and indirect learning by the student who takes ownership of the task.

Once the client projects have been given to the firms (teams) they are assigned a mentor (academic supervisor) who has regular meetings to support their independent and experiential learning regarding the live consultancy projects. The mentor helps to develop academic skills – via independent learning – regarding tasks that need to be undertaken relating to the project (e.g. use of secondary sources/desk research) and the individual tasks (e.g. literature review and e-learning journal). Formative assessment is ongoing throughout the time the students are working on the consultancy project and the individual tasks. This is mainly provided by the University mentor and also by the client organisation (restricted to the client brief requirements). Summative assessment includes the client group (firm) projects, which are assessed by the client organisation and the University. This involves a written report and a formal client presentation. The individual tasks are assessed by university staff. Engagement is achieved by the students' enthusiasm for the live client project, the regular meetings with their mentor, the e-learning journal and the fact that this module represents 30 credits of their final year. The students are well motivated and see this as a key module to achieving a good honours classification.

Effectiveness

This level six module assessment requires the student to undertake a considerable amount of independent learning. Student performance has been of a very high standard based on the client reports and formal presentations, which are assessed against criteria using standardised marking instruments. The presentations are also video recorded to enable external examiner assessment. External examiner comments have been very positive and encouraging.

Student comments and reflections in their learning journals have underlined the benefits of the module particularly from the perspective of the students developing their employability skills (including independent learning). The students are working in an environment that gives them direct access to the stimulation and pressures of working on a live project and to live up to the client's expectations.

Students' qualitative comments via focus groups have been very positive while indicating areas of potential improvement. When presenting the undergraduate consultancy project concept for the first time to the students it is important to be very clear in terms of the range of client organisations they

are likely to work on, so that their expectations are realistic. Having details of the client projects available as early as possible is important as students soon get impatient or nervous if they do not know what client brief they will be working on, and this can result in a loss of motivation. The importance of getting the client brief correctly defined was highlighted by one firm, as their original objectives had been set too broadly despite mentor involvement at that stage. In future there will be closer scrutiny and involvement by the mentor and module tutor to ensure a tight brief, which is realistic in terms of both available resources and the timeframe.

A small minority of students found working in teams challenging. More support and preparation is planned (in the form an additional experiential learning, development and a reflection day) for the next cohort taking the module.

Promotion

The benefits of independent and experiential learning are easily demonstrated using the evidence collected from the students and client organisations. The video recordings of the presentations are used to promote the benefits of the live client-based projects along with video interviews with the students and client organisations (with the permission of the students and clients).

There are separate dedicated events aimed at potential client organisations and eligible students who may take the module as an alternative to the traditional undergraduate dissertation. Video clips are played at the events and there is an opportunity to talk to a client organisation and/or a previous student who has taken the module. There is a discussion of the realistic expected benefits for all parties.

With the permission of current students and client organisations, excerpts of the report/video recordings of the formal presentations will be used as learning support material for future cohorts.

Now it's over to you: a workbook approach

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Description

During the oncology topic within the third year 'Clinical Pharmacology and Therapeutics 2' module – (CPT2) of the MPharm at Robert Gordon University (RGU) – it quickly became apparent that students had difficulty in placing complex concepts into context.

As a response to these identified learning difficulties, a just-in-time, step-by-step guided workbook approach was developed using common e-learning software. The outcome was a person-centred case study, signposting the students to information they already have and aiding them to put it into context. The intention was to enable students to critically appraise the information provided, and subsequently drive their own learning, rather than simply provide them with the solutions.

Students should perceive their lecturers not as a transmitter of knowledge but more as a facilitator, guiding their learning. In constructivist learning theory, students should draw on existing knowledge, beliefs, and skills and build on these, allowing them to synthesize new understanding from prior learning and new information. The opportunity is then open for the students to create their own case studies and workbook around the solid tumours and haematological malignancies covered within the course.

The basic cognitive competences that the students (future pharmacists) should successfully demonstrate were described in Bloom's (1956) taxonomy – namely knowledge, comprehension, application, analysis, synthesis, and evaluation. In tandem with these cognitive skills, students should be able to reflect on their own learning experience. Pharmacists' mandatory continuous professional development (CPD) is based on Kolb (1984) and Gibbs (1988) theories on reflection, and both these cycles were used to develop this software. These learning cycles propose that theory and practice enrich each other in a never-ending circle. In this model, students' learn more effectively if they are actively involved in the learning process than if they are passive receivers. By providing the conditions for students to learn, their learning is deep rather than mere regurgitation.

Effectiveness

It is important for students, particularly student healthcare professionals such as pharmacists, to develop ownership of their learning, as this is a life-long process. By learning through a process of repetition and trial and error the student quickly appreciates their strengths and weaknesses. In addition, rapid feedback from the academic, combined with the stepwise approach advocated in the workbook, allows students to formulate learning strategies and to make sense of what they learn. Formative assessment will deepen this process further. Race's (2010) 'Ripples on a pond' model provides a framework through which this can be achieved. Although, Race's (2010) premise is that the most effective form of learning is experiential learning, his philosophical approach to learning departs from Kolb where he identifies a new element, namely a want or a need to learn (in this case understanding the complex concepts of oncology).

Once the student has had that 'eureka' moment and understands the concept the academic was trying to impart (problem-based learning (PBL)), they deepen their own learning through communicating and explaining to other students.

However, it is only when the student's reflection on the modules is delivered that the student's grasp of the nature of the academic teaching is elucidated. Student feedback on a module is often provided

through end-of-year modular reports, and is anonymous. This provides the opportunity to speak without bias, knowing that the lecturer whose material has been commented upon will have no idea which student it is. However, when a student actually contacts a lecturer and asks for more examples of the particular independent learning approach taken, this positive feedback reinforces the validity of the approach.

Student one:

> Dear Dr McFadyen,
>
> I was just wondering if you were planning on putting a revision workbook on Moodle for the immune system in CPT2, as I have found the one for oncology very useful??
>
> Many thanks

It is clear that if you engage students in their own learning process then their dedication and keenness to acquire the requisite science and practice-based skills to adequately fulfil the learning outcomes and objectives of the course becomes exemplary.

Anecdotal feedback from students and staff has been positive, and following discussions with dietetic colleagues, this workbook will be developed to provide an inter-professional educational tool on colorectal cancer for dietetic and third year MPharm students. The student's comment above has also been actioned with the development of a novel inter-professional immunology tool.

Promotion

As admission officer for the MPharm and internal Biomedical Sciences validator for the International College at RGU it is important to illustrate the University's student-centred independent-learning approach to teachers, parents and potential applicants. Demonstrating novel independent-learning approaches often helps to abate concerns from students from different educational backgrounds and cultures. In addition, ensuring support (specialised software, etc.) is available to those students who may have additional learning requirements such as impaired vision, and this helps them to appreciate the University's inclusivity and the educational opportunities available to them.

It is important to signpost information to students to facilitate their knowledge and learning. A virtual teaching environment (Moodle) provides a medium through which students are alerted to all teaching material from basic lecture material to novel learning strategies. This knowledge is also communicated through a combination of email, discussion forums and during face-to-face teaching.

The Oncology workbook was recently presented to the Faculty of Health and Social Care e-learning committee as an example of best practice. It was also disseminated to the wider university and education community at the inaugural Conference on Teaching and Learning – 'Innovate to Stimulate' – at RGU on the 9 May 2014. Conference themes included online learning, innovative teaching and assessment methods, and internationalisation.

Response to the just-in-time stepwise approach has been overwhelmingly positive and is now embedded in the module.

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Pot-casting [sic]: online independent learning and assessment of pottery identification skills for Archaeology students

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Description

Pottery is a ubiquitous material and is used by archaeologists to answer questions about the date, character, and function of the sites and cultures they are researching. The ability to identify and differentiate pottery types, often from very small fragments, is therefore a key skill for Archaeology graduates. Typically, this skill is acquired by spending extended periods of time with good extant examples of common pot types in museums or while working on excavations. However, students' time with artefacts is limited by the constraints of time, money, conservation issues, and lack of suitable study materials, excavations, or museum placements.

At Liverpool, online study materials use examples of a whole pot from each main pottery style, making it easy to identify the commonest shapes, decorative patterns and images. Working independently in a virtual learning environment (VLE), students use podcasts (voiced by several different academics over images of extant pots), interactive '.pov' image files (whereby photographs of the pots can be zoomed in or rotated through 360° using the cursor), and illustrated summaries about key sites, periods and styles to familiarise themselves with the six major categories of Greek pottery. These are effectively 'digital surrogates' of extant pots that students are working on independently to familiarise themselves with the features of the six most important styles of Greek painted pottery.

At intervals throughout the module, formative online quizzes test their ability to identify these styles. Finally, in handling sessions in the departmental museum, they are presented with trays of dozens of fragments of the kind regularly found during excavations, but not normally displayed in exhibitions (which mostly display whole pots). For each tray there is a worksheet detailing an identification task to be completed (e.g. "Which mythological figures are represented on these painted pots?"; "What percentage of these pots are from each of the different styles?"; "What periods are represented here?"; or "What might an assemblage of pots like this have been used for?"). In writing up these tasks students are required to demonstrate academic skills that go beyond simple identification, such as presenting the results graphically (e.g. in the form of pie charts and histograms), demonstrating critical thinking, applying archaeological theories and discussing 'problem' pieces (some pieces are hard to define precisely and others are fakes, and being able to spot them is a key awareness that graduates need to develop).

Students work in the VLE independently, acquiring the identification skills and completing the formative assessments, but at the handling sessions they work in small groups under the supervision of demonstrators. Teaching staff have developed all the online learning materials, oversee the online formative assessments, and respond to email enquiries during the module. In the handling sessions, demonstrators encourage students to engage in discussion, with themselves and with each other. They discuss the material in front of them, how it relates to their independent learning, and, particularly, problem pieces. Demonstrators also ensure correct handling of artefacts to prevent damage, thereby modelling another essential archaeological skill for the students.

Online learning is creatively aligned with module content, so that lectures on chronology, decorative styles, and the uses of pottery, run parallel to students' independent learning and formative assessment. At the end of the module, students produce write-ups of the handling session worksheets and demonstrate the skills that they have developed independently. To successfully complete the assessment tasks, they are also required to demonstrate competencies such as IT skills, written presentation,

engagement with theory, critical thinking and discussion. Together, this engages them in the independent identification and critical questioning of the material that forms the empirical basis for the chronological and cultural framework of their entire archaeological studies.

At Liverpool, the artefacts used for handling are from the University's own Garstang Museum of Archaeology, but any relevant local museum or research collection could be used. Liverpool can also loan out artefacts from their collection for teaching purposes, by arrangement, to local schools or other universities.

Formative assessment is by online multiple-choice questions (MCQs) that are time-released at intervals throughout the module, allowing students to test the identification skills acquired by independent learning in the VLE. Summative assessment is by a portfolio in which they demonstrate skills of identification, ITC and written argument. These portfolios can be shown to potential employers or used to secure work placements in museums.

Transcripts of the voiceovers to the podcasts are provided for students who experience a hearing disability, and online learning is generally a more inclusive method of learning for students that do not have English as their first language or who are balancing study with work, caring or family commitments. This is because it allows them to study at their own pace and in their own environment and they can spend long periods of time with digital surrogates of real archaeological artefacts.

The 'pot-casting' model was deliberately developed to engage students' different learning styles while working independently online, combining visual (photographs of pots in worksheets and podcasts, images to be identified in MCQs); auditory (podcast voiceovers); read/write (information sheets, work sheets); and kinaesthetic (interacting with the '.pov' files using the mouse) methods. When combined with the handling sessions in the museum and the opportunity to test, and discuss their learning with demonstrators and peers, the result is a very rich learning experience that gets extremely positive feedback and good results.

Effectiveness

In a traditional archaeology handling session, students are shown artefacts as the demonstrator describes them, posing questions and stimulating discussion if time allows. This is potentially a passive and didactic form of learning, with limited opportunity for students to investigate the artefacts themselves, to explore problem areas in the identification process, or to test the limits of their understanding. The demonstrator is generally the sole source of information about the artefacts and students are not empowered to question the identification process and thereby understand the subjective nature of the archaeological data that underpins their discipline's knowledge base. Furthermore, independent learning is hard because students cannot often be left alone with study collections for extended periods of time due to security and conservation considerations.

The 'pot-casting' model is effective because it gives students time to experiment and explore digital surrogates of real artefacts prior to working with genuine artefacts in the handling sessions. This enriches the learning experience in the practical session because discussion is more informed and tests students' individual understanding of the identification criteria against genuine artefacts. Their independent learning means that they acquire basic identification skills prior to encountering the artefacts and, therefore, engage with them in a critical manner. Consequently, the majority of the session is taken up by informed discussion, not basic skills acquisition. Students are also made to realise the limitations of fixed identification criteria when they are presented with problem pieces and in subsequent discussions with demonstrators and their peers (who may have formed different understandings from their own independent learning).

The assessment process is clearly signposted and embedded in the learning, and the progressive formative and summative assessment means there are few fails. In student evaluation, the module achieved a total module approval score of 91.1% and comments such as "practicals are particularly good and easy to follow" and "[the module is] an inclusive learning community" were very gratifying to read (based on anonymous module evaluation questionnaires for academic year 2013-14).

Promotion

It is emphasised in the module description and handbook that a significant proportion of the students' time will be spent working online, using the 'pot-casting' materials.

Because the summative assessment requires the students to have gained the necessary pottery identification skills independently, and prior to the handling session, the need to engage with the online learning materials independently is emphasised to them throughout the module.

It is also emphasised that the ability to identify pottery types from small fragments is an essential fieldwork skill, since archaeologists often work in remote locations without recourse to consult libraries or the Internet. The handling sessions are therefore a mock real-life scenario in on-site artefact identification, which is a useful preparation for employment.

Students often seek voluntary work in the summer months with local museums or research excavations and placements are very hard to secure. They are encouraged to prepare their module portfolios, which include the write-ups of the handling sessions, to enable them to be presented when applying for such placements so that potential employers are made aware of the skills they have acquired and their ability to work independently.

Problem-based learning for Psychology undergraduates

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Description

In the level six module 'Neuroscience', a pilot study was undertaken using problem-based learning (PBL). The students are studying for a psychology degree accredited by the British Psychological Society and take the Neuroscience module as a 30-credit option at level six. The first assessment of the module follows a series of traditional lectures and seminars in cognitive neuroscience, in a traditional critical essay format. The second part of the module is organised around the PBL model, based on the ideas of Barrett and Moore (2011), and is assessed with a three-hour seen paper. Students work in small 'teams' of five, with specific roles such as chairperson, timekeeper, scribe, reader or observer. Teams are fluid between each problem or scenario, as are the roles within each team. Students therefore have the freedom to explore different roles and work within different team dynamics. Each team chooses a scenario to explore and develop for a period of four weeks. As an introduction, all teams work through the first scenario to ensure everyone understands the principles of PBL and are comfortable with it. Thereafter, every four weeks, each team chooses another scenario from a choice of a further five. Instead of attending lectures, students are presented with real-world problems (or scenarios), based on clear learning goals. Students thus learn key concepts, facts, and processes related to neuroscience.

The scenarios are posted on the virtual learning environment (VLE), together with relevant introductory lecture material and journal rich site summary (RSS) feeds. Some of the scenarios also have associated video or audio material. In weeks one and two, teams discuss how they are going to explore the problem, sharing existing knowledge and deciding how they are going to direct their learning. During this period, the tutor acts as facilitator and supporter, encouraging independent thinking and promoting confidence.

Evaluation feedback from students has indicated that this was the most challenging part for them – having the courage to 'think around' the problem, and accepting that there are no right or wrong answers. One comment from a student encapsulates this: "you believed in us and gave us the courage and confidence to go outside our comfort zones to show our true potential." Another student commented that PBL provided "the opportunity to take a level of ownership over research – that is, judge direction of scenario and develop independent learning." Each team made their own decision on how they collected and shared information. One of the roles of the 'scribe' was to collate data and share with the team. Some students chose to set up closed Facebook groups, while others used email. This enabled students who were unable to make regular sessions to engage with their team and contribute to the problem solving. Students were asked to meet up in the teaching session, but were then free to leave and work independently wherever they chose to. Many utilised the library meeting rooms, whereas others worked in the 'Student Zone' café.

Progress sessions in week three enable the tutor to explore the findings and the progress of the student teams. The tutor is then able to work with the students to explore their depth of understanding and help them to develop critical evaluative skills. Formative feedback sessions in week four allow student teams to demonstrate their learning over the previous three weeks. This feedback can take many forms. For example, some teams chose to feedback using role-play. Indeed, for one scenario (the use of deep brain stimulation in a patient with Parkinson's Disease), one team produced a documentary and published it as a closed YouTube video.

Other teams chose to discuss the use of PBL and roles in exploring their scenario. The mode of feedback was completely the students' choice, although it was emphasised that deeper learning would occur if they utilised other techniques and tools rather than traditional feedback methods such as oral presentation. "Watching others feedback their findings" was seen by students as a useful part of the PBL process. Incorporating feedback sessions gives students a goal to aim for, and encourages deeper understanding of the material and applications. For example, one of the scenarios requires the students to be part of a multi-disciplinary team discussing the case history of a female patient with dementia and her husband, who is also her carer. The students are required to research the different forms of dementia, including neuroscientific data and symptomology, but also need to understand the roles of different professionals in a multi-disciplinary team. In addition, the psychology and social care of the patient and family need to be considered. Thus, a comprehensive and professional approach is required to address the problem.

The students on our Psychology degree programme are introduced to the idea of practitioner psychology scenarios at level five, where they complete a portfolio as part of their assessment of a module. The PBL at level six in the module 'Neuroscience' takes this a step further. Students become more independent in their learning, experience being an important member of a multi-disciplinary team, and address a real-life dilemma. They learn the importance of working within the dynamics in a team, and how to respect different opinions and experiences. Most students remained in their original team, but changed their role, throughout the learning experience. Teams generally worked very well together, drawing on each other's strengths to reach a solution to the scenario.

The intended learning outcomes of the PBL pilot include a demonstration of an in-depth knowledge of neuroscience, together with a critical application of such knowledge in a real-life situation. These outcomes were assessed both formally and informally. The feedback session in week three of each scenario indicated the depth of knowledge that had been attained, and the level of understanding of how this knowledge can be applied to the problem. Formally, the outcomes were assessed by the summative seen paper comprising all six scenarios. Students were required to address two.

Effectiveness

At the beginning of the module, the students were presented with the rationale, procedure, and assessment of PBL, and asked whether they wanted to trial the approach. The students unanimously decided that they wanted to. It is therefore very much the students' project, and we all informally evaluated the approach at the end of every scenario. Throughout the trial, students were overwhelmingly positive about the experience, particularly enjoying the independent nature of the work. They also liked the idea of a seen paper, reducing anxiety about the exam. At the end of the module, students completed an evaluation form, with open and closed questions. In the open questions, they were asked to comment on "What worked well" and "What could be improved". Working independently was a common theme, with many students commenting that they thought they had a deeper understanding of neuroscience as a consequence – rather than passively listening to lectures, they actively sought the information themselves. One of the tenets of PBL is that students start from their existing knowledge base, and from there they identify gaps in their knowledge and skills. One student commented: "I have gained more confidence and learnt processes of approaching problems e.g. brainstorming … and starting from what we already know."

Additionally, being part of a team gave them confidence and a feeling of responsibility to other team members to carry out their role and research the topic. Conversely, a couple of comments suggested that teamwork had been challenging "when members aren't committed." This is a common issue with group work at all undergraduate levels, but was noticeably less of a problem with PBL. Only one team appeared to be affected by the lack of engagement of one or two team members. The team aspect of PBL is important and provides an insight into the inter-disciplinary nature of most careers leading from a Psychology degree. This is an aspect that needs careful thought and planning for students who have

difficulties in attending every session. However, the use of VLE and social media has minimised the impact of reduced face-to-face meetings. Indeed, students used various methods to keep in touch and share ideas and information between sessions.

The feedback sessions in week three of the scenarios were particularly identified as a very useful component of PBL: "they allowed us to demonstrate what we had learnt". The freedom to choose the format for the feedback was also identified as a positive aspect of PBL. All students commented that working towards the seen paper exam gave them confidence and ensured they engaged with the scenarios. The exam results are very encouraging, with the scenarios addressed with much more depth and insight than would be expected in a traditional exam. Some answers are exceptional and the cohort results show a higher mean mark compared to the previous year's traditional exam mark (allowing for differences in format) and no failures.

Overall, the experience of using PBL was very positive for students and tutor, evidenced by student improvement in engagement and attainment.

Promotion

PBL was presented at the beginning of the module as an alternative form of learning and teaching that would require ongoing commitment and engagement, but that would enable them to work in a flexible, professional manner. It was important that students understood why I was proposing to use PBL instead of traditional methods and that they felt ownership of the process. Although the neuroscience module is an option at level six, some students who take it struggle with the content and there are often three or four failures. I wanted to address this and see if active learning and engagement would improve the students' understanding of the material, and thus their attainment. Giving students flexibility in their learning encourages ownership and a more 'mature' attitude to their learning. This is reflected in the formative feedback sessions and summative seen exam papers. Emphasising the deep learning and understanding aspect of PBL, rather than 'remembering', appeals to students, as does the idea of "thinking like a psychologist". The flexibility and choice also enables students to make informed decisions about their learning experience, again encouraging ownership and engagement.

As this was a pilot project this year, other stakeholders were not involved, apart from the external examiner for the module. All materials and ideas were presented to the external examiner and approved, with extensive dialogue regarding process and assessment.

The findings of the pilot will be disseminated with colleagues and there has already been discussion of rolling out two other modules: 'Counselling' and 'Clinical Psychology'. Open day and visit day material will be amended to incorporate PBL as an example of independent learning.

Promoting competence and confidence: independent learning in Religious Education

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Description

Initially, each student briefly considers their previous learning, if any, in the context of Religious Education and shares this experience with their peers.

To facilitate coverage of the main religious traditions and manage time efficiently, students are invited to create a group of six. This ensures that the six principal religious traditions represented in the UK are covered. To conduct their independent task, each group chooses a religious tradition or secular philosophy. Thereafter, each student selects a topic within the chosen tradition that becomes the focus of their research. A maximum word count is set to 1,000 words with a minimum at 500 (references are required).

In a second session, students work collaboratively. As a group of six, each shares their work with their group for about 20 minutes, then responds to queries. All of the students are then required to draw implications for teaching the topic in a primary school.

A third session sees students use information from their independent task, teaching experiences and reflections from session two to prepare and demonstrate to their peers how their chosen topic can be taught. The aim of this seminar is to develop their pedagogic knowledge and repertoire and their confidence to teach religious education in primary classrooms. At the end they receive feedback from their peers. In all, this supports them to address some of the requirements of the 'teachers' standards'.

The first task is completed and presented independently. However, for the delivery of session three, they plan and deliver collaboratively.

The role of the tutor is to ensure a wide range of religious traditions/topics is covered and secular philosophies are not omitted. The tutor ensures everyone has a topic to explore. Flexibility is exercised in supporting students choose their religion/topic. The tutor offers access to resources available in the subject teaching room.

This independent task is embedded in the 'course philosophy' as the course seeks to develop high quality teachers who are able to work in a context of considerable and rapid change. In addition, it fulfils the strands of the University's learning and teaching strategy by supporting students to make a successful transition from their previous learning experiences to undergraduate work by engaging them in such activities so that they become independent learners. Through this task, students demonstrate high levels of commitment and empathy, including respect for others and a commitment towards diversity and inclusion. They demonstrate a commitment to continued professional development to become highly employable. Moreover, teaching is increasingly a team-based profession. By sharing their work, they develop the skills to work collegially and co-operatively. Specifically, this task links with their final year 'Independent Study' module, in which students are expected to demonstrate competence in selecting, retrieving, evaluating and using resources for their research. For the specific module, they reflect on the success of teaching strategies in enabling pupils to enjoy and achieve.

The intended learning outcomes are to provide students with an opportunity to become aware of the significance of subject knowledge, and to consolidate and enhance it. Secondly, to develop competence, and confidence, in teaching. A third outcome is an increased understanding of the importance of reflection, evaluation and research in enhancing practice – and to take responsibility for their own learning and that of others.

Students are reminded to access the support provided by the Centre for Academic Success. In addition, they are informed about the faculty librarians' drop-in sessions provided in a building where the module is delivered. The tutor also shows examples of completed tasks.

Students are then encouraged to submit their independent task onto the virtual learning environment (VLE). This creates a depository for the whole class, so that everyone can access all the work and not only that produced by their group. These are accessible for the duration of their course.

A forum for discussion is available on the VLE. There are study cubicles in the library, which they are encouraged to use. e-Books, paper books, and subject-specific resources are accessible in the teaching room.

To promote competence and confidence through independent learning in the context of Religious Education, it is important not to rely on an end-of-module assignment. The role of summative assessment is to assist students in creating an audit for continued professional development in Religious Education and to identify the next topic/religion to learn about. Formative assessment is used mainly during the session in which students share their work. They receive feedback from their peers on the quality of information they have gathered and collect ideas from their group for teaching their topic. Their own teaching idea is critically evaluated by their peers. The tutor checks their usage of technical vocabulary, pronunciation, and spellings and offers guidance on sensitive matters concerning their topic where applicable. The tutor encourages students to identify their own areas of learning to enhance their teaching and knowledge. For some, this is used to inform their audit and/or professional development profile.

Individual tutorials are offered to all students to assist them in completing this task. The forum is available to seek support from peers and the tutor.

Effectiveness

These activities provide various opportunities for independent work and the consideration of creative approaches to teaching. In completing the independent task, I have observed students being enabled to identify and locate appropriate sources of information. They evaluate the suitability of resources and use their analytical skills. Students read for a specific purpose and extract relevant and useful information from various references to write succinctly about a specific topic and give an oral presentation in an appropriate format to a targeted audience. They paraphrase, summarise, draw conclusions, and present their information in a logical order. This task also enhances and enriches their subject-specific vocabulary in Religious Education. It raises their motivation to learn and teach Religious Education.

In the second session when they share their work, students are seen to be inquisitive. Their confidence is developed in a topic of a religious and/or non-religious tradition. Their knowledge and understanding about a religious tradition as whole is enhanced by learning about several topics as a group. This is effective as students become active participants. In the context of religious education, it is especially prudent to provide opportunities for students to work collaboratively as a social group. Such organisations prove to be helpful and effective to some degree in minimising religious bigotry, xenophobia, racism, Islamophobia and fascistic tendencies. In other words, working as a group assists them in recognising the relevance of the material being studied. Moreover, they learn through trial and error in a supportive environment and demonstrate their group leadership.

The third session, in particular, provides an opportunity to prepare and rehearse for oral presentations and stand in front of an audience thus enhancing communication and interpersonal skills in the capacity of a teacher. They are expected to critically evaluate the teaching ideas they observe and offer peer feedback. On completion, they reflect on the feedback received to strengthen their own ideas. This academic dimension is effective as it develops their higher intellectual skills of reasoning and problem solving. These skills are important not only for future teachers but for students in general as they prepare students to become lifelong learners.

In addition, these tasks support their preparation for other academic work on the course such as referencing, citing sources within a text and compiling references. Their confidence in conducting small-scale research is also enhanced. It is been noted that their personal skills are also enhanced in terms of time management and personal responsibility.

Importantly, it develops their autonomy as learners. It has been my experience that these tasks demand that they become self-motivated and self-directed.

The possible limitation might include: students not completing their task, the number of students in a class, not all students submitting their work for the group/class, and not fully referencing their work.

Promotion

To ensure that everyone completes their independent task, the tutor requests electronic copies of their work in advance. Closer to the day, a reminder (if necessary) is also sent. When presenting the rationale for the task, students are informed about the expectations of presenting work at different levels in undergraduate work.

Student-led teaching

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Description

This report describes two examples of student-led teaching. Although different in detail, they are built around the same basic principles. It has been observed that some final (fourth) year undergraduates (our degrees are four years long) are ready and willing to take on specific and challenging leadership roles that the standard curriculum and academic process does not readily accommodate. To allow these students – who are not always the academically most gifted – the opportunity to challenge themselves, two options were created for them to become engaged in the design and delivery of teaching to other students. What was quickly discovered was that this creates a rather different learning environment that, in interesting ways, is powerfully effective. In short, the removal of authority and status figures – encourages these student leaders to avoid becoming pretend lecturers – from the learning process results in a collaborative environment where very different gains result for all parties.

In one example, a group of final year undergraduate students provide most of the teaching for a statistics and research methods module taken by second year undergraduates. They provide some lectures, all tutorials and create most of the workbooks that the learners work from. They begin by establishing what goals they have and then design materials (lecture slides and workbooks) to achieve those goals. They mark all the work in workbooks on a correct/incorrect basis, which does not require the exercise of academic judgement.

The fourth year students will be called student leaders. The second year students will be called student learners.

The group (between five and ten so far) work cohesively, meeting weekly during the term to discuss issues that have arisen, anticipate issues that may arise, and to ensure that progress is on track. They use a Facebook page continuously to check with each other and to consult on problems as they arise.

The role of staff is twofold. One member of staff takes academic responsibility for the module and for student learners on it, focusing on progress and assessment. This entails the delivery of the conceptual teaching about research design, assessment beyond workbooks and overall co-ordination of the module. Student learners treat their student learner tutor as the first call with any progress issues, such as when they have failed to understand something. The staff member would be approached where more complex issues arise.

A second member of staff is responsible for the student leaders. This member of staff is the co-ordinator for the fourth year modules that the student leaders are taking concurrently. The main focus of this member of staff is to ensure that the student leaders are making personal gains from the experience and to ensure that it does not erode their own academic record.

The module has been completely re-written to accommodate this arrangement. The module's fundamental aim is to allow each student to become practiced and competent at doing basic research design and statistical analysis. This is achieved by a practice of repetition. The student leaders are then given the role of encouraging and rewarding the student learners as they repeatedly do the basic operations. The student learners engage much more readily in this respect with student leaders than they tend to with academic staff.

A key feature of the process is that the student leaders are making their own judgements about the best learning process. In simple terms, they own the module and deliver it as theirs. It has been noticed that the student learners respond to this very positively.

In another example, some students are given the opportunity to design, develop and deliver final year elective modules to their peers, with academic staff only involved in the assessment stages. The opportunity is open to all, but only a few of the more compelling suggestions from students are implemented. Students who wish to do this have to satisfy the overall academic co-ordinator for final year that their motivation is sound and that their interest in whatever topic they choose is strong.

The student leaders in this case will then write a module handout which explains the purpose of the module; the learning outcomes; the nature and credit value of the assessments; and finally a personal statement explaining their own interest, motivation and expectations. Students who sign up for such a module are in complete understanding and agreement about the nature of the module and its co-ordination.

These elective modules have a structure based around discussion groups: 12 students meeting for two hours six times during the term to make presentations to each other, to discuss research papers and to debate whatever content the module has. Once the module has started, the only contribution of academic staff is to grade the assessed work.

Effectiveness

Three positive outcomes have been observed.

First, the student learners in both examples engage in a different manner with the course. A genuinely collaborative atmosphere is created where student leaders and student learners share on an equal footing in the process. In particular the student learners, in an environment where they expect (and experience) very little if any judgemental feedback, become much more adventurous, but also much more open about their progress or lack of it. In simple terms, it turns out to be much easier for a student who is struggling with statistics to talk to another undergraduate student than an academic staff member.

Second, the student leaders acquire some very positive personal development gains, although the issue of whether they can articulate this remains to be considered. They become very confident at presenting material – and achieve a maturity in this regard that is very encouraging. A set of employability attributes obtained from a large insurance company with heavy graduate recruitment requirements are used – preference for action, team working, leadership, communication, planning – and the student leaders make rapid and strong gains in each of these areas during the process.

Third, and more surprising, there is a gain for the academic staff involved. The process is a very heavy demand in terms of time and effort for academic staff. Our own observation is that when staff engage with it, often reluctantly or sceptically to start with, they quickly see not just benefits but also inspiration.

The work produced by learners is of high quality and our external examiners have always agreed with this. Equally, student feedback is typically positive. There is a time course on student feedback that is becoming recognisable: initially they are unsure and worry about the qualifications of those who are to teach them. However, contact turns that around and feedback is then positive. Most interestingly, for the teaching of statistics, it has been observed that those students who took the course last year are very keen to encourage those students who are taking it this year.

The weakness is that a completely satisfactory answer is yet to be established regarding the gain to the student leaders. While informally staff have observed great strides in the development of student tutors, it is not so clear to the tutors themselves. A way of placing supported reflection into the two schemes needs to be found.

Promotion

For about five years it has been made explicit to final year students that the goal for them is to become confident and independent learners. This is approached through an induction day at the start of their final academic year. Here, how students can engage with this aspect of the curriculum is explained. The truth is that while many do, the idea clearly competes with the imperative they feel to maximise grades.

Recruitment of student leaders is done on the basis of invitations to all followed up by extensive sessions exploring the role and commitments between the volunteers and the final year co-ordinator. These culminate in practice sessions with their peers in the final year before final decisions are made.

Recently, these examples of student-led teaching have begun to be disseminated through the British Psychological Society and the Higher Education Academy.

Student mentors @ NTU

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Description

This student academic mentor scheme is a cross-year, same-discipline scheme where student mentors work with less experienced students to develop academic writing, maths and study skills.

Student mentors undergo the NTU recruitment and selection process, are trained in mentoring to facilitate and enable independent learning, and use questioning techniques to encourage independent thought. The vision for this model is one in which highly skilled students are recruited and trained to work with lower year students to facilitate discussion and promote familiarity with the conventions of writing in that school. According to feedback, the majority of students access a student mentor when encountering difficulties with their academic work – and a high percentage of students cite increased understanding and confidence as being one of the main outcomes of a session. Qualitative data is also positive:

> The mentor was very patient and carefully guided me through my feedback, allowing me to reach my own conclusions whilst suggesting other ideas and techniques. I found this very useful; rather than being told what I need to improve, I was able to find solutions for myself. (Student participant 2013-14)

This highlights the nurturing of student independent learning by student mentors. Interestingly, we have found that feedback from mentors is also positive, citing improved confidence, increased engagement with their own studies and enhanced student experience as being some of the many benefits of being in the role. Two-day residential training encourages a sense of community. Mentors engage in role-play and analyse case studies to create a collaborative approach to running a mentoring session. They also consider a range of web-based and paper-based writing resources which deal with features such as writing structure, analysing the question, and grammar and punctuation, in order to practise using these in actual mentoring sessions.

Feedback from the training also suggests that mentors themselves are able to reflect critically on their own writing, serving to highlight areas for improvement. Recent research conducted at University of Limerick (O'Sullivan and Cleary 2014) also suggests that the embodiment of engagement by mentors has a positive impact on those attending sessions with a mentor.

Mentor sessions at NTU are run from within the library on three campuses. On City site, a dedicated space is set aside for drop-in and booked sessions, where mentors can work with students using a range of resources and mentoring techniques to encourage independent thought. Paper-based information and worksheets exist for students to take away, and these are also stored in a virtual learning room, together with links to other resources to enhance the learning process. Online support is also given for distance learners, and videos and podcasts of mentor-led workshops are available from the learning room to meet DDA requirements.

Mentoring, it seems, serves to support independent learning through encouraging students to reflect on and discuss their work in a safe environment. Mentors also move towards autonomy through enhanced time management, increased engagement and a greater sense of confidence.

Effectiveness

Student mentor feedback from 2013-14 shows that they have received some excellent feedback, and that they have seen a marked rise in bookings following their induction talks:

> My mentor was extremely helpful, at first I was a bit apprehensive in attending, being a final year student I felt silly in asking advice on organisation. However, I never felt intimidated, and my mentor made me feel really welcome. Anything I asked, I was given decent advice and it just made me feel being able to talk to someone who has experience in how to improve my work – I will definitely be seeing my mentor again. (Student participant 2013-14)

Mentors themselves seem to benefit in terms of their own development:

> As a student mentor, my role is to aid other students to develop their own independent learning techniques. To develop their confidence in their own abilities, and ensuring they know how to reach their full potential and gain the best grades possible. (Current mentor 2013-14)

In contrast, mentors also report that there is still a general lack of awareness of the scheme, in spite of all of the promotional events, presence at fresher's fairs, induction talks and drop-ins within the library. To raise the profile of the scheme, the marketing team has recently launched Facebook and Twitter campaigns and are becoming creative with media walls and plasma screens around campus. Recently there have been spotlight interviews and videos of mentors recounting the value of the scheme being shown in libraries and other buildings around the university.

To further promote the scheme, mentors work with academics to visit tutorials prior to assignment deadlines, and following feedback. This is to encourage students to collaborate with mentors to develop their writing, improve their study skills, and increase engagement and autonomy.

Finally, there seems to be a general lack of response to the student feedback survey circulated after every session. In order to increase feedback rates, to help us improve the scheme, the student mentor team now offers entry into a prize-draw to win a reward of £50 worth of Amazon vouchers to each respondent.

Promotion

Promoting the student mentor scheme is crucial to its success. Feedback from students who have accessed the scheme often state that they found out about the scheme by accident, and that they did not hear about it until the third year, wishing they had known about it sooner: "I did not know about the service until a mentor spoke to us in a lecture so I think it could be advertised more widely."

The mentors themselves have therefore prepared a short promotional talk, which gives information about who they are, where to find them, how to book, and what they can and cannot do. This is interspersed with inspirational quotations about the benefits to both students and to mentors.

Learning and teaching co-ordinators also promote the scheme within each school through learning and teaching committees. Academic staff are encouraged to invite mentors into tutorials and academic sessions to raise awareness of the benefits of accessing a mentor. In addition, a referral slip is attached to assignment feedback forms encouraging students to book an appointment with a student mentor if they feel there are areas of their writing or study skills they would like to develop, such as time management, organisational skills and enhancing the process of writing. In addition, the scheme is promoted through all-module learning rooms contained within the virtual learning environment at Nottingham Trent University, enabling students to self-refer, thus encouraging autonomy.

Student presentations in the 'selection and use of dental materials'

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Description

Students self-select groups of four to five to work together on a 12-minute presentation taken at random from a list of subjects drawn up by the Dental Materials teaching team. The list of subjects is based on (a) a difficult materials selection choice for a clinical application; (b) a new technology that is having an impact (or is anticipated to have an impact) on clinical dentistry; or (c) a subject currently attracting controversy. While each presentation is on a different subject, the approach is intended to be common and has three main elements:

- a short introduction that may include observations on the scientific basis for the material or technology or controversy;
- a review of relevant scientific or clinical evidence;
- a conclusion that must exercise some judgement on the part of the student group.

The students are allocated subjects and form into groups in October, and make presentations the following January at the end of the semester. Students decide how to allocate tasks between team members.

Staff develop the presentation titles to ensure that they encompass the Dental Materials curriculum while requiring additional reading and critical thought beyond the core course material. A group of course teachers assess the presentations and, taking into account peer feedback, award a mark. The best presentation and runner up are awarded a small prize in recognition of the effort and achievement, while the best use of multi-media in the presentation is awarded an additional prize.

This independent learning activity requires that students use their core knowledge of dental materials to evaluate an innovative technology or material. This is a key skill for dental professionals as they are exposed to developments throughout their working lives and must make evidence-based decisions on how, or whether, they should adopt the new development.

The learning outcomes are that students will be able to:

- explain, using examples, how there is a trend towards development of materials with properties that are beneficial in specific circumstances;
- describe how the development of new materials and technologies creates greater challenges for clinicians with respect to materials selection;
- explain the limitations of the available evidence base when predicting the outcome of a clinical intervention with a dental material;
- undertake this project as an illustration of how the modern dental student and dentist need to be 'life-long learners' with an active interest in the subject of dental materials science and health technologies.

The students have had experience of similar self-directed presentations from the second year of the programme. This project extends that experience by focussing on material that requires a critical approach and acceptance of new material, whereas previous work can be based on core lectures and reading. During the preparation period students are assigned a tutor to guide them and they can meet with them to discuss progress and try-out arguments they have developed.

A virtual learning environment (VLE) is used to support the whole BDS programme but there is no specific area for this project.

The University of Sheffield provides excellent online and physical library resources including a wide range of peer-reviewed journals. The Information Commons and Student Union building have group study rooms that can be booked by students for meetings and rehearsal of presentations. The Information Commons is always open permitting students to access study areas and online facilities at convenient times. The University provides all students with online storage areas, which they can share with colleagues to allow collaborative production of documents. The School employs an IT support officer and a learning technologist who can help students troubleshoot IT problems across a wide range of technical difficulty. Lectures are given in health informatics at several stages through the programme to familiarise students with literature searching and appraisal strategies.

Formative assessment is provided by tutors assisting during preparation of the presentation and by peer review at the time of presentation. Summative assessment is undertaken by staff when the presentation is given using a standard-set marking pro forma. Feedback is given to the presenting group by both staff and students.

The BDS programme requires significant student attendance although there are study sessions integrated into each student's timetable. These give an opportunity for face-to-face meetings, however, the students are accomplished in online collaboration, which can take place asynchronously if required. The University's student support service provides assistance for students who have been assessed to have specific learning support needs and opportunities are available for all students to have support in aspects such as group work, presentation skills and time management.

Effectiveness

Impressions from the standpoint of tutors suggest that students gain a substantial insight into the complexity of making evidence-based decisions. They also appear to enjoy the learning exercise, and it has additional benefits related to the development of important transferrable skills (including teamwork and organisation, reviewing scientific and clinical data/publications, and public speaking).

Student feedback for this section of the programme reports that they find the project increases their understanding of dental materials. Importantly, the project occurs as students are undertaking clinical work in practices outside the dental school where they are exposed to different materials and techniques. This project invites them to question, using evidence, the merits of diverse approaches to patient care.

Students' independence would be greater if the project occupied a larger proportion of their time. However the programme must balance the needs of many disciplines, especially the needs for hands-on clinical experience, which is critical at this stage of their learning.

Promotion

From the beginning of the BDS programme, students are reminded that they must become lifelong learners if they are to be safe and successful clinicians. This framework is enforced by the professional regulator – General Dental Council (GDC) – who require that all registrants have a personal development plan and engage in continuing professional development.

Although much of the knowledge element of the programme is teacher-centred, the development of skills and professional attitudes must be student-centred, albeit modelled by supervising staff. Thus students self-assess and reflect upon all of their clinical work culminating in presentation of a clinical case in the final year where self-criticality is essential.

In each year of the programme students undertake at least one independent learning activity, with this project being one of three in the fourth year. This structure reinforces the concept that independent learning is integral to the curriculum and that student-centred learning is essential for engaging with the subject.

These activities demonstrate to the GDC that the School has prepared students to understand the need for and perform self-directed study to enable them to develop professionally.

Students' reflective logs

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Description

As part of an electronic portfolio of their work, language students at York St John University are required to complete a reflective log of their independent work. As the modules have very little timetabled contact time, students undertake a considerable amount of independent work either on their own or in collaboration with other students (for example in creating video dialogues), but each must produce their own portfolio.

Staff provide guidelines for the reflective log and encourage students to be reflective both in class and by reviewing and commenting on the logs at specific times during the course. The aim is to encourage students to become more reflective in their language learning and in their learning in general.

Brockbank and McGill make the point that higher education these days is considered to be about more than just the learning experience within the institution, and is about preparing students for their whole life (Brockbank and McGill 2007). Reflective logs or portfolios are seen to be a useful way of achieving this, and the authors cite Elton and Johnston (2002) who argue that portfolios "help students' reflective capacity which will in turn enable them to continue learning after passing beyond the immediate course" (Brockbank and McGill 2007, p. 196). Brockbank and McGill also argue that:

> a system which promotes reflective learning through reflective dialogue has the potential to develop the autonomy and interdependence of students, preparing them for the rapidly changing world they will face in the 21st century (Brockbank and McGill 2007, p. 336).

At present the dialogue element of students' reflection is fairly informal, whether in class discussion, tutorials or by means of the comments staff add to their e-portfolio. This is something that could be developed in future.

The examples provided were from preliminary (post-beginners) level. At beginners level, the virtual learning environment (VLE) is used to encourage reflection by providing questions for students to consider each week. This has not yet been extended to include post-beginners as it is part of a package of materials for the beginner students, however, all students receive a weekly language learning tip.

The students are encouraged to make use of the 'Languages Resource Area' within the library. They also have study guides available, a series of articles created by the author that consider different aspects of language learning, for example, taking a language-learning theory and explaining how it is relevant to the learner. They also have available to borrow a range of equipment such as digital video recorders to produce materials for their electronic portfolio.

Students are expected to produce a video and a piece of written work. Both of these constitute the formative and summative assessments, since although they form part of their final assessment, they receive feedback on both pieces, which informs the remaining videos and written pieces they are required to produce.

A great deal of support is available to all students so that they can all produce an electronic portfolio whatever their IT skill level. The Technology Enhanced Learning team are very supportive of the aims and the Academic Technologies Trainer is available for tutorials. Illustrated guides have been created as

well as the reflective log guidelines mentioned above. Lecturers provide feedback on the portfolio twice during the semester. As the assessment is electronic, assignments can be uploaded off-campus at a time that suits the student. In the past a sight-impaired student has been supported on this module, but it was before most of these technologies were introduced. Nevertheless this experience raised awareness of disability issues, meaning disabled students can be more easily integrated into the courses.

Effectiveness

Some students did comment that they felt the reflective process detracted from time to do the work required. It was felt that given the potential benefits of reflecting, it was worth persevering and perhaps improving how we present the idea to the students; it only requires approximately one hundred words each week. So, if it is undertaken as it is supposed to be – throughout the course rather than completed at the end – it should not be onerous. The difficulty is in presenting the idea to students in a way that convinces them. The strength of the idea is that it will affect them not only in their language learning but in all aspects of their studies and indeed their life, and that they will become reflective practitioners themselves.

In general, the quality of the students' reflections have been impressive. On being asked to comment on the reflection process, one student remarked:

> My reflective log helped me to identify areas of strengths and weaknesses. Whereas I found it a bit difficult to express how I am doing throughout of the course. In the future I would recommend to do a reflective log, it is good to analyse what you have done."

Another said it was "something I feel has enriched the learning experience and has also benefitted not just learning Spanish, but learning for me in general."

Promotion

Students learn of the module requirements in the module handbook that includes a summary of the assessment, and lectures expand on this in their own way. A detailed course overview using PowerPoint has been created, giving the rationale behind the assessment. Guidelines for the reflective log have also been provided and these are available through the VLE together with packages of electronic supported open learning (SOL) materials, which include further suggestions for reflection each week (and which cover the particular topic of the week, as well as wider issues such as skills development). The study guides and language learning 'tip of the week', mentioned above, are attempts to encourage students to see the wider issues and a nudge to remind them of the need to continue their independent work between classes.

References

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Study skills for academic success: SPOC and MOOC

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Description

The University's Centre for Achievement and Performance (CfAP) has transformed a ten credit 100% face-to-face module into a 100% online course using the CAIeRO (Creating Aligned Interactive educational Resource Opportunities) process (referred to as Carpe Diem in academic literature). There are two modes: a MOOC mode (Massive Open Online Course) and a SPOC mode (Small Private Online Course).

The MOOC mode is available via Blackboard OpenLearn and anyone can enrol. New cohorts run every eight weeks throughout the academic year. The SPOC module is available for current students via the university's virtual learning environment (VLE). CfAP's staff liaise with course teams to deliver the content via the VLE at required times during the first year. Also, parts of the course have been embedded into other online courses to supplement and enhance the existing provision.

It is an eight-week course which helps the student to develop and enhance their study skills before attending university or while they are undertaking their first year. Academic Staff have created the course and manage it in both modes. While running, the courses use student ambassadors to peer review the process and support the learners.

The course has been offered to all applicants at the University of Northampton for the September 2014 intake (circa 13,500 students) prior to their arrival. The course is also embedded in some programmes of study. Paramedic Science and Dental Nursing cohorts undertook the course in April 2014.

There are five main learning outcomes from the course. The first focuses on the nature of the raised expectations involved in study at the higher level, together with the communication skills this will require. Secondly, critical thinking. The course then turns to address issues of research skills and effective reading methods, and then covers referencing. The final topic is that of academic writing.

The learning outcomes of the course are very explicit. Firstly, it is hoped that those undertaking the course with become equipped with the skills required for success in higher education (HE) and become independent learners. Participants will be able to reflect upon their learning journey and their individual academic development. They will also enhance their academic writing techniques, communication skills (particularly by participating in online discussions and communicating with tutors and peers), and utilise a range of information-learning technology to research and present their work.

In the SPOC mode of delivery, the course is heavily embedded by the programme team into the work of the students. For example, the development team work very closely with Dental Nursing and Paramedic Science.

When undertaking the SPOC mode of the course, the students have access to all the resources any student would use during a course at the University of Northampton. They have access to online resources; academic librarians; academic practice tutors; learning technologists; personal tutors; and student peer support.

All learning is online via the VLE and is supported by peer mentors. The students are expected to undertake the work directed to them. Then, interaction with their peers is via the discussion boards and

other interactive elements of the course, such as uploading video; creating a journal entry; or undertaking a quiz.

There is no formative assessment in this course. All feedback is received via peers and peer mentors and is supplemented by work undertaken with course tutors within their other modules. The course is not credit bearing.

The course is 100% online and the content has been designed to ensure accessibility. It is constantly monitored and assessed to ensure it is fit for purpose. The development team are currently undertaking focus groups and interviews to measure impact and engagement.

Effectiveness

Strengths

The course has been welcomed from all areas of the University and beyond. So much so that the School of Health will accept participation with the course as a pre-enrolment requirement for some applicants. Previously, the School expected students to undertake a credit-bearing study skills module.

Several students on the SPOC have now gone on to undertake undergraduate degrees at the University of Northampton.

Peer mentors involved with the project have told the development team, anecdotally, that their involvement has improved their own understanding of particular study skills.

To date, the project leader has disseminated information about the course at the *Association for Learning Technology Conference* (ALT-C); the Association for Leaning Development in Higher Education (ALDinHE) conference, Blackboard conferences, and several learning and teaching conferences. The development team also delivered a workshop at *Online Educa* in Berlin in December 2014.

A postgraduate (level seven) version of the SPOC/MOOC is currently in development.

Weaknesses

The course does not have any formal assessment mechanisms due to the fact that it has developed from a MOOC into a SPOC. The only way of 'assessing' the participant is via the peer mentor.

Participants from a pilot cohort that ran in July 2013 were surveyed, but as it was blended delivery (to test the online content) the positive outcomes of this course do not necessarily reflect the impact and success of the current version. From April 2014, a PhD student at the University of Northampton led focus groups on the course and conducted interviews to ascertain its impact, successes, and areas for improvement.

Promotion

The mere existence of the Centre for Achievement and Performance indicates that the University of Northampton takes independent study and learning incredibly seriously. The Centre was established over 20 years ago and was one of the first in the UK. It is a large team in comparison to others – with eight members of staff across two sites.

All of the Centre's work with potential, current and past students demonstrates its commitment to independent learning. It offers the SPOC/MOOC to all applicants to the University and also provides a scheme called 'Flying Start' every academic year to ensure that all students are supported in developing their independent study skills from the moment they commence their studies.

The Centre is also confidential, students cannot be 'sent' to CfAP, and the system is purely self-referral, which ensures that students take responsibility for their own learning. The Centre is able to promote its work and develop relationships with students as a lot of the teaching is embedded into schools via lectures and workshops. When the student self-refers they experience a one-to-one service via tutorials or a drop in system.

Working closely with students constantly reinforces the message that they need to be independent learners. Staff do not proofread work. They discuss with the student how to identify what they need to do to improve and help them develop a plan of action for when they leave their tutorial.

The CfAP team spends a lot of time liaising and networking with colleagues within the institution as well as external contacts. The Head of CfAP works very closely with the Head of Academic Practice and teaches on the University equivalent of the PGCert in HE. The Head also works regularly with the Director of the Institute of Learning and Teaching, Professor Ale Armellini. The team speaks at national and international conferences about the work of the Centre.

Sub-plots and chapters in independent study: research as transferable skills in contextualising creative writing

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Description

This study is based upon the experiences of tutoring Creative Writing students in independent study regimes. Experience has suggested that creative writing students, at all levels, were subject to the tyranny of recording emotions or life experiences, often at the cost of acquiring or developing wider academic skills -– especially with regard to research skills. This has been a dynamic frequently observed by colleagues teaching in other subject areas, but who have often encountered creative writing students through joint honours programmes.

As an independent study tutor guiding students through their creative writing projects, there is an opportunity to involve them in wider academic processes and practices which would not only provide them with wider academic and research skills, but would also give them the ability to contextualise their writing, creativity and imagination. There is also an opportunity for reinforcement and to give them confidence in being able to relate and talk about their writing on many levels – academically, theoretically, and intellectually, as well as passionately. The experience of some independent study tutors have made them conscious of the fact that contact hours with students were in general short or limited and so one-to-one meetings with the students – fortnightly appointments of 30-45 minutes – can be used address this dynamic, extend contact, and to provide more detailed feedback.

A description of these practices should first note that students on the creative writing degree at LJMU undergo an independent study project – often during their second year. Each student is assigned an independent study tutor who guides them through their project which is usually a piece of writing, such as a poetry collection, a short story, reportage, travel writing, etc.

The role of the tutor is to offer advice on the manageability of the project, and to facilitate meetings and discussions (whereby the student can give an update on their progress or express any difficulties they might be having). Assessment duties are also a feature of the independent study tutor.

In the first instance, the student has a one-to-one meeting with their tutor allowing them to talk openly about their ideas, and permitting the tutor to gauge their articulacy, confidence, and how structured their idea may be. It also provides an opportunity to assess the details of their project, and how manageable it is.

The student then researches the literature on their subject – including genre if relevant – in order to provide a reading list for the next meeting. One aim here is to identify what is being written in the field. This means the tutor can gauge their research and academic writing skills – for example, ascertaining whether the student presents a reading list in the correct manner using the academic (Harvard) system. It also gives the student a chance to see how their work sits within wider theoretical and publishing contexts.

At subsequent meetings discussions are held regarding findings and how research techniques might be improved. It is an opportunity to ask how their research may have altered their original ideas. Students are also asked to write a literature review for the next meeting, outlining, in a few sentences, how the books reviewed related, or are relevant to their own ideas/project.

At the next meeting the student is asked to talk about their literature review and to discuss how research might be integral to writing fiction. The student is then given the task of considering a possible audience or genre for their work for their next meeting, and to provide a structure/plan or copy of their writing project to date.

Summarily, students are encouraged to talk about their writing/project at every meeting, but the research tasks will enable them to talk about their work in wider and theoretical contexts. They will see how their writing/projects fit within wider patterns of thought, and my experiences of guiding students through these processes – processes that some, at first, find distracting or puzzling – are that students become more articulate, and more confident in knowing they understand their subject in depth. They also acquire skills, which although they might not use in fiction writing, will have a bearing on how they approach their written and communication skills.

Effectiveness

Overall, experiences of adapting these processes to a creative project were revealing. If anything, students took to research almost too much, putting off the creative writing element in order to go 'deeper' into the research. In one instance, a student who had decided to write a short story made up of personal letters between two friends, was asked to read up on epistolary fictions, in particular, L. S. Kauffman's work on the subject. The student completely changed their approach to the story as a result of this research, and in the process, gained a lot of transferable skills that went towards providing evidence for student graduate skills attainment.

More generally, the strengths of these practices can be seen in the way they encourage students to move away from surface learning into deeper learning. Also, by adopting academic research and writing skills and techniques they become more integrated into the broader academic community. Students can also see their work within still wider contexts, appropriating shared skills and knowledge, and not just viewing their work as a personal, and often isolated, exercise. The research tasks are designed to promote and enhance academic skills, but also to encourage students to talk about their work on many levels. In short, it is designed to give them the confidence to talk about their work and to possibly change their writing style as a result of their acquisition of in-depth and often quite specialist knowledge.

The meetings provided an opportunity to judge student communication skills, their application to learning, and their ability to collect and synthesise information. The meetings also allow an opportunity to provide guidance, feedback, and greater contact hours. By setting tasks outside of the creative writing process, this process of tutoring asks students to consider their work in comparison to what was being written elsewhere – and by doing so it provides an opportunity to encourage higher standards from them.

Regarding the project's weaknesses there is the problem of personal knowledge base and understanding the diversity of ideas – ranging from epistolary fiction to psycho-geography, from poetry to reportage – which means tutors have to be resourceful and imaginative in the tasks they give the students to research. The only constants in practice and approach were for students to complete a research task, and demonstrate academic writing skills. As such, independent study tutors employing this practice need to have a decent knowledge base. Tutors who have experience of teaching across the arts and media have an advantage in that they can see students' work in wider and often theoretical contexts. However, not every tutor has an inter-disciplinary background.

Another potential weakness relates to balance. When does research stop and the creative work begin? As pointed out, once immersed in the research process, many students were reluctant to start their creative project and in one or two cases the research had a slightly adverse effect on the student, almost an epiphany, where they began to see their original idea as poorly conceived, naive, or as unworkable. It was difficult for some students to see what they considered to be an 'original' idea as

being considered elsewhere, or as part of a mini-industry thought of by others. These effects should not be underestimated, and in these circumstances, meetings often ceased being about writing skills and instead became exercises in motivation and restoring confidence. However, this can be considered as part of the learning process – that students to see how their work exists within wider networks and that 'originality' often lies not so much in subject matter, but in approaches to that subject matter.

There is also an issue of manageability. Students had many assignments to complete for other modules, so research tasks should be designed to create the maximum impact from little work.

Promotion

Learning best takes place when students understand the aims of learning – what is required.

As an independent study tutor specialist training in one-to-one teaching skills can be beneficial. For many students, independent study is an opportunity to demonstrate their own personal skills and unique 'world-view' outside of core modules and lecture/class settings. It is a useful technique or practice, therefore, to anticipate these characteristics or dynamics and to accommodate them into schemes of work or learning aims and objectives.

It is important to ensure students know and understood why they are being asked to undergo these tasks and how they will benefit from them. The knock-on effect can be significant. Through experience it has been noted that students promote these tasks among their peers. Further, these are good working practices that carry on once students had completed their independent study; they took what they had learnt and applied it to their writing practices and learning on other modules.

As a result of my practices I was recognised by the University, receiving a learning and teaching award for 'Innovation in Curriculum Design'.

Successful failure in undergraduate independent learning

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Description

The 'Corporate Reconstruction and Turnaround' module taught at Loughborough University School of Business and Economics is a final year optional module, available to all final year students who have followed a Business degree programme. The module is designed around an accessible up to date real-life case study. Students, working in self-selecting co-operative groups (three to four) research and prepare a 5,500+ word appendix report – that demands analysis, independent research, and independent thinking outside the classroom – to answer practical and applied questions about the case.

The case study is selected each year from a small sample offered to the tutor by a regional insolvency practitioner. The cases are of real companies in discrete industries (typically medium-sized enterprises) from the Midlands area. The apparent simplicity of the company and its business model often belies the complexity of the problems that led to its demise into insolvency and the variety of potential solutions. Often the fact of the failure is known but the fate of the company assets still hangs in the balance – so there is no 'real life' solution to follow.

In order to gain access to publicly available information about the case study company the company will have already entered Administration. This gives access to formal court documents prepared by the insolvency practitioner which are invariably addressed to the company's creditors. There is a clear rule laid down that the directors of the company must not be contacted – and they never have been. The module is designed in three distinct parts:

1. Lecture inputs for seven to eight weeks including 'new' material on the insolvency industry, the law and refreshers on company analysis from a strategic and accounting perspective.
2. The coursework case is launched in week one and a clear timetable given to students for an open meeting with the Administrators in about week seven or eight.
3. Following the Administrator meeting the groups are given opportunities over the next three weeks to arrange small 30-minute group seminars with the tutor.

In part one (the lectures) other examples and cases are discussed and for much of the time the lectures are interactive in order to aid individuals revising such techniques as ratio analysis.

In preparation for part two, the students are advised that the case study is incomplete and certainly does not give appropriate answers for the coursework. To fill gaps they must research the company, the industry and markets as well as the detail of insolvency law to enable them to understand the job of the Administrator. The highlight of part two is a two-hour lecture session where the Administrators answer (or deflect) searching questions from the students. The Administrators often comment that the students are better prepared and more dogged than many real creditors in insolvency meetings.

In the final part of the module, the group meetings with the tutor are voluntary but each group manages to fit in one or two before the report is submitted. The tutor uses the opportunity to clarify possible misconceptions and to enhance the enquiries being made and research being undertaken. The module's intended learning outcomes are as follows:

- evaluate key management skills indicative of successful recovery;

- identify and evaluate relevant management strategies conducive to recovery;
- critically analyse the environment in which troubled companies and recovery specialists operate;
- critically assess the effectiveness of different recovery vehicles;
- apply relevant legislation, techniques and business practices to crisis and recovery situations;
- create and criticise plans for recovery;
- interpret numerical information;
- develop team-working skills as well as report-writing and case study skills.

The single-assessment task asks students to report on aspects of the failure, the planned rescue or the feasibility of rescue. These outcomes are clearly predicated on the outcomes for the programmes of study that the students follow, and the module is accessible to those who typically shy away from quantitative areas since many corporate problems are revealed to be managerial or environmental rather than purely accounting. By working in groups, students contribute different skills and insights, learning from each other and gaining confidence in their own abilities. The skills demanded of students, and the preparation for independent study, come as a result of known inputs in the first two taught years of their programmes. They also stem from the variety of experiences they have had during the year immediately preceding their final year (when they spend a year on professional placement).

The module embeds well into the development scheme and in many cases acts as a capstone module for their studies as it draws on academic learning from a variety of subject areas. The face-to-face teaching is fully supported by a virtual learning environment (VLE) that contains not only video capture of the lecture inputs (not the Administrator meeting, as filming can dampen candour) but also lecture notes, hyperlinks to relevant websites, and one or two Camtasia-based podcasts addressing little-used skills such as using a company record database (FAME) from the University library for market analysis.

The design of the module makes it accessible to all students whatever their backgrounds, disabilities or family/work circumstances. All materials and 'lecture captures' are available electronically, seminars with groups are held at mutually convenient times in the tutor's office, rather than in timetables slots. University provision of note-takers for domestic and international students with specific needs is also available. The one group of students for whom additional provision is made are visiting international students. The assumptions about preparedness through a business education cannot always be made and so the tutor organises additional seminars for them throughout the semester so they can find the resources in a foreign University as easily as their UK peers.

Effectiveness

The module is offered to students in the first semester of their final year and builds on their experiences of previous study and their placement in the preceding academic year. The module's design promotes co-operative learning in self-selecting groups and is based around a 'live' case study that gives enormous scope for independent research, thought and exploration.

Student feedback in 2013-14 was typical with high scores reported (see table below) and positive comments on formal feedback questionnaires.

Marks achieved via the group coursework showed high achievement but with room for better students to shine. In 2013-14 a mark of 80% was awarded based on the depth of research and analysis undertaken by the group.

Year	n.	Average mark %	Standard deviation	Feedback score 1 (out of 5)	Feedback score 2 (out of 5)
2010-11	80	62.51	8.651	n/a	n/a
2011-12	108	63.46	7.867	4.23	3.87
2012-13	66	63.22	7.514	4.37	3.83
2013-14	73	66.15	9.294	4.56	4.43

'Feedback score 1' represents questions on the effectiveness of the module, and 'Feedback score 2' represents questions on the resources available to support learning.

The key weakness of the module is the level of risk that needs to be managed – risk around accessing an appropriate case study, access to the Administrators and access to research data and information.

Promotion

Effort is made to ensure that undergraduates entering their final year of study are aware of what the module represents by addressing the students in a School 'options' event around May each year, and by posting a podcast describing the module (stressing the real-life case study, the information gaps to be filled via independent research, the focus on analytical skills and the balance between theory and practice).

The School's Associate Dean (Teaching) also takes the opportunity to share experiences of this style of teaching and assessment with colleagues. The module also draws on academic research, underlying the rigour of the theoretical base and the evaluation and application of theory that students undertake.

The Administrator, providing a fresh case each year, is not only a provider of placement opportunities for students but also a graduate employer. Their insight into the learning on the module leads to positive impressions of how Loughborough students are prepared for the workplace.

Supporting language learners' autonomy: the self-study hour at the University of Nottingham Ningbo China

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Description

The self-study hour (SSH) implemented by the Language Centre (LC) at the University of Nottingham Ningbo China is an in-class hour delivered by LC language tutors as a part of the weekly schedule of stage one and two language modules. It includes four teaching hours – one in-class and six outside class.

The purpose of the SSH is for students to develop self-regulated learning habits and skills – and gradually learn how to plan, monitor and control their own language learning, under tutors' supervision.

The SSH is organised by individual students, who will decide on which skill and/or weaknesses they would like to focus on, whether to work individually or in groups, and to choose what resources to use (from the Library, on Moodle, or online).

Tutors act as facilitators and should not lead the in-class activities. They support students in the planning phase: they should verify the consistency and feasibility of the plan, and give students feedback on it.

After the SSH, students comment in a log on what they did during that time, and tutors will support and monitor this reflective work (this can be a challenging task for some students). Students then plan the next SSH according to these comments. In both the planning and reflective phases, tutors' feedback is individual, and this leads to discussions that help students develop reflective skills.

Some of the intended learning outcomes are to identify areas on which they need to work, decide on objectives, evaluate what they have achieved, and learn how to choose their own materials.

Tutors and students decide how and to what extent the VLE is used. They can decide together whether plans and feedback are shared on a forum and students can comment on them. Tutors can decide to build a series of self-study activities for supporting students at the beginning of the independent learning process, and in so doing gradually reduce tutors' guidance.

Because the SSH is part of the language modules schedule, it can be held in a classroom. Students can also decide, with their tutor, to hold it in the language lab – which enables them to access online resources. One of the key points is that students bring in their own learning resources such as books, videos or CDs from the library.

Tutors' feedback is formative, and they decide its format and timing. It has been agreed in the LC that tutors' formative feedback on logs takes place at least four times per semester, as it is essential for students to become capable of elaborating realistic plans. Some tutors have introduced the concept of 'reality test'. This is a peer-assessment process where students – guided by the can-do statements of the Common European Framework of Languages – give evidence of their language abilities to classmates and obtain their feedback.

All students are actively involved in this activity: our programme attendance is compulsory and the SSH is part of the teaching schedule. Additionally, both plans and logs can be emailed to tutors before/after the independent learning session or shared on our university virtual learning environment (VLE).

Effectiveness

Tutor and peer feedback are the main strengths, as they help students set achievable goals, create realistic plans, and be aware of their achievements.

Students' feedback has been positive. We conducted an internal survey followed by focus groups and students clearly understood the purpose of the SSH, declaring that it helped them learn how to study independently. They asked for a two-hour weekly session instead of a single hour session, in order to have more time to share their plans and achievements with classmates and tutors. They felt that this discussion would further improve their reflective skills, and their ability to undertake autonomous study.

Students of the final year (stage three) who do not have the SSH, were able to design their own learning and revision plans and they asked their tutor to change the type and timing of assignments according to their own end-of-semester revision plans. We believe that this is an important achievement for students that have been exposed to the SSH process only for two years.

A possible weakness could be that while tutors have the freedom to conduct the SSH according to their teaching styles, the diverse delivery methods could unsettle students. This is why LC tutors collaboratively designed a five-step guideline that includes the following points:

- how tutors should inform students about the SSH;
- how the log should be used;
- how to facilitate exchange of ideas and material between students;
- how to promote self-assessment, tutors and peer feedback;
- a list of dos and don'ts for developing students' independent learning strategies.

In addition, we also found that when the SSH process does not include the weekly six self-study hours students should undertake outside class, its effectiveness is limited. Some students, in fact, would not extend their reflective abilities to the planning of these other hours.

Promotion

Since independent study is one of the transferable skills included in the official students' module outline, at the beginning of each semester tutors devote time to introduce to students the nature and purpose of the SSH.

The importance of developing independent studying skills when studying a language has also been introduced to language tutors at University level at the *Language Centres Intercampus Conference* in September 2012 (Malaysia Campus).

A seminar on a pilot research project financed by a small research grant on the SSH has been addressed to academic staff and students in January 2013 at China Campus. Workshops to share good practices and update our SSH guideline are organised within the LC professional development programme every year.

In addition, the importance of developing independent learning skills is also introduced to potential students and parents during the open day and through demo classes.

Finally, the results of our research have been presented at the *Asian Conference on Language Learning* 2014 in April in Osaka, where we have been able to develop a network with other researchers working at university level in China to share good practice and develop further collaborations.

Team Academy Northumbria – learn to surprise yourself

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Description

BA (Hons) Entrepreneurial Business Management has been developed to complement the current work-based learning programmes offered by the Corporate and Executive Development Centre at Newcastle Business School. It is an innovative new programme aimed at those aspiring to set up and run their own businesses or those who wish to stand out from the crowd when applying for graduate positions after completing the programme. In other words, it is intended to nurture entrepreneurial mind-sets and actions.

The programme adopts a fresh approach to business education, designed to accelerate students' development of entrepreneurial and business management competence through a work-based approach to learning. To support a philosophy of 'learning by doing', participants set up real businesses in teams and learn through managing those businesses, identifying business opportunities, developing plans to exploit these, and managing the resulting activities (see Pugalis *et al.* 2015 for further details).

Knowledge of business developed during the programme is applied in practice as a means of enhancing learning and there is also much emphasis on the development of key management competences such as creativity, innovation, leadership, communication, team working, planning, and decision-making. Participants are encouraged to take initiative and put ideas into practice as a means of accelerating their development, and a flexible approach is adopted in which learning on the programme is designed to best meet the needs of the learner. The programme also acknowledges the social nature of learning and there is much emphasis on working in teams as a means of promoting learning and developing participants' ability to relate to and work with others professionally.

As well as staff within the Business School, the programme has been developed in consultation with central University staff responsible for supporting student and graduate business start-ups as well as local entrepreneurs and small business advisors. Indeed, the team of coaches are composed of these hands-on enterprise-enabling specialists.

Consultation, engagement and networking has also taken place with other educational institutions which currently operate or plan to run similar programmes. These include Team Academy at Jyvaskyla Institute of Science and Technology, Jyvaskyla Finland, where such a programme has successfully operated from their 'Team Academy' for the past 20 years. The Team Academy approach has more recently been adopted internationally (e.g. Spain, France, Netherlands, Hungary, and Brazil) through relationships Team Academy has established with other educational institutions. However, to date, this has not included UK institutions apart from the University of the West of England and University of Westminster who launched a similar programme in September 2013. Learning expeditions to inform the programme development are ongoing to Team Academies in Strasbourg, Amsterdam, and Mondragon (Spain) where such programmes have recently been launched.

In the Team Academy approach, which underpins the learning philosophy for the programme, learning takes place in a framework in which learners work together to reach shared goals. Students form into teams (of around 15-20 people) early in the programme and stay in their teams with a dedicated academic coach for its duration. Each team business has its own dedicated space and team spaces are

co-located to enable networking and work on entrepreneurial projects they identify themselves. These projects are initiated and managed as part of a business set up and jointly owned by the learners.

A flexible approach to learning is employed which emphasises a coached approach, practicality, just-in-time learning, the social nature of learning, developing and applying knowledge in context, immediate experimentation of ideas through putting them into practice and enjoying learning. These can be seen in the following guidelines for learners:

- take the initiative, search for instructions;
- learn to manage chaos;
- you are allowed to make mistakes (you can learn from them);
- focus your energies on solutions, not on worrying about problems;
- do your best and set your goals high;
- see opportunities not obstacles;
- dare to experiment and to be yourself;
- smile, enjoy and leap in;
- be humble and recreate your success again and again;
- respect others and make use of the experience and knowledge of others, so you do not end up re-inventing the wheel.

Learning is underpinned by extensive reading and students are provided with targets in which they are required to read a specified number of books and write an essay on each. These are not summaries of the books but rather personal reflections highlighting potential implications for the student in question and their team. Books are chosen by the student to meet their own, and the team's, needs at the current stage of their businesses. This facilitates the transfer of theory into practice, as well as a reverse process in which students are able to make sense of their experiences through subsequent reflection on theory addressed in their reflective essays. In order to enhance group learning, these reflections are shared with other students.

Learning is facilitated through team-coaching activities in which each team is assigned a dedicated coach. The coach's role is to create a shared space where learning can take place and facilitate the learners' developing ability to self-manage and take responsibility for their own learning and processes. Coaches attend team meetings and coach individual students, providing support and guidance in a non-directive manner. This support is provided by University staff with business experience as well as expertise in work-based learning approaches and coaching skills. To support this approach, a number of staff have completed a team-coaching development programme and the development of others is also planned to be supported from other faculties who currently deliver coaching programmes. This support for students is complemented by mentoring from within the local business community and offers for such support, as well as other practical assistance (e.g. banking and financial support for business development).

Effectiveness

The strengths of this approach are:

- just-in-time pull approach led by students;
- emphasis on team working and collaboration offers real-life experiences and accelerated 'maturation' process enhancing their 'graduateness';
- construction of knowledge linked to the development of the social identity of the learners;
- learner autonomy and empowerment;
- improved employability prospects – entrepreneurial and enterprising characteristics are highly valued by employer;

- enhanced successful start-up rates for programme graduates;
- student feedback in programme committee meetings and in module questionnaires has been very positive to date;
- enrolment numbers are encouraging for a new programme despite minimal marketing efforts;
- opportunities afforded for business engagement – beneficial for the whole Faculty/University;
- it captures the imagination and has attracted a lot of local support and interest.

The weaknesses of this approach are:

- the significant transition from traditional education methods required by learners to the programme;
- the climate of learning is chaotic and ambiguous, requiring considerable amounts of introspection, authenticity, and reflection which will not suit everyone;
- resource requirements in terms of coach availability are considerable and do not fit easily into existing workload planning models;
- travel requirements for the team coaches are significant and impact on the number of available suitable coaches;
- legislative constraints in incorporating the student businesses in line with institutional regulations.

Promotion

The entire philosophy of the programme is centred on independent learning, which is communicated from the outset. The team coaches are the 'go to' person for the students ('teampreneurers') however their role is not to provide 'the answer', but rather to help the students to ask themselves and each other searching questions. There is much emphasis on giving the learner freedom and an understanding that with freedom comes responsibility, which is assumed by the individual and the group and this rather than a culture of blaming others, should be a powerful force in learning and achieving positive outcomes in projects.

The approach embraces the notion of learning rather than teaching and methods employed in the learning process to provide learners with new insights include: dialogue, team coaching, learning contracts, reading, learning by doing, group project work.

The development of the programme responds to a recent paper from the Quality Assurance Agency for Higher Education (QAA) which argues that the "call for a greater emphasis on enterprise and entrepreneurship education is compelling. Driven by a need for flexibility and adaptability, the labour market requires graduates with enhanced skills who can think on their feet and be innovative in a global economic environment" (QAA 2012).

Northumbria University's 2025 vision also calls for distinctive offerings for students with real-world focus using innovative approaches to learning as a means of enhancing graduate employment prospects. This proposal addresses the 2025 vision through its innovative work-based approach to learning in which students will set up and manage real businesses. As the aim is to develop students' capability to sustain such activity after graduation the programme also supports the University's mission to "transform lives, making a powerful contribution to cultural and economic development and regeneration, in the City and Region."

In terms of the strategic aims of Newcastle Business School, its mission is to develop individuals to achieve their leadership and management potential and to make a difference to organisations. The approach adopted in the programme is one that reflects that this can be best achieved through an active approach to learning. It therefore contributes to the objective of the school to inspire excellence in students in terms of business and professional practice as well as leadership and management

development. Through its innovative work-based nature it also specifically contributes to strategic aims of the school to:

- deliver relevant and contemporary programmes that employ innovative learning and teaching and develop independent reflective and critical learning;
- enhance the employability of individuals through personal and professional development;
- enhance the development of the region through knowledge and networks.

References

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The surprise over-collateralisation of tutorial work: an example of promoting independent learning

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Description

This example of independent learning reports on a level five module 'Financial Markets and Risk' which is delivered in the second semester. The student cohort primarily consists of students on the BA 'Accounting and Financial Management' award, however a few students from the Maths and General Business programmes joined the module.

The module was first introduced in the 2013-14 academic year and so no benchmarking against past years is possible. Taught sessions take the form of a two-hour weekly lecture which focuses on teaching core knowledge and ensuring students are well placed to undertake the more advanced practical tutorial activities. This is followed by six one-hour tutorials throughout the semester, which are delivered in a PC suite with class sizes of 17 students.

The module is assessed through one 5,000-word individual report, which is submitted at the end of the module. The report is based on the evaluation of an existing investment portfolio and the subsequent recommendation of changes to optimise its future performance. Each student on the cohort is allocated a unique portfolio to analyse.

Most students have had little exposure to portfolio management principles in their previous studies and given the complexity and scope of the module staff concerns focused on the students' ability to keep up to speed on a fast-moving module and to ensure their full engagement in the learning process. The lectures and tutorials relied heavily on student interaction and engagement in the topic area (e.g. being aware of daily financial market news stories and developments). This provided a good opportunity to really push independent learning and its importance within the module.

Given the module required students to have a holistic understanding of the investment environment and process, they not only had to read a core text book (Bodie, Z., Kane, A. and Marcus, A. J. *Essentials of Investments*, Global Edition, 2013) they were also expected to read quality newspapers and keep up to date with a number of stocks (such as ASOS, Debenhams, Dignity, GlaxoSmithKline, Vodafone, etc.) which remained the focus of the tutorial activities.

Although the workload perhaps seemed a little daunting to them, given the nature of the assessment, students were primarily worried about the 'all or nothing' nature of the final assignment. They sought continued reassurance and guidance to ensure they did not feel overwhelmed by the prospect of writing such a large assignment and that they hit the marking criteria and expectations of the marker.

In the first lecture, students were given a broad outline of the assessment and a brief overview of the tasks they would have to complete. It was also made clear that precise details, such as the individual portfolios on which the assessment would be based, would not be made available towards the end of the module. Although students often like to know what exactly they have to do at the start of the module this effectively took the module assessment 'off the table' and generated an air of uncertainty among the cohort as to what exactly they would have to do. Students were reassured that if they did the work they would do well and that lectures and tutorials would essentially replicate what they needed to do for their assignment.

Students were encouraged to sign up for several daily financial news email updates and also stock updates which would enable them to keep up to speed with developments on their smart phones when they are 'on the go'.

The most innovative aspect of the module is the structure and content of the tutorials. Students were not provided with the tutorial activities in advance and, instead, were given a tailored sheet of activities when walking into class at the start of each session. They received no overview and were expected to immediately get on with their work. During the session, they were given one-to-one support to ensure they had a full understanding of what the requirements were, but not necessarily how to derive the answers and undertake the research. This contrasts with many other modules where students are expected to pre-prepare questions.

Activities are split between both whole class tasks (i.e. tasks which all students undertake on the same data set) and individual tasks, which then feed into generating whole class tutorial answers (like a jigsaw learning activity).

Tasks though are greatly over collateralised (i.e. are constructed so that students cannot finish them in the tutorial) and rely heavily on outside reading and research after the tutorial for later tasks in order to complete them.

If this work is not undertaken outside class then students would really struggle in the next tutorial as tasks are built upon the previous weeks work and will impact the entire class pursuit of the answers. This, therefore, encourages students to buy into independent learning and to engage in the module. The independent reading and tasks contribute towards the completion of a set of complex spreadsheets and research tasks. As these tasks were good preparation for the assignment, and also fed into subsequent tutorials, students knew if they did not engage they would struggle in future weeks and impact the class progression.

In designing the module, it was clear the structure and work requirements would place students under a lot of pressure and require continued support and feedback. Therefore, the following support and enhancement mechanisms were put in place:

Formative in-class support – as group sizes were small students gained a lot of one-to-one feedback on the work they were doing. Tutorials were based around students completing work themselves and so time could be spent with each student (or small group of students) to look over their work, which they had done in and out of class, and provide detailed feedback and guidance.

Google and use of the VLE – to add further support to the independent learning process, students were introduced to sharing files on Google Drive. After completing the over-collateralised tutorial tasks (often the night before the next tutorial!) they shared their Excel file with me for checking and comment. I reviewed their work and any errors were corrected by the student before the next tutorial (to ensure they were up to speed).

The assumption was that this service would not be used much. However, it was extremely popular and proved a good source of formative feedback and support. It probably had around 80% take-up from the cohort. This service supported the independent learning process and ensured students were able to gain recognition for their work outside of class.

Other interactive communication tools such as Google Hangout and Skype meant the tutor could aid and support students remotely in their quest for self-directed learning. This also was beneficial for students who were away during Easter (and were studying) or who missed classes and were keen to catch up.

Clear Link to Coursework Tasks – as tutorials/independent learning tasks were designed to replicate work students needed to do for their assessment, students not only got feedback on their work but it also enabled them to apply this directly to their assessment.

Peer Review – students were encouraged to submit assignment plans into Peer Review software to gain additional feedback on their assessment ideas. The take up on this was huge with all students submitting work to be reviewed and 92% of the cohort providing reviews of three other pieces of work.

In addition to the above the usual office hours and publishing of relevant articles (etc.) on the VLE were available to students.

Effectiveness

The module gained excellent 'buy in' from students, and the need to complete work for the next tutorial led to a very engaged cohort who pushed themselves to learn about new concepts outside of the taught content.

The breadth of arguments and techniques demonstrated in the assessment could not have been covered during normal taught classes along with all of the developments in financial markets during the course.

Student attendance and module feedback on the whole was very positive and take up of the Google file-sharing facility and peer review process were excellent. There were some students who did not like the approach, or the volume of work expected, or the fact that the exact assignment requirements and data were not made available until towards the end of the course. However, this was an integral part of the module design to ensure students were engaged throughout the module and focused on learning rather than *learning to do an assignment*.

Some of the class-wide activities really worked well and enabled students to piece together different techniques and considerations, which could be implemented into the coursework. Given the design of tutorials and activities, the majority of learning was done on an independent basis. Overall module marks were very good and failure rates very low for such a technical module.

Promotion

The importance of independent learning is firmly embedded within the culture of the module and in the way the module is taught. The importance of independent learning was communicated to students early in the module and evident in the first tutorial (which proved a bit of a shock to some of them). However, on a practical level, it has been fully embedded into the design of the work which students must do in order to keep on top of their workload and to fully prepare for their assessment. In taking this approach it has clearly demonstrated that where independent learning is fully embedded within the module, students will undertake greater levels of learning outside of the classroom and engage via a range of communication methods.

As a result of the success of this module and student demand, a trading room facility is being developed in liaison with a commercial partner. Given the interactive nature of the module and the dynamic content, it will be an ideal platform for students to learn real-life portfolio management/trading techniques which would give students an edge in their search for jobs. The development of the trading room and use of industry-standard software will further enhance the module and build upon the need for self-directed and independent learning. This initiative and teaching approach will be a key marketing message given to prospective students and professional bodies (who are also very keen to be involved in the module).

Finally, the University has a very active Investment Society and the features and content of the module have been widely distributed among the members which has led to further interest in the module.

Using a self-managed learning model to encourage greater student engagement with the learning process and develop peer–peer feedback skills and practices

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Description

Corporate social responsibility (CSR) and sustainable business include a very wide–ranging set of topics with a significant amount of the material in case-study format. Third year undergraduates take this module in the final semester of their studies when most have already either obtained employment or have a very clear idea of their industry/sector of choice. This optional module runs alongside the work they are doing to complete a research dissertation.

Cunningham (1999) incorporates a range of self-development, self-directed learning and action-learning processes into a self-managed learning (SML) framework. The emphasis is on encouraging individual responsibility for learning in the context of a supportive yet challenging group of peers. Sometimes adopted by organisations wanting to encourage learning among managers, it also appears relevant to Business students as they prepare for careers where they, most likely, will need to actively manage their own learning. The decision to adapt SML was influenced by a desire to encourage the development of learning skills and give students choices about the industry/sector they choose to explore.

This means they can source case studies that they find relevant and interesting rather than trawling through material that may be of little interest. The freedom of choice in this approach also means that they can make links with the third year dissertation project, their career choices, and work on this module.

Feedback from students across the Management School indicates that they really value personalised feedback on their work. Teaching staff have therefore been exploring means through which feedback may be enhanced. Peer-to-peer feedback through self-managed learning processes is one approach to improve the learning experience.

Key features of process

- two 45 minute lecture sessions per week;
- one class per week. In week one class members self-select learning set members. Set size is on average five to six students;
- sets agree criteria upon which they will assess the work of their fellow set members. The course handbook includes criteria that are used to assess their submitted course-work, a 2,000 word 'learning log' (40% of coursework). They can use these criteria as a starting point for the development of their own;
- each student is asked to prepare and agree an individual learning programme (ILP). This explains –
  - the broad topic they wish to inquire into,
  - the questions they have about the topic,
  - the tasks they will undertake during the module to both answer their questions *and* how they plan contribute to the learning of their fellow set members,
  - that the set has agreed the ILP against the agreed criteria;
- set meetings occur during class time and are largely self-governed. The lecturer acts as a resource by offering support and challenge. Students provide feedback to one another about the work they are

sharing. For students who are unable to attend set meetings they communicate and provide feedback using Blackboard (VLE) or via student enabled social media groups;
- at the end of each class the lecturer offers the group a set of reflective questions. Summarised responses will form a small section at the conclusion of the learning log;
- the learning log is intended to evidence individual and shared learning that has developed during the module drawing upon the ILP, which forms the basis for it, and the set process; and
- a set presentation on a topic of their choosing will count for the remaining 10% of coursework.

Learning new skills and information
As the process implies students are challenged to develop skills in a number of key areas:

- planning a 'doable and stretching' individual programme of learning;
- agreeing criteria for assessing each other's learning programmes;
- supporting the learning of others;
- providing weekly face-to-face feedback to peers;
- learning to receive feedback from peers and evaluating its value;
- reflexivity.

These skills will be invaluable in management careers and students are regularly reminded of the relevance of the process to the work they are likely to be required to undertake upon graduation.

During this pilot, in the first half of 2014, the module delivery team has learned a great deal. The role of the module leader becomes much more of a facilitator of learning and a guardian of the process than a more conventional lecturer and class tutor. It was necessary to agree a structure for the material in which students could anchor their learning programmes. To do this, meta-themes were identified (context, theory, application, and management) for students so they always knew the territory they were expected to cover regardless of the industry/sector they selected to work on.

The team also needed to very carefully explain marking criteria. In this adaptation of self-managed learning, students in learning sets are not required to agree marks. The module leader retains the role of marker for the main piece of work (the learning log) so clarity to ensure a connection between student-agreed criteria and module criteria is important. This has largely been achieved through routinely reminding students of module criteria.

The module leader provides students with formative feedback on their learning programmes. This means they gain a clear sense of what standard is required of them by the university alongside the standards set by their peers. To assist in this, students are required to post their programmes on Blackboard (VLE). The module leader then offers both specific and generalised feedback. The process also enables students to share their learning programmes across the class as a whole.

Support … and challenge
Being available to students as they grappled with self-managed learning has been vital. Sometimes a word of reassurance is all that is needed. At other times, helping them reflect on their experience and handling the dynamics within learning sets is required. Offering reflective questions at the end of each class (summary responses will be included in submitted learning logs) alongside experimenting with class venues to challenge habitual ways of behaving in class have both contributed to a different experience. On one occasion, a meeting was held in an art gallery and on another in the University Senate – the objective is to reflect on how environment impacts on the learning process. The module leader is very upfront in asking for feedback so that the optimal learning experience is created during the module.

Effectiveness

Two comments from students stand out. The first was from a student who attended the first lecture and said afterwards that if other students were going to be involved in assessing his work he was not going to do the module. He said he did not trust them! The second was from a student after the same lecture "You mean I can study what I want to?" This was said with open-eyed amazement.

It seems that for the majority (most stayed for the whole module) self-managed learning is an eye-opening positive experience. For some students it is not their preferred way of working.

External examiner feedback has been very positive, indicating that they thought the approach innovative and stretching but suitable for third year students.

Information of the above activities has been shared with peers who have been intrigued and supportive. Exams and assignments have yet to be marked but from early signs suggest they will be of a high standard. Students regularly comment that they enjoy the process.

A major strength of this approach has to be the level of engagement by students in both process and content. It is training them for the types of managerial activities they will be required to carry out as employees (providing structured feedback especially) and they seem aware of this. A weakness, if it can be called that, is the amount of trust that is needed between students and between the class and the module leader who no longer 'controls' the learning agenda but helps create spaces in which students can take charge of it for themselves.

Promotion

It is early days in adopting a self-managed learning model within the Management School. Following feedback at the end of the semester combined with exam results it will be easier to judge how best to communicate the importance of independent learning to future cohorts of students. In class, managerial behaviours are discussed and students are learning through the process. The value to students of learning how they can learn for themselves is also underlined, as they move out into the workplace.

With regard to colleagues, relevant information has been presented at a *University Feedback and Assessment Conference*.

Self-managed learning helps to build confidence and interest in learning in a variety of contexts. If some students have appreciated this point, and its importance, then the module will have been more than worthwhile. It may even be life changing.

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Using an 'expert group' approach in exercise science

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Description

Students work in self-selecting groups on an area of interest within the field of exercise science and health. They are asked to locate a systematic review and become expert 'as a group' as opposed to an individual. Groups consist of four to five students and each assumes a specialist role including a leader for the group.

Staff facilitate and develop core learning with expert groups setting weekly learning goals and tasks. This often involves a 'back to basics' approach before students' progress onto more complex problems. The timing of the learning is developed 'by the group, for the group'. Academic issues and concepts are debated between formal meetings and challenges brought to group seminars on a weekly basis.

Work-related skills are developed through group work and individual responsibilities at completing agreed tasks. The expert group assume the role of a professional public health review group and are responsible for providing the scientific evidence to support the wider strategic delivery of services for, for example, physical activity and cancer, physical activity and the prevention of falls, and so on. The question the expert group ultimately have to answer is would they invest in services to promote physical activity and reduce sedentary behaviour to reduce the impact of non-communicable diseases. In that sense the study has a strong work-related context.

Regarding intended learning outcomes, students are expected to be able to critically evaluate current research methodologies used in physical activity and health research. They should demonstrate advanced skills and knowledge in the measurement of physical activity design and have the skills to implement field-related studies that involve physical activity measurement. They are also able to critically analyse limitations in current theoretical models in physical activity exercise and health promotion, and they can apply these to future public health efforts to increase physical activity.

Students are supported with a specific example of independent learning guide structure, which outlines learning approaches in a step-by-step process. They are also required to problem solve and manage conflict within their group and communicate through their group chair. Communication is mainly managed through a group Facebook page and Skype, and students are able to participate at a distance if required. With respect to the role of a virtual learning environment (VLE), Blackboard is used to support students, and the learning approach varies, enabling groups to use various forms of technology learning resources and systems to achieve their goals. Specific examples of physical activity programmes are also available on YouTube.

In terms of the module's assessment, students choose their own sub-area of study, locate a systematic review in the area, allocate work across their group, and subsequently write their own exam question including marking criteria. During these steps, students receive regular tutorials where the tutor provides formative assessment and feedback and there are strategically placed whole group sessions involving student workshops and presentations.

Effectiveness

The strength of this approach is the matching of curriculum content to student choice. Students choose to work in an expert group with respected peers and friends. Thus students are more highly motivated

to study a group-selected topic area with peers that they feel they can work with and this drives their engagement with the content.

Their work is also based on goal setting, and goals are managed by the group leader after each weekly seminar group meeting. In these meetings, the tutor checks learning progress and matches a programme of learning with student needs.

The examination is seen and provided one month before the examination date. The weakness of the approach is the problem with some students not being matched to a topic they are motivated to study or a group that they would like to study with. A further limitation is the amount of contact time available to each seminar group when large numbers of students select the module.

Promotion

Learning is promoted through group responsibility for setting learning, agreeing on outcomes and supporting the @expert group principle to develop expertise as opposed to the focus being on an individual student. Material is chosen by the expert group and the approach to, and timing of, learning is developed 'by the group for the group'. Communication is mainly managed through a group Facebook page. Material is dealt with, managed, and debated between formal meetings and then brought to group-led seminars on a weekly basis. These lead to a learning product assessed during a seen examination constituted with one question from each expert group that is written (including the marking criteria) by that group.

Using reading diaries in independent learning

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Description

Reading diaries (and optional 'reading question' diary prompts) are used to encourage year three English, and English and Film BA (Hons), students to develop their self-directed learning. Since critical theory can be daunting, the independent study – that is, extensive theoretical reading – is often experienced by students as a formidable task, so the idea was to provide a support structure to enable them to not only be able to persevere despite the challenge, but also to increasingly see themselves as confident interpretative agents, able to engage with and challenge the texts from their own position.

To help them do this, for the last few years, students have been asked to use reading diaries to structure their engagement with the material as they study. The module handbook says:

> If there are certain passages that bewilder you in the reading, use the diary to analyse that sentence piece by piece, trying to get it into your own words. Use the diary to try out your ideas. It is a safe place, where we don't need to see perfection – what we want is to see the thought processes that you personally go through when you face that particular passage. We strongly recommend that you keep a reading diary for all your reading on this module.

Specific reading questions as optional prompts for each theorist on the module are also offered.

Students are encouraged to choose their own platform for recording their reading diary entries, for example, a handwritten notebook, a blog accessed through smartphone, a website, or a word document, or any other format that feels right to them. They are encouraged to take ownership of it and personalise it. This flexible and student-centred format is useful for students with disability/accessibility requirements, as well as for students with prolonged commutes who, of necessity, may have to read and reflect while in transit: the goal is to have the diary be part of the reading experience as it occurs, rather than added later. International students have also found it particularly helpful that the diary gives a space that can be used specifically for reflecting on cultural difference in their engagement with the text at hand.

The module leader ensures there is a wide range of support for this approach, given that it is a novel format for most students. First, lecture and tutorial time is dedicated to discussing the format, and the kinds of cognitive processes that go into creating such a diary are modelled. Sample diary entries are also offered, which students analyse in class. In class discussion, the example's reflective component is examined, noticing how the hypothetical student highlights her uncertainty and takes the reader with her through her thought processes as she engages with the text.

During these discussions, students regularly notice and comment on the way that the student in the example deliberately focuses her attention on a passage she does not understand, in contrast with usual strategies many students feel pressured to adopt when writing assessments. In the interests of scoring well, in traditional assignments some students understandably feel it is safer to stay with familiar theory with which they are already confident, rather than to explicitly seek out other work that puzzles them. This form of reading diary asks students to deliberately invert that trend, encouraging them to seek out areas of confusion, and rewarding the risk involved in doing so.

As the first assessment on the module, early in the term, students are asked to provide extracts from two of their reading diary entries. The prompt is as follows:

> Choose two half-page extracts from any of the readings prescribed on the module … Write two short reading diary entries of approximately 750 words each in which you take us into your own thought processes as you try to understand this passage. Show us your thought processes as they unfold, and draw links to other topics on the module and outside the classroom to help yourself make sense of/apply the ideas.

A key element of the support is the banded assessment criteria, in that these explicitly identify the qualities of a successful diary and differentiate it from a traditional essay. The crux of these criteria is the way they do not penalise misunderstanding the theory, but rather emphasise the value of detailed reflection, drawing links to other ideas/texts, and rewarding originality and ambition in the analysis – that is, explicitly rewarding risk.

The assessment associated with the diary is both formative and summative, and is closely integrated with the subsequent assignment on the module. For the diary assessment to mesh with the reassurance that it is genuinely a safe space for students to engage with ideas they are not sure they understand, it is essential to ensure that misunderstanding the critical theory does not affect the grade, but detailed formative feedback about any such misunderstanding is given. Clarifying misunderstandings is particularly important since the reading diary is designed to lay foundations for the final essay, a more traditional, argumentative piece where accurate grasp of critical theory is most definitely assessed. Yet, for the reading diary, the priority is encouraging students to learn the skills of dwelling with difficulty in their reading experience, and embracing risk in engaging with challenging material, moving out of the 'comfort zones' of familiar critical approaches.

Effectiveness

After using this strategy, it was noticeable that students' grades increased in the final conventional essay assessment. It also seemed striking that students came to class better prepared, and that in the final essay they seemed inclined to take more risks, in the sense of being willing to engage with theory that was relatively new to them that trimester (instead of staying in safer, better known waters). This adventurousness is applauded and the reading diaries made this difference.

Student evaluations are very positive with 95%-100% of the class agreeing that the assessments and learning experience as a whole are worthwhile, well supported and helpful. External examiner comments have included:

> The module is innovative and inspiring in its formulation of an assessment structure. I particularly enjoyed reading the diary entries and I find this to be an engaging and encouraging model of assessment, helping students to appreciate their own processes of learning and perception.
>
> The use of reading diaries is very effective.
>
> This is an excellent module, one that I find to be pedagogically exemplary. The attention to detailed, careful guidance for students in the module handbook noteworthy and the assessment rationale is well-conceived.
>
> [The diaries are] a real testament to the value of this mode of assessment.

In addition to conventional questionnaire feedback, students have also been given the opportunity to use visual feedback to capture how their confidence with the theory changes as a result of the diaries and in-

class support: students were given the opportunity to draw a sketch in response to a carefully-constructed prompt inviting them to describe their level of confidence with regard to the material. The sketches showed a striking improvement in confidence with the theory, and also demonstrated a high correlation between increased learner confidence and an increased sense of themselves as active readers.

Promotion

The explicit goal in using the diaries is to enhance confidence in engaging with difficult reading, and to nurture appetite for textual challenge.

In communicating the value and potential of this approach, the module leader emphasises both the academic goals (competence in using critical theory) and the value of the associated emotional skills: that is, the capacity to endure challenging reading and consciously choose to actively dwell with difficulty.

From the opening class, the module staff emphasise that the (hopefully) transformative learning experience will occur during the students' independent learning, in their preparatory reading before class – those moments working alone, working through the reading questions, and compiling the reading diary, are where the challenging, frustrating, and inspiring encounters with these seminal critical ideas will occur.

Staff talk candidly about how even researchers specialising in critical theory (like themselves) must labour and dwell with difficulty when working with these texts; staff model the kinds of cognitive process and specific strategies that one can use to make sense of challenging extracts. And staff drive home the idea that the emotional and practical capacity to handle textual difficulty is a vital transferrable skill, central to success on other undergraduate modules, as well as in postgraduate work and careers more generally.

This technique has been disseminated and promoted in a range of avenues, including internal staff conference presentations, staff workshops, a paper at a national pedagogical conference, and the national ESCalate newsletter of the HEA Subject Centre for Education.

Using the student voice to enhance first year Engineering learning at the Institute of Technology Tallaght, Dublin

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Description

Third level education offers students greater freedom and flexibility compared to secondary school. As students make this transition they are exposed to new teaching styles and burdened with the responsibility of managing their time and resources. Management of the first semester, or year, is crucial to subsequent performance. Consideration must also be given to the subsequent transition to professional work and the requirement for lifelong learning skills. Learning to learn modules at third level seek to improve first year students' learning experiences and introduce the broader skills demanded by employers.

It is arguable that traditional delivery of a learning skills module cannot interest modern (young) people; the average modern teenager lives in a world of mobile phones and instant messaging. The challenge faced by lecturers is to create value for students.

In the case of engineering education, mathematics is one of the main factors contributing to student dropout. While there is some awareness of the mathematics proficiency required at all stages of engineering education, the use of mathematics in engineering practice is not as evident.

One of the noteworthy features of the educational research literature in recent years has been the attention given to the 'student voice' (Higher Education Authority 2013). Seeking students' perceptions about their learning methods has been shown to have positive outcomes for academic success (Smith 2006). It is argued that the social side of engineering education, particularly peer learning, enhances first year electronic engineering learning at the Institute of Technology Tallaght.

Understanding modern students' motivation to learn has value for educators; for example Richard Skemp (1987) asks "why should anyone want to learn mathematics?" His response is "motivation … towards satisfaction of some need" and in the classroom, short-term motivations are "the desire to please the teacher and the fear of displeasing her or him" (Skemp, 1987). Paul Ernest also asks "what is the purpose of teaching and learning maths?" He believes that the aims of teaching mathematics "can be a hotly contested area." An absolutist-like view of "giving students mainly unrelated routine mathematical tasks which involve the application of learnt procedures, and by stressing that every task has a unique, fixed and objectively right answer, coupled with disapproval and criticism of any failure to achieve this answer" lead to "mathephobia" or a feeling that "mathematics is cold, hard, uncaring, impersonal, rule-driven, fixed and stereotypically masculine" (Ernest 2004).

While lecturers recognise the importance of student motivation, the notion of students' fear of displeasing the teacher is not as apparent. Such a fear might limit student questioning and their understanding of course material. Furthermore considering Vygotsky's ideas about social interaction, language and communication in teaching and learning (Vygotsky 1978) and also the idea that "the single most important feedback channel [when evaluating the effectiveness of an experimental teaching and learning methodology] is the feedback of the students themselves" (Leviatan 2008), this study investigates using the 'student voice' to identify solutions to the challenges faced by first year engineering students in their new education environment.

For many students, the value of 'learning to learn' modules is not apparent, and students engage in the subject only because it is mandatory at the Institute of Technology Tallaght. Wigfield and Eccles' 'social cognitive expectancy-value' model of achievement motivation posits that predictors of achievement behaviour are: expectancy (Am I able to do the task?); value (Why should I do the task?); students' goals and schemas (short-term and long-term goals and individuals' beliefs and self-concepts about themselves); and affective memories (previous affective experiences with this type of activity or task) (Wigfield and Eccles 2002; Schunk *et al*. 2010). Expectancy-value research has substantiated the claim that students with positive self-perceptions of their competence, and positive expectancies of success are more likely to perform better, learn more and engage in an adaptive manner on academic tasks by exerting more effort, persisting longer and demonstrating more cognitive engagement. Students who value and are interested in academic tasks are more likely to choose similar tasks in the future. Interest refers to the liking and wilful engagement in an activity. Interest can be: personal (personal enjoyment or importance of specific activities or topics); situational (interestingness of the context e.g. novel versus textbook); or psychological (heightened interest when personal interest interacts with situational interest) (see Schunk *et al*. 2010; Wigfield and Eccles 2000, 2002; Wigfield 1994).

This study set out to deliver the learning-to-learn module in a way that generates positive expectancies of success, and also creates value for first year electronic engineering students thus enhancing students' learning experiences. The learning-to-learn module aims to make students aware of their learning styles and to engage in learning strategies that work best for them. The module's assessment comprises three components: learning journal; group project; and quiz.

In an attempt to make the learning-to-learn module more relevant to engineering students' prescribed learning, the methodology employed here involved communicating with students; asking for direct feedback and inviting students to identify particular mathematics and engineering topics in their course that posed difficulty for them. Students were further invited to suggest various teaching and learning techniques that might help them overcome their particular difficulties. For example, in the case of mathematics, some students had difficulties with trigonometry. In the learning to learn class, students presented and discussed aspects of trigonometry from their lecture notes and problems sheets and they collectively guided the lecturer through the solution to the problems, with the lecturer questioning the process and seeking clarification at each stage. A summary of the learning including key learning points, concepts, formulae, and problem-solving ideas was compiled. Students then applied this type of learning by engaging in further challenges and seeking help until they could independently solve similar problems.

The next stage of group learning emerged when students identified problems with computer programming; in this case the lecturer was not familiar with the subject. When asked by the lecturer to specify the problems encountered, it appeared that students experienced difficulties at different stages of the subject and with different concepts. It was agreed that the students would collectively pool their understanding and learning, and collaboratively work through problems. Given the lecturer's lack of computer programming knowledge, the lecturer assumed the role of student. Once the first student volunteered to become the 'tutor' and took control of the computer and overhead projector, many other students, over time, also became willing contributors. The lecturer (acting as student) listened to the 'tutors', compiled notes on the white board and questioned the 'tutors'. After some time, all students seemed to have assumed a role of either student or teacher, seeking clarification or assisting clarification. While this type of learning created value for students; they addressed subject difficulties, they learned how to tackle computer-programming problems and they also developed confidence in the subject. Another advantage of this type of learning environment is *learning how to learn*; the students observed the way the lecturer, acting as student, engaged in learning activities such as compiling notes, asking questions, seeking clarification, recognising new concepts, addressing problems and reinforcing learning.

Effectiveness

As part of the learning to learn module, students are required to keep a learning journal in which they reflect on their learning and document their feelings about their learning. An example of the students' reflections in this instance includes:

> Computer programming seems to be a difficult subject for everyone in my department, we all faced a lot of difficulties doing the assignment given to us relating to pseudo code.
>
> We brought this issue to our learning-to-learn lecturer … who fixed a class for this problem to be solved.
>
> Tuesday 1st October … in the TDC centre … the whole class came together to solve this computer programming issue with the help of [the lecturer].
>
> One of our classmates came to the computer and projected the questions on the screen.
>
> Contributions came from every angle, everyone participated in the questions.
>
> It was very helpful and it opens the door of my understanding to that particular assignment on pseudo code.
>
> What I love most is that the whole class came together to find solutions to the problem we were facing and in the end we got the solutions.
>
> [The lecturer] was very helpful in creating time to bring us together to get solutions to the problem of computer programming as relating to pseudo code.
>
> The group learning in the TDC was very helpful, everyone brought their idea and we were together finding solution to a problem … in the end it was a success.
>
> my approach to learning has changed in a positive way.
>
> I strongly recommend this type of learning.

Several of the above statements suggest, quite strongly, that a peer-learning environment helps to create a sense of belonging, which as Thomas (2013) argues, has positive effects for the improvement of student retention.

During the peer learning, students appeared comfortable both asking questions and supplying answers. One noticeable feature is that students began to use their own language; they explained concepts simply rather than using developed terminology. While students often show "fear of displeasing" mathematics teachers (Skemp 1987) and may be subjected to "disapproval and criticism of any failure" to achieve the "correct" answer (Ernest 2004), students in this peer-learning environment showed no fear of addressing learning difficulties or being seen to be 'wrong'.

Students appeared to enjoy collaborating; the word "love" is used. While many students refuse help in the form of ancillary programs, students from another first year group joined the peer learning class when they heard about the idea of social learning.

This type of learning fits well with the social cognitive expectancy-value model of achievement motivation (Wigfield and Eccles 2002; Schunk *et al.* 2010); here students recognised the value of peer learning and they developed confidence in computer programming: "in the end it was a success."

Students particularly liked when the lecturer assumed the role of student and questioned students who acted as tutors. It was observed that as students contributed to the discussion they would often, out loud, correct themselves, thus demonstrating clarification of thinking. Overall, the freedom and willingness to learn was very evident from the students' participation.

In conclusion, dialogical classrooms, while often challenging teachers, allow students to ask questions and consider different perspectives, and therefore create rich learning environments. Collaborative learning, where a group of students work together dealing with different perspectives and a common goal, encourages interaction between students. The peer-tutoring element of collaborative learning benefits both students who are tutoring – as they are encouraged to clarify their own thinking – and those who are being tutored – as they can address their areas of misunderstandings. Collaborative learning opportunities encourage students to verbalise their ideas and challenge other students (Pietsch 2009). A significant difference between engineering education and practice is the social aspect of work compared to education. Furthermore, graduate engineers' difficulty communicating mathematics is a significant weakness of engineering education (Goold 2014). The National Council of Teachers of Mathematics (NCTM) in the US confirms that communication is an essential part of mathematics and mathematics education in that it is a way of sharing ideas and clarifying understanding. When students are challenged to think and reason about mathematics, and to communicate the results of their thinking to others, orally or in writing, they learn to be clear and convincing and they also develop new levels of understanding (NCTM 2000).

Promotion

Students were required to reflect on and document their learning in their learning journals. These reflections created awareness among students of the opportunity to learn from their classmates, and of the benefits of communicating with other students about their course material. The students' learning journals demonstrated a sense of their ability to learn outside of the classroom and independently of the lecturer.

The effectiveness and learning opportunities created by independent peer learning were presented and discussed at a teaching and learning forum to lecturers at the Institute of Technology Tallaght. This forum was facilitated by Professor Liz Thomas (Professor of Higher Education at Edge Hill University in the UK). A key element of this forum was the involvement of students who participated in the study. The students demonstrated the effectiveness of independent learning and the added benefits of a positive class environment that helped them to learn more effectively than if they had not participated. (The forum was also attended by the Students' Union representatives.)

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Using work-based learning as a pedagogical approach to continue the professional development of qualified nurses

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Description

This module runs at levels five, six, and seven, and all students identify a change project derived from an identified issue in practice. Students are all qualified nurses and work in a variety of fields of practice. The module aims to put the student at the centre of the learning experience and this key principle is facilitated by the use of work-based learning principles and 'action learning.' The philosophy of learning is that knowledge generated by the students is within the context of the 'real world', that is, of their individual work places. Each student identifies an individually-selected, change-project related issue within their clinical practice. The issue is agreed upon with the student's manager. The students attend action-learning sets every two weeks where they work through the process of 'action reflection' – action, in relation to their individual projects culminating in a change being affected or proposed.

Students work both collaboratively within the action-learning sets (to reflect on actions set previously) and then independently in the workplace (to carry out the actions agreed in the sets). Action learning, being a social process, enables the students to learn from and with each other, and develop a community of learning.

Various members of staff support the students. Within the University, the action-learning sets are facilitated by experienced academic staff with a special interest in work-based learning and action learning. Each student is allocated an academic supervisor with whom they meet regularly to monitor academic progress. Within the trust, the student is supported via the use of a tri-partite learning agreement by their line manager with whom they agree their project. A clinical 'buddy' is also engaged in the support process. This person is an appropriately qualified and knowledgeable practitioner who can support the student with their personal and professional objectives, and who acts as a resource for the project topic area the student has chosen to explore.

The module is delivered at higher education levels five, six, and seven, and is embedded within the BSc post-qualifying programmes, the Msc Nursing programme, and the new MSc Palliative and End of Life Care. It is also offered as a standalone module.

Learning outcomes at level five:

- identify the factors that influence personal and professional development;
- communicate personal insights into your developmental needs;
- demonstrate the relationship between personal and professional goals, and those of the organisation, within the dynamic context of health and social care;
- identify, apply, and reflect on a range of learning strategies to meet development needs;
- explore the extent to which practice is evidence/research based;
- demonstrate the application of knowledge and skills relevant to the work-based project.

Learning outcomes at level six:

- identify and analyse own personal and professional needs and the factors influencing their own development;

- identify, apply and critically evaluate a range of strategies to meet development needs;
- review the extent to which the development needs have been met;
- critically evaluate a proposed change in healthcare practice using an evidence and research-based approach;
- critically analyse the progress to date of the proposed implementation project;
- reflect on the collaborative processes required to develop healthcare practice by a work-based learning approach.

Level seven learning outcomes:

- identify and critically analyse their own personal and professional needs;
- acknowledge the factors that influence their professional development;
- identify, apply and critically evaluate a range of strategies to meet the identified development needs;
- review the extent to which the development needs have been met;
- implement and critically evaluate a significant change in healthcare practice using an evidence and research-based approach;
- critically reflect on the collaborative processes required to develop healthcare practice by a work-based learning approach.

In order to support students to develop academic skills to undertake independent learning in this context, each student is allocated an academic supervisor with whom they meet regularly to monitor academic progress.

A virtual learning environment (VLE) is used via the application Blackboard. This not only supports the students with module information, but also enables them to communicate with each other and academic staff in between the action-learning sets. A collaborative module blog is set up at the beginning of the module. After each set the students will post their agreed actions, and then reflect on them. The whole set can then engage in supporting each other through discussion and the sharing of resources. Each student is also allocated a personal journal. In here, the student will record their individual action-learning journey and can receive academic feedback and support from the allocated academic supervisor. These can then be exported for assessment purposes.

The module is embedded with a VLE. Students can access this within the University or remotely. Bespoke online materials are recommended through a reading list accessed via the VLE and, in addition, there is a bespoke area into which students will upload resources that have been sourced to support their individual project development. This becomes a dynamic storehouse of resource material. NHS Trust libraries are also accessed so that students can continue the action learning in the work place. In addition, the student's line manager and clinical buddy will highlight relevant resources and support mechanisms offered in the workplace to facilitate the student's learning experience.

Regarding assessment and feedback, the action-learning process enables formative feedback to be embedded within the module delivery. During the sets, ongoing formative feedback is given by both peers and the academic facilitator. Students are also encouraged to self-assess regularly, as they record their reflections on the blog and in their personal online journal.

Effectiveness

The effectiveness of the module is measured using student evaluation, which comprises the completion of the University's generic evaluation form and informal discussions with students. Responses report that this method of learning is enjoyable and that students feel they develop academically, professionally, and individually.

The process of action learning enables students to develop as independent learners, within the context of a supportive and trusting environment. They enjoy discussing individual project development with others, sharing ideas not previous considered and, with the help of the action-learning set facilitator, developing reflective skills using a model in an applied and meaningful way. Some form of structure appears to act as a buffer for those who have difficulty initially with, and who are anxious about, adapting to a new way of learning. Namely, clarity of the actions set by the individual, application of these actions to the project, and use of the blog for inter-set feedback.

Personal development themes clearly emerge once students develop an understanding of how to manage their own learning and the processes involved in the development of their projects. The most significant themes impacting on the student are reflection, confidence, and communication. Just as important is the transferability of these newly-developed personal skills to the student's professional development and status – enabling some to drive changes, interact with, and make recommendations to, both the local team and to inter-professional colleagues.

The fact that the chosen project must be entirely applied to their practice setting motivates the students, and the tripartite agreement facilitates communication with line managers who in turn are reported to engage, support, and encourage project development. Students report that linking the module experience to their professional role enables them to link reflection and problem-solving skills. This, they report, results in a direct improvement in their work, which in turn contributes to the achievement of organisation goals.

Support from the facilitator and academic supervisor is seen as hugely important. The fact that academic staff feed into the blog and the development of the learning journal acts as a key motivator to the students. Also, while initially anxious about completing presentation for the assessed component, many students have adapted the presentation for promotional interviews, with successful results. Students recommend all students complete this module as it really improves confidence.

A more formal evaluation study found that key issues related to preparedness, support and (again), personal, professional, and academic development. Lack of awareness about what is involved arose from prior teaching and learning experiences, which was particularly appropriate as for most of the participants it was an entirely new way of learning. The findings certainly highlighted the need for more information to be made available to enable students to gain an understanding about both the method of learning and the processes involved. In response to this, pre-module information has been developed that offers unambiguous and straightforward explanations related to the key issues of work-based learning, action learning, assessment processes, expectations, and support mechanisms, thus enabling the students to make informed decisions and feel better prepared.

Finally, the external assessor stated that it is "a well-managed and delivered module [with] excellent student feedback [and] congruent assessments. Results consistently good [with] committed tutorial staff." The assessor also regarded the student attainment as "a real strength of the module" and noted that "attrition rates are tiny."

Promotion

The student information directorate (SID) college teams are responsible for co-ordinating the delivery of all aspects of student-information activity which occurs at school and college level. They are embedded in each college and play a vital liaison role between local stakeholders and the central team. Their primary responsibilities are managing enquiries from prospective students; co-ordinating the student recruitment marketing plans for the colleges; supporting open day and outreach activities; and supporting the SID logistics team with timetabling activities.

Academic staff are actively involved in these activities, and programme and module leaders are available at all times to discuss queries via any medium (email, phone, Skype, or in person).

Dedicated administrative staff support the physical application processes.

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