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Welcome to the thirteenth issue of *Compass: Journal of Learning and Teaching*!

This issue of *Compass* explores some potent themes including the philosophical and practical defence of some traditional features of higher education; issues of student and staff training and development in a Sino-English university context; and measures (especially with technological assistance) to overcome student underperformance and drive achievement. The papers here emphasise a commitment, enthusiasm and determination to create higher education learning environments that enhance individual progress, help with the development of readily transferable skills to the working world, and contribute significantly to personal development.

After a brief tour of the shift during recent years from higher education's earlier discrete academic identity to its current amalgamation with further education, forming what is globally termed 'tertiary education', one opinion piece by Patrick Ainley considers the present undervaluing of 'academic' pursuits against the trend, especially in business-related study, towards provision of pre-vocational training for a working world without secure employment or identifiable professions. Another opinion piece by Russell Crawford similarly defends the traditional, this time in the form of the lecture. The piece suggests that with skilled planning and delivery, the lecture provokes learners to engage mentally with ideas, information and analysis. Crawford is concerned that staff new to the profession may, because of the prevailing dismissive attitude of those with 'chuunibyou', be led to ignore, or avoid trying, this very potent teaching tool.

An investigation into the challenges and problems facing student representatives of the 'Learning Community Forum' (LCF) at The University of Nottingham Ningbo China by Claudia François, Filippo Gilardi, Dunant Halim, Thomas Hirzel, and K Cohen Tan considers two internal case studies. Since this university values student 'voice' very highly, the quality and relevance of feedback is crucial to achieving institutional and educational change; there are therefore implications for the training of student representatives. Empowerment of the representatives was enhanced by means of the Nottingham Advantage Award, which helped to overcome barriers to their involvement by recognising their contribution to teaching and learning and by providing training to develop such skills as leadership and communication, readily transferable to future employment.

A further insight into Sino-English institutions is provided in a case study by Henk Huijser, James Wilson, Dawn Johnson, and Jianmei Xie. To put much more emphasis upon the enhancement of learning and teaching and to enable a more organic, bottom-up approach to continuous professional development (CPD), a communities of practice (CoPs) model has been introduced and monitored. Having carefully clarified the rationale for this model, the paper considers such challenges as the scepticism of departmental heads and very varied staff perceptions of learning and teaching. The authors suggests that no two CoPs are ever the same and that therefore the model is ideal for adaptation to discrete contexts, though the essential aim of organisational and structural CPD may be common to all. The paper gives a fascinating account of the process followed at this university, with individual lead roles created in faculties ('clusters') to move each CoP forward; when institutional management creates the conditions for CoPs to flourish, they may thrive, and though progress to date has been variable here, the expectation is that remaining barriers will be overcome.

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The persistent failure of students to complete directed reading is the focus of a case study by Arron Phillips and Martin Compton, which reports on the seven-week trial of whole-class qualitative quiz questions to stimulate preparatory reading. The authors suggest that prevailing staff anticipation and acceptance of 'non-compliance' (with compensatory measures thus implemented in teaching sessions) as well as student undervaluation of set reading serve to compound the problem. The case study carefully surveys previous research and its findings, which provide a wealth of reasons for students' avoidance of preparatory reading; it also indicates the potential of quizzes to stimulate a more positive response. The trial conducted produced sufficient evidence to support the latter and the authors helpfully provides some thought-provoking points for academics when setting preparatory reading for their students.

Chris Little provides a balanced view of relevant research through a technological review of the student response system (SRS) Mentimeter. With its time-saving and convenient application via student mobile devices, the author's personal experience of student engagement when Mentimeter is deployed confirms reported evidence of SRS value. Provision of instant feedback about both learning and teaching, capacity for customisable features and versatile presentation of the data are Mentimeter's particular strengths, but the review includes an objective SWOT analysis to assess its weaknesses, too. Little provides a summary of its possible uses in student sessions and concludes with a very positive endorsement of its potential.

A second focus on technological development with assessment benefits is provided in an opinion piece by Ray Stoneham recommending such video recording and management systems, integrated with Virtual Learning Environments, as Panopto with Moodle. Stoneham regards the ability to create a screencast or video for assessment purposes as an essential digital literacy skill for all university students. The platform, they confirm, makes marking and feedback simple and effective; file size is no longer a barrier; recording is easy and uploading is automated. Furthermore, though normally a student can see only her/his own recording and feedback, visibility can be extended for peer assessment or group access. Usefully, students can also produce video CVs or online demonstrations for prospective employers to view. Lecturers already familiar with such systems for their own practice will be readily able to provide context-specific feedback and make both formative and summative assessments.

The technology theme continues in this issue with a case study by Frances Boylan on the '12 Apps of Christmas' online course, now run twice at the Dublin Institute of Technology, which aimed, via an app a day for twelve days, to encourage the use of students' mobile devices in the classroom for personalised learning. Research indicates that both teachers and learners need technical, logistical and pedagogical support to bring this about, even though all may be conversant with the technology elsewhere. The second of the courses attracted almost two thousand participants from around the globe, to take advantage of the twelve showcased apps by following links to information, watching video demonstrations and opting to do tasks encouraging personalised use of the apps. Twitter provided the means of sharing what participants achieved. Boylan outlines the course's design and intention of getting students and educators to understand the engagement benefits of personalised learning when they collaborate to tailor pedagogy, curriculum and the learning environment

to cater for individual needs. All in all, the feedback confirms that the course has much to offer and so it will run again in December 2016.

With the intention of enhancing student digital literacy, the open source e-portfolio platform, Mahara, has been recently introduced into Newman University's 'Youth and Community Work' programme: students are asked to compile evidence of their self-reflections from study skills development activities and their work placements; this they may share with prospective employers through a 'secret URL'. A case study by Helen Bardy, Lorraine Loveland-Armour, and Sarah Parkes looks specifically at the barriers to success with Mahara for Newman students with dyslexia. The case study, with compelling detail, charts the quest of teachers and support staff to understand and to overcome these barriers by means of student partnership projects; it concludes with some very pertinent findings and a useful summary of interventions both made and to be carried out in Newman University in the best interests of those students accessing dyslexia support.

I hope that the kaleidoscope of topics raised and discussed in this issue will spur further critical discussion amongst colleagues working within Higher Education. With the HE climate in continuous change, we look forward to publishing more of your views in our future issues and special TEF edition of *Compass*.

Danielle Tran
Editor

The Academic Question of Vocationalism

Patrick Ainley

University of Greenwich

'Academic' in English education is associated with the brain and 'vocational' with the hand. Institutionally, this is reflected in traditional class terms, with academic 'higher' education for the professions endorsed by universities superior to non-academic 'further' education trade training for manual crafts in colleges. Like the US, most of the rest of the world makes no such distinction, but talks about 'tertiary education', whether at college or university, following a general or pre-vocational secondary schooling to eighteen, the age of maturity and citizenship.

Now that England has adopted an Americanised mass tertiary system alongside a persisting elite HE and FE has been 'decanted' - as Alison Wolf says - into HE (Wolf, 2015), the traditional divisions have been eroded. This doesn't mean, however, that undergraduate participation at tertiary level guarantees employment security. As new information and communications technology has led formerly securely-employed professionals to work across the previous divisions of labour and knowledge, specialised professions are reduced to para-professions, with multi-skilled, flexible working, and their more or less academic vocational education reduced to pre-vocational training. At the same time, quantitative assessment of behavioural competence and information replaces qualitative judgement of previously-acquired knowledge and skill, eg. Ofsted-supervised school teacher training (*sic*).

Consequently, 'academic' tends to be seen as abstruse and irrelevant. This tendency has been exacerbated by the 'gobbetised' grammar-schooling inflicted upon state schools by the academic National Curriculum, in order to 'raise standards' (through cramming for largely literary tests) to 18+. Those who fail this selective mechanism are relegated to second-best 'vocational' options, like so-called 'apprenticeships' and this will happen even earlier if government reintroduces secondary moderns, dividing all children into two routes from an earlier age.

Yet it is often pointed out that all HE was originally vocational – literally a 'calling' to the 'priesthood'. Indeed, the most vocational subjects of Medicine and Law still retain this high prestige. Science, however, is widely misperceived only as a method, not a vocation. The humanities, by contrast, are accepted as academic but general – fit only for teaching, while those 'who can, do', applying their 'skills' in ubiquitous business.

Business Studies, which occupies 20% and more of English undergraduates, is considered the prime vocational area, especially as, with privatization, every occupation turns into a business. But BS doesn't make you an employer and, like other students, most BS graduates seek secure, well-paid and at least semi-professional employment. If they are lucky, their business study is preparatory to that employment, so it is also pre-vocational, 'multi-skilling' in 'transferable skills', applicable across the widening range of business activities.

However, even for technical jobs, most employers prefer graduates to apprentices, so the subprime degree bubble may hold up for a few more years, although already the cake is

scarcely worth the candle as NUS estimates an average £53k debt for three-year residential undergraduates since maintenance grants were abolished. Meanwhile, the professional occupations to which degrees used to lead are continually being whittled away. This includes the academic profession, increasingly preparing its students in *The Business Study University* (Ainley, 2016) for general pre-vocational 'employability'.

So, save for a few trades turned into crafts for which a genuine apprenticeship is needed – lasting years not months – the supposedly 'vocational' has become general and pre-vocational. Only traditionally academic courses at elite universities remain genuinely vocational, sustaining, and sustained there by research communities of academic practice that students may develop the expertise to join. Elsewhere, research is often separated from overloaded undergraduate teaching.

So, all academics need to recover their academic community and collegiality, welcoming students into a community of developing knowledge and skills that, even if it cannot guarantee them access to careers in a professional community of practice, at least awakens them to higher levels of learning, ie. reveals to them that everything is not necessarily as it seems, which is the essence of the much vaunted 'criticality' we are always demanding of our students!

Government, meanwhile, persists in seeking to reduce student numbers by raising fees and cutting grants, whilst encouraging differentiation through institutional competition, undercut by the limited offerings of state-subsidised HE. Undergraduate numbers may indeed fall as technological change enables a variety of occupations to be undertaken throughout an individual's working life, obviating the need for specialised vocational preparation, but using the market is not the best way to achieve a reduction in student numbers.

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Attacks on the Traditional Lecture: A Case of Academic Chuunibyou?

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Chuunibyou: a Japanese slang term describing a tendency in people to look down on others, preferring minor trends in an effort to be 'cool'. Here, I propose this term as apt for a recent and unfair inclination by some with academic chuunibyou to view the traditional lecture as a poor pedagogic tool.

My central belief here is that the lecture remains a useful, relevant, pedagogically-focused application of the professional teacher working her/his craft and can be viewed in essence as facilitating a powerful 'pedagogy of gesture' (Church *et al*, 2004; Crawford, 2014). Whilst the craft of teaching is varied, diverse and often discipline-specific in nature, session delivery style typically focuses upon pre-set delivery modes such as the lecture, small-group tutorial, seminar, practical class and field work (Eble, 1988). The list of session types is long, but what is understood in selecting any one of these delivery modes is that it creates an expectation in learners (Dowling *et al*, 2003). As an experienced lecturer who enjoys giving lectures, I frequently find myself having to advocate this style of teaching to colleagues, in order to counter widespread criticism of it that seems to stem from both 'popular' opinion and what I consider 'academic chuunibyou'. Whilst there are various anti-lecture stances in the literature, two that seem prominent and that I frequently hear from colleagues are that the lecture is 'teacher-centred teaching' (used pejoratively) and that there are constraints when considering issues of inclusivity (Turner, 2015). I would argue that these and other criticisms of the lecture are conditional on the quality of the teacher's pedagogic session planning and should certainly not put practitioners off using what is an undeniably versatile teaching tool when well-designed.

As part of what I view as 'academic chuunibyou', the lecture has, in recent years, come under particularly negative scrutiny as newer, alternative teaching modes are elevated by the undermining of an original staple of the system (Oermann, 2005). Other teaching modes, such as team teaching, small-group discussion and peer-to-peer learning, have not been as critically lambasted as the poor old lecture though, as one might expect, they themselves do not actually fare any better when subjected to the same degree of scrutiny (Fischer *et al*, 2004; Topping and Ehly, 1998; Shulman, 2000).

The concept that the teacher is the one best placed to decide on the mode of delivery seems obvious to this author, but criticism of the lecture as 'teacher-centred teaching' essentially disempowers practitioners (especially new ones) from being able to decide this for themselves, almost shaming them into 'innovating' (read: not using a lecture format) for its own sake, thereby disposing of a pedagogic rationale and damaging the learning process by removing a useful weapon from the teachers arsenal (Oblinger, 2005; Hembrooke and Gay, 2003). I would make the point that the teacher is the one best placed to make this decision, which should always be with a qualified eye on the learning outcomes rather than with 'academic chuunibyou'. There is a tendency, in this author's opinion, towards a reductive Socratic view of the lecture as being transmissive in nature and, whilst this can be true, the skilled practitioner uses the lecture too effectively for it to be thus (Turner, 2015).

I have always designed my lectures on the premise that the pedagogic point is not to 'impart knowledge' but rather to present ideas, information and analysis, provoking learners to think about the subject, a process hardly 'passive' for them. The opposite, in fact, is the case: the audience may be sitting without talking (an oversimplification of 'passive'), but is fully and actively engaged in synthesising the flow of the lecture, quite in accordance with the threshold concepts pedagogic philosophy (Meyer and Land, 2005). In this way, the lecture should be considered an 'intellectual experience', in which the content, design and, most critically, the performance all coalesce into a riveting and unique pedagogic product, offering a staunch defence against 'academic chuunibyout'.

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Panopto with Moodle: Enabling videos and screencasts to be effective assessment tools for all

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Abstract

The widespread availability in universities of modern video recording and management systems integrated into Virtual Learning Environments, such as Panopto with Moodle, now enables all students to create their own recordings easily and submit them for assessment; the platform makes management of the marking and feedback simple and effective. It is time that lecturers embraced this development, so that assessment remains effective and relevant. The ability to create a screencast or video for assessment should be an essential digital literacy skill for all university students.

There have been some attempts at universities to assess students on the basis of screencasts made by them to demonstrate their work: for example, by Shafer (2010), for mathematics, and University of Reading (2015), for digital design. However, until quite recently, the facility for students to record their own presentations or demonstrations of their work has been limited to those with the necessary technical skills to set up microphones and cameras and to access and use appropriate software (e.g. Camtasia). Making these recordings available to staff for assessment has often been hampered by large file sizes, a variety of file formats and the lack of a suitable management framework. Hosting files on such external services as YouTube, Vimeo and Jing has made this rather easier, but issues of security and data protection may lead to difficulties, whilst the management of the whole process is time-consuming and fraught with problems. There can also be issues with maximum file size or video-duration limits.

Modern video recording and management systems integrated into Virtual Learning Environments, such as Panopto with Moodle, now make it feasible for lecturers to expect their students to create and submit their own recordings for assessment, whilst the platform makes management of marking and feedback simple and effective. Students can normally see only what they have uploaded and can upload multiple times. There are no practical limits on file size. All recordings are date-stamped and identified by the user's authenticated ID. Lecturers can easily view all the recordings for the course and give feedback viewable only by the student. Depending on settings, students can extend the visibility of recordings to other users for peer assessment or group access. Similarly, lecturers can extend the visibility of individual recordings to other lecturers for moderation and to external examiners and others for quality assurance.

As these platforms become commonplace, there are many advantages to the institution: such systems are already widely used by staff for recording lectures, providing screencast feedback and implementing flipped classrooms. However, their use by students for recording is more limited. Students now have the tools for easily creating screencasts - to record a demonstration of a system they have built, to produce a critical evaluation of a website or to

present their ideas or the results of their research. Video recording, using Panopto on mobile devices, of presentations, interviews or performances is also possible. Adding video to a screencast may help ensure the authenticity of assessment, particularly if all students have previously recorded a short personal introduction (as part of induction to the institution) that may provide comparison. Assessment can be either formative or summative, with easy facilities for lecturers to give context-specific feedback.

These platforms give many advantages to students over alternative assessment methods. The skills they gain enable them to produce video CVs or online demonstrations for prospective employers. Viewing their own recordings is an excellent opportunity to reflect on their own skills and to try out new ideas. The process of recording is simple and uploading can be automated. There are no issues with file sizes and students can manage their own uploads by renaming or deleting them or making them available to others for review or sharing. They can even download recordings as MP4 files for indefinite local storage.

One of the authors has used Panopto with Moodle for several years as an assessment tool for both final-year undergraduate students and Masters students. End-of-course feedback showed that students had little difficulty in making the recordings and all met the deadline for uploading. They used their own laptops or personal computers (Windows or Mac) and found the recording and uploading process easy. Most did just one unedited recording, a few made several attempts before they were satisfied with the result and some even edited and annotated their recording for effect.

The other authors of this article were Masters students on one of these courses. Panopto screencasts having proved very effective, they subsequently recorded screencasts themselves to support their own individual final project reports. They also experimented with video recording, finding it a useful preparation for video interviews and a confidence-builder for their presentation skills.

In conclusion, we recommend that the ability to create a screencast or video for assessment should be an essential digital literacy skill for all university students. From September 2016, all Masters students in the CIS department will be introduced to Panopto at the start of their studies and will be required to record a short video to illustrate how to pronounce their name (both formal and informal) and to introduce themselves. This will replace an existing ten-year-old departmental system requiring all Masters students to upload a sound recording of the pronunciation of their name – of great value to lecturers as most Masters students at Greenwich are from overseas and many have unfamiliar names. Experience has shown that engagement with students is significantly enhanced when lecturers know how to pronounce student names and also when they know how students wish to be addressed. Panopto (2016) case studies show a variety of ways in which Panopto can be used for student assessment – lecturers may well be encouraged to explore their own ideas as well.

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Improving reading compliance with whole-class qualitative quiz questions

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Abstract

“Have you done your reading?” If you are a teaching academic who always gets positive responses to this question, then you are in a very fortunate (or talented) minority. This small case study draws on existing research into why students do not read and evaluative research into strategies designed to combat this phenomenon. It reflects on an *ad hoc* trial of quiz questions randomly targeted at individuals in two seminar groups of first-year undergraduates within the Business Faculty. The trial spanned seven weeks and sought to improve previously poor levels of reading compliance. The study found that, within a short period, the technique employed significantly increased levels of reading compliance, when measured across the whole group through qualitative comprehension questions.

Introduction

So-called ‘reading compliance’ is a broad umbrella term that refers to actual or claimed confirmations of suggested, recommended and essential reading by undergraduate and postgraduate students. The term itself, although apparently the most common for the phenomenon in the literature, connotes conformity, regulation and scrutiny, though the counter strategies to non-compliance are not always mandatory. The rates of non-compliance set out below and the breadth of strategies deployed to combat it suggest there are parallel phenomena of ‘reading relevance’ and ‘reading significance’ that need to be considered simultaneously.

Non-compliance, when it comes to set reading, is widely recognised amongst teaching staff (Burchfield and Sappington, 2000; Starcher and Proffitt, 2013; Hatteberg and Steffy, 2013) and lecturers’ perceptions of it appear to be reflected in the reality. Hatteberg and Steffy (*ibid.*), for example, cite multiple studies since the early 1970s that show that no more than 30% of students complete reading tasks for any purpose. It also seems to be an increasing trend (Burchfield and Sappington, *op. cit.*). Indeed, Lei *et al* (2010) describe it as an ‘epidemic’.

Our small case study within this urban, post ’92 university was one of both convenience and opportunity. The study aimed to address a first encounter with this common challenge, as experienced by one of the collaborators (a PhD student with seminar-leading responsibilities, henceforth ‘the tutor’), and drew on the expertise of the other (a Senior Lecturer in Learning, Teaching and Professional Development with twenty-five years’ teaching experience, ten of those as a teacher educator). As we shall set out below, due consideration of a range of approaches culminated in a strategy ‘with a twist’ that, in this context, has had a remarkably satisfying impact on levels of compliance.

Our collaboration commenced after an impromptu conversation about difficulties faced when teaching a class in which the majority had not completed a required reading task. Prior to this, the tutor had done some teaching as co-tutor within the faculty, on a course involving a

lot of student presentations; engagement levels were high and preparation was impressive. Previous positive experiences as a teaching assistant in smaller groups at another post '92 institution, the co-tutoring role and the levels of engagement all served to emphasise the dissimilarity of the subsequent experience. Some faculty members suggested that we should not expect students to prepare, as this was rare, and little could be done to motivate them. Since this disappointing view ran counter to impressions of these same students in a different setting, we committed ourselves to the development of a strategy to change the behaviour and attitudes of the students. In a structured approach, we analysed contextual specifics and considered various strategies. Awareness of the levels of non-compliance reported in the literature did lessen the shock of facing a large group of blank-faced first-year undergraduates and made us the more determined to challenge the problem.

Below, we set out a consideration of key literature on why students do not read and what can be done to overcome this reluctance, before detailing the specifics of our case study.

Why don't they read?

Explanations for the phenomenon itself and its rise include a growing disinclination to read, or even respect, hard copy material in a digital era (Jolliffe and Harl, 2008). Scepticism about the value and purpose of the assigned readings is also common. Brost and Bradley (2006), for example, 'judged the lectures to be accessible to students whether or not the reading had been done' (p.104). Conversations with colleagues seem to suggest that in our faculties, when setting reading, we sometimes succumb to the assumptions that a) students will not do it and b) this disinclination is down to laziness. Despite no empirical connection between the latter thought and reality, it is persistent and worrying. Logically, we might next ask: If we do not expect them to do it and anticipate having to compensate in class for that, then why do we set reading at all?

Clump *et al* (2004), in a relatively large study amongst undergraduates within a single institution (n=423), found that reading compliance before coming to class leapt from 27.5%, when there was no incentive other than requested preparation, to just under 70% when the material was directly related to a quiz or test. They report, with evident disappointment, that nothing would appear to raise compliance to 100%; however, what seems more significant here is the connection between motivation and reading and the impact this has on assessments. Self-reporting studies such as this may need to be viewed with a degree of scepticism: Hoeft (2012) observed, for example, that of the 46% of students who reported that they had completed reading, only 55% were able to answer simple questions; Sappington *et al* (2002) found similar results and connected this with academic dishonesty. In short, asking students whether they have done the reading is not likely to elicit a reliable response. Once again, this range of inaccurate reporting roughly approximates to our own experiences within one first-year compulsory course. On appearance alone, it seemed that, although some had engaged with the texts, many had either skimmed or were assuming they would not be tested on their claims. We were consequently keen to embrace a strategy that measured comprehension rather than claims of compliance.

In a fairly large study of Business undergraduates (n=394) (Starcher and Proffitt, 2013), almost 50% of the students stated 'lack of time' as a reason for non-compliance with set

reading; 'boring', 'not meaningful' and 'professor rarely refers to the texts' were the next most commonly offered reasons. These were from pre-defined categories, however.

In a smaller, more qualitative study, Brost and Bradley (*op. cit.*) were concerned that emphases on student-focused solutions to non-compliance and assumptions about motivation were a potential distraction and might cause other factors to be ignored. Instead, they focused on advanced level students studying for an elective module in which they were exposed to thirteen different lecturers. Their student sample was small, but most interesting in their findings was the sense of the *strategic* amongst student decisions as to whether or not to read. Time factors and content relevance / interest were cited, but, where students guessed, realised or assumed the material would be covered in class, the likelihood of in-depth reading of the set texts was low. This also reflects Pecorari *et al's* (2012) study, which showed that a significant majority of students valued attendance and lecture notes more highly than text book content and set reading. Their apparent strategic reckoning was: "if the objective is to pass a course and attendance is sufficient to achieve that goal, the textbook is superfluous" (p.249). The inherent dangers here of limited vistas on content and the resultant reduction in opportunities to engage with deeper learning are made clear; we were keen to avert them.

One of the most frequently-cited problems is a lack of adequate study skills or what Brost and Bradley (*op. cit.*) describe as 'unpreparedness', owing either to student mindset, to confidence issues (Tuckman, 1991) or, increasingly, as a consequence of frailties in their pre-undergraduate education and consequent weaknesses in language and comprehension (Lei *et al*, 2010).

What can be done?

Hoelt (2012) notes that there have been few university-based studies on strategies to combat reading non-compliance. Hatteberg and Steffy (*op. cit.*) state that, despite the ubiquity of the issue, there is relatively little research on it and large-scale comparative studies are a notable gap. Their evaluative study drew on student perceptions of the effectiveness of a range of methods to foster reading compliance (which they had, in turn, filtered from existing case studies) and this informed our specific choice of technique to implement first. Of seven strategies, they found the students reported 'announced reading quizzes' as the most effective. In fact, all the open and inclusive strategies were more popular than the 'surprise' or exclusive strategies, such as unannounced quizzes and random questioning. Hoelt (*op. cit.*) also reports 'quizzes' as the reading motivation students most frequently requested and, in a follow-up study, shows that quizzes had a significant impact on both compliance and comprehension. Johnson and Kiviniemi (2009) also connect frequent quizzes on reading to increased success in summative examinations, a finding replicated by Sappington *et al* (*op. cit.*). Uskul and Eaton (2005) had similar results when students were given graded, long-answer questions to set reading. These three studies illustrate degrees of blurring of the distinction between formative and summative assessments, though do not advocate the use of quiz scores as part of summative grades. Perhaps the biggest problem with this approach, however, is the additional workload it entails.

In contrast, Roberts and Roberts (2008) argue that the quiz approach does not foster deep learning or understanding of content. This suggests to us that the types of questions asked need to be carefully considered. Additionally, their argument assumes that the quiz is the principal method of developing knowledge, whereas other studies and our own approach regard the use of quizzes much more as a threshold to deeper understanding, emerging later in the sessions. Another suggested reason for non-use of mandatory motivators such as quizzes is that they might provoke resentment towards lecturers and result in poor evaluations (Sappington *et al* 2002). Such cynical reasoning, based solely on supposition, adds little to our understanding of why students do not read. However, it is somewhat revealing about the stance lecturers take on this issue, and is perhaps indicative of more widespread perceptions of students by academic staff. Sappington *et al (ibid.)* state in their conclusion: "Faculty who reject quizzing on the basis of students' ill will may want to reconsider the practice of giving exams on the same rationale" (p.274). Lei *et al (op. cit.)* claim limited confidence as a key reading de-motivator, one that becomes more influential as readings are attempted but not understood. This suggests to us that quizzes offer the opportunity to tackle simultaneously the compliance and self-confidence issues, with a potentially wider impact on students' studies.

In interviews with Business Faculty colleagues, Starcher and Proffitt, (*op. cit.*) identified the reading quiz (in many forms, but usually multiple choice) as the most commonly cited in-class strategy used to encourage pre-reading of the material. Other suggested strategies were: presentations to class and one exam question based only on reading. Pre-class strategies suggested by their faculty colleagues included chapter summary tasks, online postings or quizzes and reading journals. In the paper, Starcher and Proffitt (*op.cit.*) criticised their faculty and colleagues for the inherent extrinsic motivation factors at play in the design of some strategies used. These may have embarrassment potential which, they argue, could have serious long-term consequences. However, this assumes that the quiz responses and results are necessarily open and visible to others. They seem to ignore alternative, less open ways of managing quizzes which can have an *intrinsic* potential. For example, students might be encouraged to consider their responses ipsatively, the lecturer could collect responses or the students might self-mark. Such approaches would then draw on the inherent formative potential of questioning. Having said that, we opted for a series of oral questions posed randomly to individuals in a group setting; though an individual would be asked a question and might be embarrassed if s/he did not know the answer, we nevertheless felt that this was legitimate in not exceeding the usual expectations of classroom interaction. Praise for the whole class if they did well, or advice to read more and deeper if the class score was poor, would follow, encouraging a sense of group responsibility rather than creating discomfort at individual exposure.

Despite some reservations, the literature pertaining to studies of both students and lecturers suggests that quizzes have the potential to increase reading compliance. A multi-faceted approach, including both academics and students (Starcher and Proffitt, 2013) and strategies that enable both surface and deeper levels of comprehension (Hatteberg and Steffy, 2013), should always be part of the wider learning design.

The impact of not reading material cannot be underestimated; it is, of course, only one strand of the varied notions of 'student engagement', but a significant one nonetheless. The evidence that such things as engagement with studies, levels of preparedness and time

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spent on studies out of class have a positive impact upon achievement is now unequivocal (Quaye and Harper, 2014). In addition, frequent 'low stakes' tests on reading improve not only reading compliance but also class attendance (Schrank, 2016).

For both mature students and school leavers, changing reading habits is often a significant challenge, but, given the continuation of established pedagogic frameworks or even the adaptation and implementation of new ways of teaching and learning, it remains both a behaviour and a skill that they need to develop quickly. If we enable non-compliance by reflecting our assumptions and attitudes or by (because we expect it) implementing in-class measures to compensate for it, we produce students who learn NOT to read. This makes addressing the issue in year 1 all the more important and can be part of the wider development of active and independent study habits in a non grade-dependent setting, which will help prepare the students for the following years (Cottrell, 2013).

The sample

This study focused on two seminar groups taught by the same tutor. The two classes were on a first-year compulsory course within an undergraduate programme at the Business Faculty. Group A had an average attendance of twenty students whilst Group B had an average of eight students. Group A students were a mix of mature students and school leavers, was ethnically diverse and comprised both UK born and international students. The latter seminar consisted entirely of school leavers, mostly UK born and with a more homogenous ethnic profile. Gender is a factor that features in some studies, but, as this was a study of 'opportunity and convenience', no distinctions or contrasts were made.

As a convenience sample, the two cohorts mirror a large proportion of other cohorts in a university which has a wide and celebrated ethnic diversity alongside a significant mature student population: a diversity noted in the recent QAA higher education review (QAA, 2015).

Context

The programmes are taught in the conventional form of a lecture and seminar on a weekly basis across one term. The seminar material gives students the opportunity to explore the weekly topic in depth. The lecture, in this structure, comes after the seminar, which meant that students did not have the grounding knowledge that a lecture can provide. In terms of learning design, the lecture endeavours to provide students with an exploration and understanding of the fundamental underpinning principles of the course topics. Whilst the seminars provide students with the opportunity to explore these principles in more detail, they also provide students with the context to, and reality of, these principles in the workplace. The course leader provided the teaching team with materials for the class, but left it open to the tutors as to how it was covered in the seminar. In this case, the tutor used small group discussions based on texts directly relevant to the weekly topics. This reflected the majority approach across the seminar team. As such, reading prior to the seminar was essential. In preparation for seminar, the reading involved one academic article or a case study and a short portion of the recommended text book, usually no more than ten pages.

In the first three weeks of the seminar course, the majority of students appeared to have done little or no preparation. Since the tutor had minimal responses to general questions and

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efforts to engage the students in discussion were to no avail, the first twenty minutes of the seminar had to be spent on remedial activity. The tutor either encouraged the students to read the case study or provided a short introduction to the topic, which, as the literature reinforces above, had the potential to continue the cycle of non-compliance and legitimise the students' tendency not to read.

The quiz approach

The following quiz-based approach was then adopted as a means of engaging students and getting them to undertake the reading. Each week, the tutor came up with a series of questions based purely on the reading material. The questions were varied in terms of potential responses.

Some of the questions asked for surface level responses:

- What four criteria did the author claim were needed?
- Who is the leading researcher in...?
- Which motivational theory does the theory in this text develop from?
- Name four of the eight types mentioned.

Other questions gave students the opportunity to explore their understanding, such as:

- What did you understand the author to mean when s/he said...?
- Illustrate theory X by giving an example.
- How does theory Y correlate to theory Z?

The surface level questions gave the tutor an instant indication of whether the reading had been done superficially or not. The other questions, challenging Roberts and Roberts (*op. cit.*), were interpretative and could (and did, in latter stages) lead to vibrant discussions and deeper understanding.

The questions were randomly targeted, risking, as suggested above, student discomfort, but the non-conformity rates were so high that it would soon be apparent that most would not be able to answer even the superficial questions. This was a deliberate and considered deviation from the approaches suggested in our reading, but one we were keen to trial, as it had the potential to kick-start discussion and get to the deeper levels of understanding more efficiently.

This approach was unannounced in the first week, but announced thereafter. The students were informed at the end of each session of the reading required for the next session and reminded that a quiz would happen then. Between weeks 9 and 10 of the teaching term, as the students had a break for Easter, they were also reminded again by a further message via the virtual learning environment messaging service.

In practical terms, the quiz worked as follows: As the register was completed, the students would be given a number. Once all students had been allocated a number, the total would be placed in a random number generator on the projected computer screen. The free online software would then select a number and that student would be asked a question. Should the student not answer the question, it would then be opened up to the class. Use of a random number generator aimed to remove any bias from the selection process. The

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randomiser was a deliberate effort to show that there was no inclination to ask students who had not previously tended to prepare, nor to ask those who *had*, as the most likely to provide the correct answer. Averting alienation was at the forefront of our thinking and we felt that the time it would have taken to administer individualised questions could not be justified. The desire to make the questions qualitative and serve as prompts for later discussion was also an important consideration.

What was learnt?

Data was collected informally, the tutor recording alongside the questions whether each question had been answered correctly by the group; thus there was no record of individual changes or developments. (This would be an interesting future project at a more systematic and formalised level, especially in this context.) Fundamental here is that the record is of *first responses*, giving an indication of the breadth of increased compliance. Eventual correct responses, even if initial answers were incorrect or flawed, were higher and, in weeks 8 and 9 with Group B, were in fact 10/10. Tutor observations of responses to the process and of the trends also form part of the findings set out below. In the final session, students were asked what they thought of quizzes.

From a tutor perspective, it is clear that the continued use of the quiz approach has been successful with these cohorts of students. This can be seen from the improvements in class scores over the course duration (see fig 1.)

Session (by course weeks)	Group A score	Group B score
Week 4 (unannounced intervention)	2/10	3/10
Week 6 (announced hereafter)	2/10	2/10
Week 7	3/10	4/10
Week 8	6/10	8/10
Week 9	8/10	9/10
Week 10	6/8	7/8
Week 12	13/18	15/18

Figure 1: Number of correct responses by group

Weeks 1-3 of the course were where the problem was first identified, but where no action was taken, other than remedial strategies. Weeks 5 and 11 were sessions for which no reading was required.

As can be seen, first-time correct responses increased almost every week. The results' dip in week 12 can be rationalised by the fact the quiz was a) much longer and b) was an exam revision session and so the questions referred to previous reading, including that set in the first three weeks, when no quizzes took place and preparatory reading had not been done. Some improvement in preparation for weeks 6 and 7 was noted, but it was still insufficient to make a positive impact upon class discussion.

During the first few weeks, as reading compliance across the group grew, it was not possible to perceive many clear patterns. The tutor allowed sufficient 'thinking time' for a student to answer the question and resisted efforts by other students to step in. Some students would

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look down at their notes or there would be long silences in response to those questions. However, as the 'pattern' of the approach became embedded, so the students adapted their behaviours and clearly demonstrated a growing sense of engagement and even enjoyment.

In the first three weeks the students who prepared were mostly non-UK, and, of those that had prepared, the majority went on to have near perfect attendance. The students who prepared from the outset responded in a positive manner and appeared to embrace the quizzes much earlier on in the process than other students. In terms of attendance by the groups during the study, there was no decline in Group A though there was a small decline in Group B (twelve in week 3 and eight on average thereafter) after a significant drop off in the weeks prior to the start of the quiz trial. Further research would be needed to determine links between attendance and the quiz approach and so reasons for the slowing of the rate of non-attendance cannot be determined or claimed at this stage.

Towards the end of the trial, responses to questions were faster; the inability of any chosen student to answer continued, but to a much more limited extent and, significantly, the overall quality of engagement with the topics at hand improved. The sense of fluidity and general 'success' of the sessions was also tangible. As the term progressed, the students would, without asking, apologise for not having done the reading and ask to be excluded from the quiz. This unexpected honesty enabled the tutor to provide an alternative activity for those who had not prepared.

The general tenor of the responses was that students found the quizzes helpful in getting them to read, though some clearly saw it as a necessary evil and were reluctant to engage with the texts. Most of the students spoken to were positive, as indicated by this characteristic response:

"I like the quizzes... they encourage me to do the reading which enables me to get more from the class activity." (Group A)

One was blunt about disliking the method, but the 'compliance despite...' nature of this response is important to note:

"I hate quizzes but they force me to do the reading for what is in my view a rather boring subject, so I s'pose it's great". (Group B)

It was good to hear that the effort with the randomiser was noted too, though, interestingly, this student saw it as a motivator in itself:

"The fact we can see that you are not picking on us and it's random definitely motivates me to get involved, to be better prepared". (Group A)

Formalised, deeper responses in the form of focus groups or interviews would no doubt offer richer insights.

The slow start over the first few weeks could indicate that the students were waiting to see whether this was a one-off or was going to become a regular occurrence. By the fourth week of the trial, and in both the seminars, those students who were asked the questions were

showing clear evidence of reading and this continued throughout the remainder of the seminars.

A possible perceived drawback to doing a quiz on the reading material would be that the tutor must spend time preparing questions. However, it was found that, as the tutor needs to read the material prior to teaching it, the increase in preparation time is minimal. The quiz itself took around ten minutes from the seminar, which was already limited in time. The tutor nevertheless felt that taking ten minutes to do this was beneficial, as it framed the subject matter and focused on the relevant theory, concept or study. In contrast, in the first few seminars twenty minutes or more was being spent remedially explaining things or waiting for students to read the document. Thus the quiz in fact increased the time available for group discussions and more in-depth application and analysis.

Conclusions

Whilst this was a small sample, the results suggest that a quiz based on mandatory, relevant reading can be a suitable method of engaging students to prepare for the class. We were delighted with the result and the apparent ease with which the group culture was modifiable. One non-deliberate manifestation was the way in which the quizzes began to feel like a competitive 'me against them challenge'. The anticipation of the number from the randomiser and the collegiality amongst the students will therefore form part of the way such quizzes will be set up and 'sold' in future. The tutor was at times frustrated that the benefits evident as a consequence of the trial were at the cost of a fuller reckoning of individual depth of understanding and patterns of compliance. Given the same circumstances in future, a similar strategy would be implemented from week 1, though with perhaps an additional single question for each student to be answered on paper or via mobile devices and submitted before the whole-group random questions.

One of the main benefits to this approach is that students become accustomed to reading prior to attending class. The quiz leads to positive learning behaviours that will be expected of them going into their second and third year of studies. Sadly, it does not mean that they will like it more, but at least it indicates wider motivational factors. A study on reading content and engagement, perhaps linked to student choices at undergraduate level would be interesting follow-up work.

The in-class benefit of minimising the 'mini lectures', allowing time to focus on clarifying issues, enables academics to have a greater sense of where to pitch the learning activities for that session. Often, students' responses to the more open questions would provide material for a more in-depth discussion when the class broke up into small groups. Unexpected outcomes, such as when these activities actually improve the fluency and coherence of the session, bode well for the way we might manage the approach in future.

The whole process leads us to wider conclusions that we have expressed as questions we feel all academics should consider before setting texts for reading preparation:

- Is the reading actually essential or even important? If so, what mechanism will you have in place to ensure its contents have been understood? If not, why are you setting it?

- How closely tied is the set reading to the seminar or lecture content? Have you made the nature of this connection clear?
- What assumptions do you have about students' ability to read, process and understand what they are reading and what support is in place both immediately and more widely within the faculty or institution?
- Will your quick-witted and strategic students know (or feel) that the material will be covered in class even if they haven't read it?
- Are your strategies for encouraging (or forcing) reading potentially shaming or embarrassing?
- Will the benefits of gauging comprehension at an individual level (e.g. through individual response mini papers) outweigh the whole class developmental and deeper discussion benefits of approaches similar to those used in this study?
- How could you demonstrate that you are not 'picking on' likely non-compliers or, perhaps worse, choosing the 'usual suspects' of keen compliers?
- Do the strategies 'preach to the converted'? i.e. Do they benefit those who read anyway?
- If we use in-class activities, how much can we tap into intrinsic motivational forces and what else can be done to make the reading something pleasurable rather than dutiful?

Above all, we found that this trial challenged assumptions about what students are willing and able to do. If extrinsic motivators like compliance-boosting quizzes are coupled with an assumption that students *will* do the reading and a clear connection between the material and seminar content is made, then it is not the number of students reading that is important but their starting points in the seminar and the individual progress that can then be made from there.

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The 12 Apps of Christmas: an innovative and effective online student and educator support

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Abstract

The 12 Apps of Christmas course is a free open online course that has run at the Dublin Institute of Technology, Dublin, Ireland, in both 2014 and 2015. The 2014 version of this course was aimed specifically at instructors and went on to win the Mobile Learning Division of the International E-Learning Award (iELA) and come joint third-place at the eLearning Excellence Awards run as part of the 14th European Conference on eLearning. The 2015 iteration was aimed primarily at students of all ages undertaking further education, third-level education and/or postgraduate study, but also included additional supporting information for educators. This case study sets out our experiences of designing and delivering the 2015 iteration of this innovative and effective student and educator support.

Introduction

Mobile learning has been defined by the Mobile Learning Network (<http://www.molenet.org.uk/>) as “the exploitation of ubiquitous handheld technologies, together with wireless and mobile phone networks, to facilitate, support, enhance and extend the reach of teaching and learning.” This definition certainly implies very strongly the potential that mobile technologies, and the mobile learning approach, hold for teaching and learning. However, as Chen and deNoyelles (2013) discovered when they undertook a study exploring student mobile learning practices at their university, there is a gap between the number of students who own mobile devices and those who use them for academic purposes, and those who do use them for academic purposes do so mostly outside the classroom, with limited guidance from their educators. Dahlstrom and Bichsel (2014) disagree slightly with this, as they found that “many students use smartphones or tablets for academic purposes”, but agree that “in-class use is still uncommon”, adding that “students are more likely to apply mobile devices to academics when instructors encourage their use in class” (Dahlstrom and Bichsel, 2014). Even though students and educators alike use mobile devices regularly, Chen and deNoyelles (2013) concluded their study by suggesting that both groups need technical, logistical and pedagogical support in adopting mobile learning, if its effectiveness as an approach to teaching and learning is to improve. With regard to student usage, Luckin (2015) concurs with this sentiment, noting that “although students arrive at university comfortable with technology, it doesn’t mean they know how to use it effectively for learning purposes”.

Since 2013, staff of the Learning, Teaching and Technology Centre (LTTC)¹ at the Dublin Institute of Technology (DIT), Dublin, Ireland, have been supporting educators in one way or another as they explore different mobile technologies and strive to integrate them into their teaching, learning and assessment practices. In December 2014, and again in December

¹ www.dit.ie/lttc

2015², they ran a short, free and open online course called The 12 Apps of Christmas³. The course was advertised both nationally and internationally in an effort to help interested educators and students alike to expand their personal learning networks and to expose them to as many ideas as possible.

Material was offered to the participants in daily bite-sized chunks, to help them to fit it into their busy schedules. So, 'twelve apps, over twelve days, for twelve minutes a day' was how the course was advertised. This case study begins by explaining the challenges faced and the decisions made in designing the course and delivering it, and then uses the participants' feedback to evaluate it. The study concludes with some final thoughts about measuring the impact of this free online open course.

Course Design and Delivery

The 12 Apps of Christmas course 2015 ran each weekday for twelve consecutive weekdays from December 1st. A free website builder called Zoho Sites was used to build it (accessible now at: <http://www.dit.ie/the12appsofchristmasarchive/>) and it was licensed under the Creative Commons License CC BY-NC-SA 2.0. A hybrid app, called '12AppsDIT', was built also and made available for free download from both Google Play and the iOS App Store. Twitter was used as the main channel of communication during the course, via the dedicated hashtag #12appsDIT, but a comments feature was enabled on the website also for those who preferred to engage in that way.

Following an intensive social media advertising campaign and publicity via national and international learning and teaching networks, 1,967 participants signed up to follow the course from twenty-five different countries. Whilst the course was aimed primarily at students and their educators, the registration sheet shows that just over 40% of the participants were students, while 59% noted that they were educators. The remaining 11% was made up of a mix of instructional designers, educational technologists, librarians, assistive technology advisers and parents.

Over the duration of the course, the participants were introduced to twelve different mobile apps, including OneNote, Office Lens, Trello, Pocket, IF & DO, MindMeister, RefMe, StudyBlue, Cogi, Maths apps, Flipboard, and PicCollage. As so many apps useful for personalising learning are available, it was very difficult to select just twelve to showcase. The course team started by using personal experience of mobile apps to choose those worth sharing; colleagues recommended others; finally, an extensive online search of relevant blogs and newsletters to see what educational technologists, educators and students worldwide were recommending added a few more. Various alternatives to the selected daily apps were listed each day too, which provided participants with additional choice. In an effort to be as inclusive as possible, a conscious decision was made to showcase only apps available for both Android and iOS devices. If the daily app was also available in the

² The 2015 iteration was run in collaboration with DIT Assistive Technology Officer Trevor Boland

³ This course was based on a similar programme devised by Chris Rowell of Regent's University in London

Windows apps store, or if a showcased app was available via a browser, then the team highlighted these details.

It was difficult to know: how much content to include without overwhelming the participants; how to make it relevant to them; how to keep them motivated for twelve whole days. As we had done during the development of the first, 2014, version of the course, we turned yet again to the TPACK framework (Technological, Pedagogical and Content Knowledge). In order to integrate technology effectively, the framework proposes that there must be an understanding of the relationship between technology, pedagogy and content (See www.tpack.org). Directed by this framework, the team made a number of design decisions:

1. To drip-feed content daily: each morning, a new page to be released on the website and on our own app, and participants each to receive a short email, alerting them to the fact that the daily app was now available for review.
2. To deliver via the daily pages a bite-sized piece of information about that day's mobile app and to design those pages to take no more than twelve minutes a day of each participant's time to read the information.
3. To provide links to additional information and also short demo videos for those who might want to delve a little deeper.
4. To provide a short additional optional task, so that participants might use the app in a purposeful and structured way and in, some cases, share with the other course participants, via Twitter, what they had created.
5. In order to keep the participants motivated and engaged, to gamify a number of the optional tasks and to raffle prizes.

The 12 Apps of Christmas course was designed in the context of social constructivist learning theory and, where possible, opportunities were embedded into the course to facilitate communication in the form of collaboration, resource-sharing and discussion. The daily email reached out to the participants to make them feel included and encouraged them to engage on Twitter. For those who did not have, nor wanted to have, a Twitter account, the Twitter feed was embedded into the website, so that they could follow the discussions there and not miss out. Each time there was a competition, entry tweets were archived, using Storify, and a link to the 'story' was disseminated. As mentioned previously, comments were enabled on the website too, so that participants could be involved there. An evident lack of student engagement with Twitter however, apart from when a competition was being run, might be explained by the fact that they were quite busy at that time of the year; or, perhaps, as some of the student Twitter accounts appeared to have been only recently set up, with few tweets other than those with #12appsDIT, Twitter might not have been an application they were either interested in or familiar with. Should students be invited to participate in another iteration of this course, such alternative methods of communication and engagement as Facebook or Snapchat would have to be explored. However, of the 102 educators, librarians and learning technologists etc. who supplied feedback on the course, 36% said that they tweeted to #12appsDIT during the course and 43% said that, whether they did or did not post comments or tweets themselves, they learned from reading what others had posted and/or tweeted.

To quote Olsen (2011), “we need to develop learners who are skilled at personalising their learning, as the changing nature of knowledge means this is a fundamental skill for today’s workforce”. A personalised approach to learning is taken when students and their educators work together to tailor pedagogy, curriculum and the learning environment to cater for each students’ learning needs, and the benefits to this approach include increased engagement, retention and success. The 12 Apps of Christmas 2015 set out to demonstrate to students how they themselves could harness the power of mobile apps to help them begin to personalise their learning. It also attempted to highlight some small changes that educators could make to their day-to-day teaching and learning practices to begin to create a learning environment that would encourage their students to harness mobile apps in this way. To this end, included on the website was a page written specifically for students, explaining that, when they learn in a way that suits them, they are much more likely to understand and retain new knowledge, and reminding them that, regardless of our preferred learning styles, we all benefit from learning with others, sharing and creating knowledge. That page also set out the following four steps that they would need to follow to start the process of personalising their learning:

1. Discover how you learn best, by taking a short inventory that tells you whether you are a visual, auditory, read/write or kinaesthetic learner (VARK) and read up on what the result means for you. A link to an online inventory was provided (<http://bit.ly/1retoy2>; Juskeviciene and Kurilovas, 2014).
2. Take the time to categorise this information under the headings:
 - a. How do you like to access and process information?
 - b. How do you like to engage with that information?
 - c. How do you prefer to express your knowledge and understanding of that information?
3. Decide what your immediate and long-term learning goals are, so as to start to take control of your learning.
4. Choose tools and technologies that will help you to achieve your learning goals while playing to the strengths of your preferred learning style. This is where The 12 Apps of Christmas course comes in.

Furthermore, a page for educators was included on the site, which gave examples of small changes that they could make to their teaching and learning practices to help create a learning environment within which their students could harness the opportunities mobile apps present for personalising learning.

Each day, the app of the day was evaluated for the participants under each of the VARK styles, and within each of those sections the featured app was discussed in terms of how it could support those students to *access* information, *engage* with it and *express* their understanding of it. This information for the auditory learners was provided daily as an audio clip. Ways in which that app could facilitate communication and collaboration were also shared.

As part of the 12 Apps course, Professor John Traxler, Professor of Mobile Learning at the University of Wolverhampton, kindly ran a webinar entitled ‘Spoilt for Choice’ for all of the participants, during which he shared his insights on mobile technology and its possibilities for

education. A recording of that webinar has been made available, with Professor Traxler's permission, as a resource on the course website.

Evaluating the Course

With the participants' permission, a wide range of anonymous data was collected about all aspects of The 12 Apps of Christmas course. This data was collected via: open and closed questions on the registration form; the comments on the website; website analytics; analytics from our bespoke app; tweets sent that included '#12appsDIT'; two different post-course feedback surveys, one of which was sent to those who had identified themselves as students, and the other to everyone else who had registered to participate.

For the month of December 2015, the month during which the course ran, website analytics show that there was a total of 39,178 page views. The first two days of the course were the busiest, with over 4,500 page views each day. The statistics fluctuated for the remaining ten days, from the lowest, 2,149 views, to a high of 3,778. The site has continued to be accessed into 2016, with January and February having proved to be the busiest months, showing a combined total of 5,342 page views. So far in 2016, there has been a total of 12,876 page views, so the site is living on as a useful resource for all.

Feedback surveys were sent out to all participants in early March 2016. Because the course had run at a very busy time, with many students undertaking exams both before and after Christmas at the end of semester one, we chose to delay sending out the two post-course feedback surveys. We wanted to give the students a chance to have started using some of the apps for personalising their learning, and the educators an opportunity to think about how they might encourage their students to start using mobile apps in this way and possibly even integrate some of the apps into their teaching and assessment practices. As a result, however, the response rate was disappointingly low, with responses from just 102 educators and only 38 students. Nevertheless, the feedback given was quite insightful. 41% (n=42) of the educators who provided feedback said that they followed the course for the whole twelve days, with a further 50% (n=51) saying that they followed it for some of the days. The main reason given for not following the course every day was workload. 40% (n=41) noted that they had returned to the different pages a number of times during the course and 30% (n=30) that they had returned to the site since the course had ended. 41% (n=42) had gone on to recommend the site as a resource to a colleague, friend or student since the course had ended.

Interestingly, 28% (n=29) of the educators said that they had already gone on, as a direct result of the course, to make changes to their teaching and/or assessment practices in the three months since the course had run, whilst a further 42% (n=43) said that, though they hadn't made any changes yet, they planned on doing so in the next academic year. It was also interesting to see that the course had motivated them to start exploring alternative apps; as one participant said, the course "*encouraged me to try out similar apps to those presented during the 12 days and compare them. It helped me select which ones were relevant and practical for me and also show a wider range of options to students/faculty*". The participants were also positive about the course as a whole and what it had set out to achieve; one said, "*the info on how the apps supported different learning styles was useful. It added an extra dimension for me. If asked by a student why they might want to use an App I*

would feel I could respond with more confidence.” Poor wifi was mentioned in 17% (n=18) of the responses given concerning barriers to mobile learning, the integration of mobile apps for learning and the personalisation of learning; a lack of awareness, confidence, time and training were also emphasised.

Of the thirty-eight students who responded to the question in their survey which asked if the course had been worthwhile, 89.5% said that it had. 70% said that, having followed The 12 Apps of Christmas course, they would now consider using mobile apps for educational purposes, and 59% had gone on to make some changes to how they approached their study, having read about personalised learning during the course. Like their educators, time constraints were mentioned as one of the main reasons for not following all of the course.

Final Thoughts

Given the free, open and optional nature of this kind of short course that is run online via social media, it is quite difficult to measure, in any accurate way, either the initial or continuing impact it might have had on its participants and beyond. The responses in the feedback surveys did provide some valuable insights, but, as the response rate was very low in this instance, trustworthy inferences as to the overall impact of the course cannot be made.

However, some of the participants made contact to share with us how they were using the course and this gave us a glimpse of the kind of extended reach it was having, which, as it turned out, was well beyond our expectations. To give some examples:

- A teacher in Spain got all of his students to sign up and follow The 12 Apps of Christmas course as an integral part of their own course - effectively, our course was being used as a live, open educational resource (OER) that supplemented their own content, and that was fantastic;
- A college in the United Kingdom also contacted us to say that it was running a whole mobile learning event around The 12 Apps of Christmas course - a committee had been established, which set up around the college three decorated booths (with, in each, laptops which displayed that day's app page) and its members actively encouraged the students to take part in the course and engage with the content;
- Four months after the course finished, a language lecturer in the USA tweeted to #12appsDIT to share their institution's 'Apps at a Glance' project on mobile apps for language learning and attributed the project idea to the structure and content of The 12 apps of Christmas course.

These examples, along with the survey feedback, do show that the course was of value. It certainly raised awareness amongst educators, students, educational technologists, librarians and parents alike of the potential mobile apps hold for personalising learning; in addition, not only did it offer technical, logistical and pedagogical support to its own participants, it also inspired others to do the same elsewhere.

Another iteration of this course is planned for December 2016; it will be aimed at educators and educational technologies specifically, rather than at students. Nevertheless, the apps that will be showcased may well be of interest to students and other groups, too. A link to the

2016 course will be made available on <http://www.dit.ie/the12appsofchristmasarchive/> in November 2016. Lessons learned regarding methods of communication and the timing of the feedback survey will be considered during the planning stages.

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Implementing a Communities of Practice model to enhance learning and teaching at a transnational university in China

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Introduction

In this paper, we present a case study of a communities of practice (CoPs) model (Lave and Wenger, 1998) to enhance learning and teaching at a transnational university in China. “Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly” (Wenger & Wenger-Trayner, 2015). A CoPs model was chosen for two main reasons: firstly, to suit a highly diverse organisational structure, in which different academic departments have diverse needs and characteristics, making it difficult to apply a ‘one-size-fits-all’ model; secondly, to allow the Educational Developers in the central unit, called Academic Enhancement Centre (AEC), to tailor their learning and teaching support to such diverse needs. Furthermore, the CoPs model was chosen as an alternative to a centrally-designed workshop model, in which academic staff attend a series of workshops on offer and have their attendance credited. A CoPs model was seen as a potentially more organic and ‘bottom-up’ approach to professional development and learning, as opposed to a more centralised and ‘top-down’ approach. Of course, there are different degrees to this binary and we do not intend to argue for one or the other. Rather, the intention is to implement a CoPs model that complements other forms of professional learning at the university.

This case study outlines the rationale behind this approach at Xi'an Jiaotong-Liverpool University (XJTLU), a joint venture between Xi'an Jiaotong University in China and the University of Liverpool in the UK, characterised by a diverse international academic staff. It further reports on the early stages of implementation and discusses some of the initial challenges encountered. We draw on Wenger and Wenger-Trayner's (2016) ‘value creation framework’ to argue that, while traditional forms of professional development often stay couched in potential value, a CoPs model promises to move professional learning beyond immediate and potential value towards applied, realised, strategic, enabling and ultimately transformative value (Wenger, Trayner and de Laat, 2011).

Organisational context – Xi'an Jiaotong-Liverpool University

According to its vision, Xi'an Jiaotong-Liverpool University (XJTLU) is a research-led international university, based in Suzhou, Jiangsu Province, China. The university was jointly founded in 2006 by Xi'an Jiaotong University (China) and the University of Liverpool (UK) and it opened its doors to about 160 students in September of the same year. As an independent Sino-Foreign cooperative university, XJTLU captures the essence of both prestigious parent universities and was the first one of its kind to be approved by the Ministry of Education in China. Currently, it has circa 10,000 registered students on over fifty undergraduate and postgraduate degree programmes. Since XJTLU is an English as a Medium of Instruction (EMI) University, the majority of its degree programmes are delivered

in the English language, with exceptions for those modules required as part of the Chinese degree.

As this is a research-intensive university, learning and teaching processes tend to be juxtaposed with research and not treated as of equal worth and are thus often regarded as secondary issues by the large majority of faculties, which tend to be primarily concerned with developing their discipline-based research profiles. There is thus minimal evidence of learning and teaching communities across the University. The AEC development programmes are seen by many as a requirement, rather than as an opportunity to explore learning and teaching pedagogies and methodologies with a view to improving the quality of teaching and, as a result, the learning experience of students. Within such a context, the adoption of a CoPs approach, the better to support professional development and learning within an informal discursive setting at departmental level, faces a considerable challenge in that it may be viewed sceptically by many Heads of Departments as 'just another meeting to attend'. Furthermore, XJTLU is a transnational university with a large influx of international staff from wide-ranging educational backgrounds and environments who bring with them very varied preconceptions about learning and teaching, those quite often misconceived or misunderstood in relation to the cross-cultural context in China, which presents some unique challenges (Jin and Cortazzi, 2006). Moreover, in the Chinese higher education context, there is little evidence of CoPs being used before now, even if there they have been trialled in other professional environments (Hasmath and Hsu, 2015; Zhang and Watts, 2008).

In an attempt to foster a better understanding of the importance of learning and teaching and CoPs across the university, the AEC decided, as a starting point, to make CoPs, and social learning more broadly, the primary focus of the Annual Learning and Teaching Colloquium, which was expected to engage senior management simultaneously in the process. Ultimately, the goal was to develop a culture of continuous organisational learning.

A communities of practice model as a pedagogical approach to organisational learning

On the surface, a CoP seems like a straightforward concept, but this may be both a strength and a weakness, with some readily grasping its nature and others oversimplifying it as a term suitable for any group of people getting together. It is not quite as simple as the latter. The concept was originally coined by Lave and Wenger (1991) who positioned learning as "an integral and inseparable part of social practice" (p. 31), implying that CoPs form spontaneously in organisations and cannot be 'created' from the top by management. The 'practice' element of a CoP is a crucial part of the concept and ensures that the learning is 'situated' (Farnsworth, Kleanthous and Wenger, 2016). In Sense's (2015) words, "situated learning actually evolves (explicitly or implicitly) through the learning processes of observation, dialogue, storytelling and conversations between people as they participate and interact within a practice, and can be considered in more pragmatic terms as learning-on-the-job" (p. 288). The emphasis on 'situated learning' means that no two CoPs are the same and that they invite differing levels of participation that evolve over time as relationships are developed and strengthened (Gullick and West, 2016). In terms of organisational learning, CoPs are thus about situated learning, mentorship, and building capacity (Wenger, McDermott and Snyder, 2002). From the point of view of the Academic Enhancement Centre

at XJTLU, this raises the question: Can CoPs be ‘created’ in a structured manner as part of an organisational professional development strategy?

As Macpherson and Antonacopoulou (2013) note, “CoP was not originally intended to describe the formulation of groups that management creates, but that does not mean management cannot support an environment in which they might flourish” (p. 267). Similarly, Sense (2015) draws attention to the intentionality of establishing what he calls a ‘CoP vessel’ to “help stimulate and facilitate social learning” (p. 287), whereby ‘intentionality’ refers to a deliberate structural approach to organisational learning with CoPs as the vehicle. This is a crucial element and draws attention to the idea that it is necessary for “[CoPs] formation and persistence that appropriate stimuli and conditions and resources are established to support [their] development” (Sense, 2015, p. 289). If CoPs are to thrive, the onus is therefore, to some extent, on management to provide such conditions and resources and a central unit, such as the Academic Enhancement Centre at XJTLU, can play a potentially important role in liaising with senior management on the one hand and academic staff on the other. However, as Macpherson and Antonacopoulou (2013) rightly point out, “the strategic adoption of CoPs is unlikely to go uncontested and they may not operate as intended, in practice” (p. 266). The case study of the initial establishment of CoPs at XJTLU is making this very clear. However, this is precisely the point of an approach to continuous organisational learning that deliberately steps away from a centralised one-size-fits-all approach. Contestation in this context is considered healthy rather than problematic.

In stepping away from a centralised, workshop-based approach, Wenger and Wenger-Trayner’s (2016) ‘value creation framework’ is considered to help address the issue of ‘value’ and to provide a framework to demonstrate the potential value of a particular CoP or whether it ‘works’. The framework has seven different values: 1) *immediate value* – immediate experience while engaging with the community; 2) *potential value* – what the learning of the community potentially produces; 3) *applied value* – practical application of the learning; 4) *realised value* – the difference the community is making; 5) *transformative value* – the learning of the community is itself transformed through continuous evaluative cycles; 6) *strategic value* – ability of the community to engage in strategic conversations to get what it needs from management; 7) *enabling value* – support processes that make the community’s life possible. The value creation framework includes four evaluative key questions for each of the seven values, covering ‘aspirations’ (What would the ideal look like?), ‘conditions’ (What would the ideal conditions be?), ‘indicators’ (What indicators should be used for success?) and ‘data’ (What kind of data is needed to show that success is achieved). From our point of view, the attraction of this framework is that it gives us an instrument to demonstrate value to those who would need to support CoPs at XJTLU.

Creating the conditions for the establishment of communities of practice at XJTLU

The original conceptualisation of CoPs included three key concepts: identity, participation and governance (Lave and Wenger, 1991). In terms of participation, Macpherson and Antonacopoulou (2013) argue that “the deployment of systems and structures by strategic management sets the landscape on which participation occurs” (p. 269). Since its early conceptualisation, Wenger *et al* (2002, p. 13) have further developed seven principles for fostering CoPs’ energy and internal direction: 1) designing for evolution, 2) opening dialogue

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between insider and outsider perspectives, 3) inviting differing levels of participation, 4) developing public and private spaces, 5) focusing on value, 6) combining familiarity with excitement and 7) creating a rhythm for the community. From an implementation point of view, these principles help to keep us, as Educational Developers at XJTLU, focused on the cultivation of CoPs, and draw attention to AEC's role of *fostering* CoPs, rather than *directing* them. The CoPs that have been established so far (which will be discussed in the next section) show this very clearly, as they are very diverse, but are developed from the bottom up, a process fostered by AEC.

XJTLU's strategy for the implementation of CoPs was based on a desire by AEC to develop a more structural approach to supporting learning and teaching at XJTLU and to support the implementation of an XJTLU Continuing Professional Development (CPD) framework. The fundamental element of the strategy was the establishment of cluster-based⁴ CoPs, which would be driven by 'CoP Cluster Leads', and facilitated by an AEC Educational Developer. As they would be 'embedded' in clusters, rather than represented in a hierarchical manner, the CoPs could then function as an opportunity for the AEC, through its Educational Developers, to identify and disseminate, in a structured manner, good learning and teaching practice.

The strategy was designed to address three key concerns:

1. that, excluding the Certificate in Professional Studies (CPS) programme and the Postgraduate Research Skills Development (PGR) programme, educational development in general is currently too sporadic and reactive, rather than structural and proactive;
2. that there are limited opportunities for 'bottom-up' ownership of, and input into, learning and teaching;
3. that it is currently difficult to track progress when it comes to good practice in learning and teaching.

The suggestion was to establish a CoP in each cluster: six in total, plus one in the Language Centre.

The CoPs would function in the following manner:

- Each CoP would be driven by a Cluster Lead (appointed by the Cluster Head, based on expressions of interest);
- Membership of each CoP would consist of the Cluster Lead, the AEC Educational Developer and all lecturers/teachers who wanted to join;
- They would meet once a month for two hours to discuss a particular learning and teaching theme and follow a 'domain', 'practice', 'community' pattern (Wenger and Wenger-Trayner, 2015; McDonald, 2012);
- Each would function as a CoP (NOT a formal committee);
- Each would be facilitated initially by an AEC Educational Developer;
- Each month, a learning and teaching related theme would be identified for the next session;
- This would be a 'bottom-up' process, but Educational Developers would be able to communicate and incorporate 'top-down' requirements;

⁴ XJTLU does not use the term 'Faculties', but instead uses discipline-based Departments that are grouped into 'Clusters', which are very similar to Faculties at other universities.

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- Good practice would be both identified during the CoPs and expected to emerge from the CoPs. The dissemination of this practice would follow existing XJTLU structures, e.g. Learning and Teaching Colloquium, Teaching Development Fund (TDF), Teaching Conference Fund (TCF), the CPS Programme, the PGR Programme (which included professional development for Teaching Assistants), etc.

Initially, CoPs were introduced in the form of a specific CPS workshop, which was followed by the Annual Learning and Teaching Colloquium soon after. As noted above, to launch the process, CoPs were a key focal point of this Colloquium in 2016, which featured a number of workshops and a keynote address/seminar by Etienne Wenger and Beverly Wenger-Trayner. This was supported by senior management to build initial momentum for the implementation process. In addition, this was particularly important in an institutional context where staff come from a wide variety of different national contexts, creating the potential for very different understandings of what a CoP might be or how it might function. The Colloquium was therefore seen as an opportunity to develop a shared understanding about the meaning and application of CoPs.

Building on this momentum, XJTLU plans to foster the establishment of cluster-based CoPs, a process that is now under way.

Evaluating the start-ups – an initial evaluation using the Value Creation Framework

Heads of Department (HoDs) were initially asked by AEC to identify key people in their clusters who could act as potential 'leads' for the development of CoPs within different academic disciplines here at XJTLU. This was a difficult balancing act, in that it created an immediate tension between 'top-down' decision making, and 'bottom-up' organic development. However, at this early stage, we made the strategic decision that it was important for HoDs to be involved in the process rather than alienated from it, as space needed to be created for the 'bottom-up' process to occur, paradoxical as that may sound. The first call for engagement produced four potential leads and the Educational Developers within AEC arranged to meet with the named persons in order to explore/support the possibility of encouraging people to come together to discuss shared challenges they had within their own particular contexts. Follow-up conversations have revealed that all four of these identified leads are now at different stages of development of their CoPs. Confirmation of similarities and differences of experience was not unexpected and highlighted the multitude of potential constraints and limitations of such an approach.

While one Cluster Lead has had some initial success with getting colleagues and peers together to explore the development of a CoP within their own context, another has struggled to do so. Yet another has made a first attempt to develop a cross-disciplinary CoP in his Cluster. AEC helped to facilitate the initial CoP sessions, but we allowed the extent of our involvement to depend on the Cluster Leads, so AEC's involvement varied between hands-on training and mentorship and light-touch facilitation. Using the 'Value Creation Framework', we have been able to evaluate the 'start-up' projects/experiences.

The immediate value of setting up CoPs was predominately viewed as a way of better understanding current cross-discipline methodology and of sharing/discovering good

practice, in terms of what works/does not work in individual situations. Within the Language Centre at XJTLU, agreement was reached about the conditions needed for this venture to be successful and face-to-face meetings for two hours each month were decided upon. The attendance at the first meeting was healthy and the conversations exhibited energy and engagement between members. This engagement translated into an agreement by a number of members to take ownership of one of the identified issues of concern to the community (e.g. student engagement, or lack thereof; communication within and across departments); other members agreed to support them. One of the constraints that emerged was the timing of this first meeting and, upon reflection, the lead person realised that this was a very busy time for colleagues in their work schedule. This may explain why follow-up conversations have been minimal, as heavy teaching workloads present a significant challenge to the building of momentum.

The potential value of these CoPs is the aspiration to discover new approaches to dealing with the challenges faced in everyday practice and to apply new ways of doing things to enhance teaching and thus the learning experiences of students. Requests for implementation assistance from AEC were sought and provided, but it is not the intention of AEC to be the drivers or maintainers of these groups, as this would ultimately be unsustainable and ineffective. Action planning and long-term implementation should be driven from within the community itself. However, in order for this to be successful, acknowledgment and support from senior managers within each cluster and allocation of time within staff workloads (Sense, 2015) for these activities to take place are essential. In order to enable cross-fertilisation across XJTLU at a more strategic level, acknowledgement in the form of a regular agenda item for feedback on progress should be built into the regular University Learning and Teaching Committee structure.

Perhaps the most important lesson learned overall was the amount of support that the lead person needs in order to carry out her/his role. This applies in particular to the initial stage. The lead person for the Science Cluster, for example, has requested financial support for the initial CoP meeting, so that refreshments can be served as part of establishing a semi-informal environment. Interestingly, this cluster lead has also explicitly requested AEC members *not* to be present at this initial meeting so as not to create the impression that it is an initiative driven 'from above'. For those cluster leads that struggle to build momentum, an organically-occurring solution has been the development of a CoP for all leads, exploring common challenges that they have encountered and allowing them to share different approaches to some common problems. It is crucial that these leads feel tangible support in carrying out their role.

Whilst there is definitely some palpable initial optimism and excitement about the CoP approach, there are some significant challenges to be addressed, which include:

- the transitory nature of staff at XJTLU, which is a challenge to continuity and consistency;
- the lack of reward and recognition for investing time and effort in this initiative, especially in the case of Cluster Leads.

Some other factors that have been identified as important in the sustainability of both individual CoPs and the overall CoP approach at XJTLU include:

- the need for encouragement to develop and sustain feedback loops within the process (This should include a clear evaluation process to ascertain why CoPs work in some clusters and not in others and subsequently to develop ways of encouraging participation and develop appropriate support.);
- the acknowledgement that there are other CoPs happening quite informally across XJTLU, whether or not they are labelled as such by AEC (The work of the AEC team may be to identify such groups and encourage them to create a feedback loop for the teaching and learning enhancement work they are already involved with, so that we may have a fuller picture of CoP activity across XJTLU.);
- a regular CoPs feature within the AEC e-Newsletter, as a way of disseminating and nurturing this new way of working at XJTLU.

Conclusion

Overall, while there are some encouraging initial signs that the CoP approach may develop into a sustainable organisational learning culture at XJTLU, there are significant challenges ahead. The potential lies in moving beyond the initial two stages ('immediate' and 'potential' value) of Wenger *et al's* (2011) value creation framework. The expectation and hope at XJTLU is that, once they are fully established and functioning, the various CoPs, whatever discipline- or cluster-based form they take, will be able to deliver applied, realised, strategic, enabling, and ultimately transformative value. Educational development will then be a matter of 'guiding on the side' towards continuous improvement in learning and teaching in a challenging transnational higher education environment.

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University, e-portfolio and students: perpetuating a sense of failure?

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Abstract

Newman University embraces partnership work according to the principles of a *pedagogy of partnership*, evidenced through development of Student Academic Partnership, Student Research Partnership and Student Community Partnership projects.

Driving enhancement of digital literacy in its graduates, the Youth and Community Work programme embraced the open source e-portfolio platform Mahara for use on study skills and placement modules. Staff, however, became aware of the difficulties encountered by students using Mahara and embarked on an initial 'Student Academic Partnership' project to unmask these and inform teaching development. This was subsequently followed by a 'Student Research Partnership' project that investigated specific difficulties for students with dyslexia.

The projects found that students valued peer-to-peer support rather than online support resources, and uncovered a variety of navigational issues that reinforces a sense of failure (Nosek, 1997), hindering progress and ultimately limiting opportunities for students creatively to express knowledge and understanding of a given subject.

Newman University and Student Formation

Newman University is a Catholic university and, as noted in the 2016/17 Access Agreement (p. 1), continues to exceed benchmarks for recruiting students from under-represented groups. The University directs research towards a demonstrable impact on society, whilst making Higher Education accessible to members of minority groups customarily deprived of it, and aims to achieve this through promoting student formation, defined as:

- education for a reflective mind, for well-being and for human flourishing;
- within a community of intellectual enquiry, which is
- dedicated to the construction of the common good, the transformation of its members' lives and of the world they serve and engage with.

(Newman University, 2014, p. 3).

One of the ways in which student formation is embraced is through the notion of a *pedagogy of partnership* (Newman University, 2016) that draws from Catholic social teaching and emphasises Paulo Freire's idea of learning through critical co-investigation, where student and tutor are 'jointly responsible for a process in which all grow' (Freire, 1996 p. 61). Newman's philosophy therefore seeks to build on his idea that leaders or teachers should not seek to speak *to* or *for* people but *with* them; furthermore, it promotes democratic engagement and co-operative working. This philosophy has more recently found favour with

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the National Union of Students (NUS), as a critical response to the marketisation of higher education. Its *Manifesto for Partnership* (NUS, 2015) rejects both the market and apprenticeship models of Higher Education in favour of a model of partnership where students are neither customers of Higher Education nor passive recipients of it. Instead, they are active partners in the life and learning of the University and partnership in this sense is the goal of student engagement. Alongside the NUS, the Quality Assurance Agency (QAA) has embraced the concept of partnership in its element of the Quality Code on student engagement, stating that 'Partnership working is based on the values of: openness; trust and honesty; agreed shared goals and values; and regular communication between the partners' (QAA, 2012, p. 5).

Influenced by Freire, the NUS and the QAA, Newman University thus characterises the *pedagogy of partnership* as:

- building from a shared hope [How can we improve our understanding and action?];
- establishing a dream of transformation [What is the best we can be?];
- promoting respectful dialogue [hearing under-represented voices] about our lived experience and espoused values;
- involving co-investigation and shared reflection through problem-posing, curiosity, rational exploration and creativity;
- seeking the co-construction of solutions aimed at a better way of being;
- an ongoing, transformative and collaborative process of being and becoming.

(Newman, University, 2016)

Evidence of this philosophy can be seen in the development over the last three years of Student Academic Partnership, Student Research Partnership and Student Community Partnership projects at the University. These wide-ranging projects have enabled staff to work with students to further their own understanding of student experience and thereby to enhance their teaching practice.

Promoting digital literacy in Youth and Community Work

For many years now, a fundamental element of all undergraduate degree programmes at Newman University has been a compulsory accredited work placement, either integrated in blocks throughout each level of study or completed as a specific module at level five. Historically, the traditional (and often lengthy) paper-based portfolio assessment was used; however, this was replaced on a select number of programmes with the open source e-portfolio platform, Mahara. There has more recently been an institutional drive towards utilising Mahara on all work placement elements across the institution. This was seen as affording student flexibility and creativity through promoting use of a diverse range of media in assessment, rather than the traditional written form, potentially to bridge the 'digital divide' throughout the curriculum.

With the aim of improving the varying levels of digital literacy of students, Mahara was piloted in 2013/4 within the Youth and Community Work programme and across study skills and work placement modules at levels four and five. Here, students were asked to compile evidence from study skills development activities and their work placements across the year(s). One of the benefits of Mahara is that a 'secret URL' can be shared with others,

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allowing them to access student-selected and built resources contained within a specific page. This was envisaged as providing the opportunity for students to develop a digital CV in order to enhance their postgraduate employment prospects; it remains especially pertinent for Youth and Community Work students who need to be 'reflexive' practitioners. Part of all the modules utilising Mahara requires students to reflect on themselves continuously as they develop over the programme and during placement experiences. They thus can provide evidence for supervisors and potential employers of how they have been able to both 'reflect-in- action', and 'reflect-on-action' (Schön, 1983). This is achieved by including these reflections within a digital CV that utilises the 'secret URL'.

As this was an accredited Youth and Community Work programme, it was necessary to consider the needs of the accrediting body (National Youth Agency), by ensuring conformity to the benchmarks of both National Occupational Standards (NOS) and Quality Assurance Agency (QAA), as well as the needs of employers. Research by Davies and Cranston (2008), funded by the NYA (UK), found that, whilst Youth Work can play an important role in supporting young people to navigate the risks and exploit the opportunities available to them through social media and digital technologies, the professionals working with them might not have access to the technology themselves, nor the skills or knowledge base to perform this important informal educational role. Ensuring that Youth and Community Work graduates are digitally versatile therefore underpins the drive to make use of Mahara within the programme.

Despite using Mahara to increase flexibility and creativity, staff became more aware of the possible perpetuation of a digital divide caused by the digitisation of learning in Higher Education: the marginalisation of those with limited access to ICT for linguistic, social, educational, economic or geographical reasons (Selwyn and Facer, 2007). Indeed, following the first semester pilot in 2013/14, it was noted that students with dyslexia in particular, some 50% of the programme's cohort, struggled to access and use Mahara effectively. Research maintains that students with dyslexia derive particular benefit from the use of assistive technology, because it can help with organisational difficulties, improve access to text and facilitate engagement with curriculum (Mortimore and Crozier, 2006, p. 246; Phayer, 2010, p. 29; Eide and Eide, 2011, p.182; Gregg and Banerjee, 2009, p. 271). However, studies also argue that assistive technologies alone cannot overcome barriers to accessing, engaging with and organising information for higher education students with dyslexia, as such other barriers as expectations and training requirements may restrict levels of engagement (Hanafin *et al*, 2007, p. 441).

These difficulties may be exacerbated by a lack of confidence with new technologies or the requirement to engage with technology in a more integrative way, which can in turn have impact on academic performance and engagement (Pino and Mortari, 2014, p. 347). Furthermore, despite their recognisable reasoning strengths, information overload for university students with dyslexia may present them with significant challenge in differentiating and prioritising the information they learn (Bacon and Handley, 2014, p. 341) as a consequence of difficulties within the cognitive domain of working memory (Pickering, 2012, p.11; Pickering, 2005, p.139; Velluntino and Fletcher, 2005, p. 367). Thus, these underlying cognitive difficulties compound their ability to access and consistently engage with assessments based within an e-portfolio environment. However, Hughes *et al* (2010, p. 59) argue that institutional use of Mahara as an alternative assessment tool could be refined,

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through personalisation opportunities within the e-portfolio structure, as an addition to the more experiential and systematic interventions for university students accessing dyslexia support. Thus, it became apparent that teaching and support staff needed to understand the specific barriers for such students at Newman University, to enable their successful and continuing use of the technology.

Using Critical Pedagogical and Andragogical approaches to learning

The foundation of the teaching context within the Youth and Community Work team is a Critical Pedagogical approach, placing transformative learning and education at the centre of the students' experience (Brookfield, 2003). This is in part owing to the educational role that they themselves will take as practitioners during and beyond their time within Higher Education. As the programme is practically applied, assessments also need to be practical and embedded in the students' current and future work as Youth and Community Workers. Students draw on the notion of 'engaged pedagogy' which requires praxis: the integration of theory and practice (hooks, 1994; 2003).

Whilst there are various competency-based benchmarks as previously mentioned, National Occupational Standards (NOS) and Quality Assurance Agency (QAA) may, in part, provide some guidance on enabling students to develop into reflexive practitioners. Threshold concepts (Meyer and Land, 2005; 2006) are used to help students navigate from a basic, compartmentalised understanding to one that is 'foundational, coherent and integrative, 'permeating the acquisition of new knowledge and ideas' (Meyer and Land: 2006b). Using Mahara as an assessment tool supports students to be creative in how they demonstrate their theory and practice, so that they can align the professional competencies, threshold concepts and skills that Richardson's (2013) model of 'measuring the immeasurable' notes as harder to assess, yet more important for students in a networked world.

Despite prior educational barriers to learning, students opt in to Dyslexia Support at Newman University. These decisions are typically informed by students' relatively new identity of dyslexia and the desire to drive their learning forward. Approaches to facilitate higher learning are predicated upon an andragogical stance, which assumes that the students' impetus to pursue university studies is informed by:

- the view that students have decided they need to know more about a self-selected topic of study;
- the learner has established a concept of self; the ability to overcome prior educational experiences;
- a readiness to learn;
- a "life-centred" approach to *progressing* in response to educational engagement;
- individual motivational factors;
- recognition of individual strengths contributing to resilience and motivation.

(Knowles, 1990, pp.57-63; Hunter-Carsch and Herrington, 2001)

By recognising and developing known strengths, rather than reinforcing prior negative experiences, students with dyslexia at Newman are able to engage in independent learning. They determine their own objectives and evaluate their academic development effectively within a support context in order to build additional strategies to complement or tweak

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existing compensatory strategies (Wilson and Savery, 2012; Eide and Eide, 2012; Burns, Poikkeus and Mikko, 2013; Glazzard and Dale, 2013).

Thus, the use of the Student Academic Partnership and Student Research Partnership initiative fits with the ethos of the approaches outlined above.

Students in Partnership: Implementation

In semester two of 2013/14, a Student Academic Partnership project within Youth and Community Work commenced. This sought to investigate the barriers to using Mahara, with the intention of using the findings to underpin future developments. Subsequently, an institution-wide Student Research Partnership project built on the original Student Academic Partnership, but specifically focused on the barriers and needs of students with dyslexia.

The first Student Academic Partnership project focused on the generic experience of using Mahara for all students on the Youth and Community Work programme. Students who had initially found Mahara difficult to navigate and yet had come to value its use were approached to take part; one level five student was keenly interested and signed up to the partnership. They in turn recruited two further students, who created their own informal space in order to talk to other students and seek information about their concerns regarding use of Mahara. Initially, 'Whatsapp' was used to communicate questions the Youth and Community students had identified as an issue, and many students voiced their concerns in this way. Some students also took it upon themselves to provide one-to-one support to others who acknowledged that they would benefit from additional help.

Students reported that they were uncertain about where to access help when using Mahara, the position of the 'Help Page' being considered *unhelpful* and not the first place they sought assistance. Students also felt less confident in using support from the online forum and indicated a preference for peer-to-peer support. Interestingly, the student partners themselves became informal mentors to other students through tacit learning support. This created an awareness of the benefits extra support for students would bring. What became clear from the discussions between students was that those with dyslexia were reporting greater difficulty in using Mahara.

In response to this initial project, the e-learning department at Newman University minimised specific Mahara features which students found problematic and streamlined the Help section so that it was more user-friendly. In addition, the approach to teaching and supporting Mahara use was adjusted to include more practice time in seminars and scheduled drop-in sessions, and student mentors were recruited to support students using Mahara for the first time.

Following the initial Student Academic Partnership, a Student Research Partnership project emerged that sought to investigate the particular barriers to using Mahara for students with dyslexia. This involved a variety of staff working together with a student with dyslexia. The student worked in partnership on a weekly basis with a specialist dyslexia support tutor to reflect on, evaluate and engage with Mahara. This approach ensured consistency, space and time for reflection / evaluation and cooperative planning, by actively using Mahara together in order to discuss and identify barriers: these revealed challenges not only with the technology, but also with following what were perceived as complicated sequences in order

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to adapt the portfolio. Indeed, recalling sequential information, organising and prioritising it in order to engage with it frequently constitute a challenge that characterises dyslexia (Eide and Eide, 2012; Berninger, *et al*, 2006; BDA, 2011; Shah and Miyake, 1996; Cornoldi, De Beni and Pazzaglia, 1996). Once key difficulties were identified, a concept map outlining how to navigate and create pages within Mahara was created. The concept map acted as a visual aid to stimulate narratives within semi-structured interviews conducted with six university students with dyslexia.

Emerging themes

Themes emerging from the project suggest that a core barrier to using Mahara effectively is rooted in the inconsistencies in sequential memory of participants identified with dyslexia, with significant impact on navigation. This can be identified across the different levels of study as seen below:

...Its overly complex and it doesn't need to be! It's got loads of different links on there

...if you're not sure of where you are looking... you looking in all the wrong places....

(Female student, Level Four)

...just dumb it down a bit better...it shouldn't have to be that you have to upload more

...it gets confusing....

(Male student, Level Six)

...it's a bit confusing....where've your files actually gone?

(Female student, Level Five)

This challenge further impacts significantly on critical engagement with the Mahara tools, as each one requires the learner to engage with a series of additional steps.

The benefits of assistive technology for students with dyslexia is well documented (Mortimore and Crozier, 2006; Phayer, 2010; Eide and Eide, 2011; Gregg and Banerjee, 2009). However, in terms of Mahara, the systems for adding new features are not consistently mapped against more familiar and more frequently used software, which causes significant accessibility issues for participants. This can be seen in the exchange between a participant and the student interviewer:

Participant: One of the additional reasons I haven't used it...I don't know how to use it fully for me to be able to see how my assignment is progressing. I need to do it in a Word document....

Interviewer: ...something you're already familiar with?

Participant: Yes

(Female Student, Level Six)

The teaching staff initially perceived that Mahara would enable students with dyslexia to make the most of their strengths by uploading visual and audio academic work. In addition,

within dyslexia support, students have learnt to use dictaphones to record auditory reflections and other academic work. It was anticipated that this would be used as an alternative way of demonstrating knowledge. However, there was an additional challenge in this:

...we've got a certain amount of storage and pictures work for me but [they] take up a lot of data space! And if you're uploading visuals ... into your memory and data space as dyslexic students, we could possibly do with more memory?
(Female student, Level Five)

Therefore, because students with dyslexia typically have strengths in visual processing, they welcome the opportunity to present their ideas in a visual way. Indeed, overcoming the auditory working memory difficulty is also supported by the use of a dictaphone to record their thoughts as they have them, thus removing the barrier of having to type thoughts out. So it is that limitations of data storage and methods of mitigating these by compressing files add a further barrier to Mahara use.

As noted previously, university students with dyslexia can suffer information overload despite recognisable reasoning strengths. The quoted comment below reflects the initial confusion of students with dyslexia when using Mahara and demonstrates the determination, reasoning strengths and resilience used as coping strategies to manage the barriers:

...Its very complicated. If you don't know where you are going or what you're doing! It was only through trial and error that I was actually able to achieve what I wanted to achieve from Mahara. If I wasn't as curious as I am then I probably wouldn't have been able to produce what I did on Mahara....
(Female student, Level Four)

These underlying cognitive difficulties compound the ability to access and consistently engage with assessments that are based within an e-portfolio environment. Consequently, the features within the Mahara menu, although many and varied in terms of allowing students to present their understanding through a variety of formats, require the recoding of icons and labels. This recoding proves to be highly inconsistent for students with dyslexia, contributing to self-doubt and disengagement with the e-portfolio. Therefore, for them, the potential creative opportunities to demonstrate knowledge and understanding are superseded by incompatible labelling, the structural make-up of the pages and the two-dimensional nature of the portfolio.

Navigation, Navigation, Navigation

Each session within Mahara means starting the navigation process afresh in order to find the pages and the items within the pages within individual e-portfolios. This seems to lead to replication and repetition of ideas in multiple pages, with significant ensuing impact on editing requirements. Students often suggested that they should write out steps or create maps in order to navigate to previously-uploaded materials. Furthermore, the additional time investment required to begin each page for each portfolio means that students have to reacquaint themselves with the previously imposed structure of pages before creating new

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ones in order to remind themselves of their progress. Whilst there are known benefits to overlearning for students with dyslexia (Reid, 2016; Price, 2013, p. 57), the learning opportunities in engaging with the portfolio in this manner are minimal as the starting point doesn't build further knowledge, but does, for these students, reinforce a sense of failure (Nosek, 1997) that hinders progress and limits opportunities to express creatively knowledge and understanding of a given subject. However, it must also be noted that through this process of using, discussing and reflecting on how to access and engage with Mahara, students are finding that they are developing more strategies to manage navigation. Dialogic talk supports students involved in this study to bypass some of the impact resulting from working memory inconsistencies and appears to be suggesting that resilience ultimately is driven by the struggle and the opportunity to discuss the nature of the struggle with a learning partner. Moreover, a constructive, problem-solving approach to engagement with Mahara has also, in the form of recommendations for colleagues across the institution, initiated suggestions for how to improve the portfolio structure in order to reduce barriers to learning.

Evaluation and limitations

A potential limitation of this study is that students without dyslexia were not involved. As a result, it is impossible to know whether or not these user experiences are disparate from neurotypical students using Mahara as an assessment tool. Nonetheless, these initial findings are contrary to the *easy fit* with an e-portfolio as an assessment tool which also facilitated independent learning opportunities expressed in Hughes *et al*, (2011, p. 59). A number of factors may contribute to this, particularly the approaches to dialogic engagement when using the e-portfolio through forums. Furthermore, in line with Williams *et al*, (2014, p. 622), despite the difficulties that students in this study encountered, e-portfolios as an assessment tool must not be discounted: They offer valuable means of alternative assessment for students with dyslexia because there is potential to embed a more inclusive, personalised and dialogic means of critical engagement with their subject areas. This notion is complementary to emerging themes, which suggest that there are staff development and andragogical considerations that need to be addressed in order to maximise the potential benefits of using Mahara as an assessment tool for university students with dyslexia.

Recommendations and outputs

Following on from completion of the Student Research Partnership project (15/16), developments at Newman University have included:

1. construction of an institutional Mahara Working group to discuss the challenges, with a view to overcoming barriers to its use;
2. internal investigations by the e-learning team at Newman into any adaptations to the software that can be made in-house;
3. dissemination of the findings and those adaptations that require external implementation shared with the software publisher as requested - a response to the initial Student Academic Partnership (13/14) project.
4. creation of two internal resources:

- a. a visual resource to support use of Mahara is in production, with a view to adding this to the home page of Mahara as a learning and teaching resource for both staff and students.
- b. a Mahara collection of resources produced collaboratively during the course of the research project.

In agreement with Hughes, *et al* (2010), how Newman University further develops its use of Mahara as an alternative assessment tool may be potentially refined through personalisation opportunities within the e-portfolio structure, alongside more experiential and systematic interventions for university students accessing dyslexia support.

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Engaging and Empowering Student Representatives as Agents of Change at The University of Nottingham Ningbo China

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Abstract

The Learning Community Forum (LCF) is one of three student feedback mechanisms at The University of Nottingham Ningbo China (UNNC). The other two – Student Evaluation of Module (SEM) and Student Evaluation of Teaching (SET) – are administered by the University, while the LCF is a student-led forum where views regarding the provision of teaching and learning in general are collected and voiced. Whilst the LCF may potentially identify issues that are otherwise overlooked by university-sanctioned surveys, it is confronted with various challenges. This paper investigates the challenges and problems encountered by LCF student representatives by looking at two case studies: the LCFs of the Language Centre (LC) and of the Department of Mechanical, Materials and Manufacturing Engineering (MMME) at UNNC. The study aimed at identifying areas that worked well and those that needed improvement through interviews with student representatives to provide input for the design of a Nottingham Advantage Award (NAA) module. The NAA, as an instrument to address those identified challenges and problems, provides the following: 1) formal recognition of student contribution to teaching and learning; 2) training and relevant skills to empower student representatives as agents of change; 3) increased future employability for students through encouraging active reflection on their experience.

The Learning Community Forum at The University of Nottingham Ningbo China

Function and Relevance

The Learning Community Forum (LCF) at The University of Nottingham Ningbo China (UNNC) is a student-led forum that takes place at School-level once every semester during term time, with, in attendance, at least an academic Senior Tutor or an LCF staff representative representing the School. Unlike the other two University feedback mechanisms – Student Evaluation of Module (SEM) and Student Evaluation of Teaching (SET) – which take the form of structured questionnaire surveys for every registered module delivered by the School, we encourage students to chair the LCF meetings and minute them. If students do not feel comfortable doing so, an academic member of staff may chair the meeting and, in some schools, the minutes may be taken by an administrative member from the respective Faculty Offices. Topics discussed within the LCF meetings typically involve wider systemic issues that could directly or indirectly influence students' experience and learning process, as opposed to the relatively narrower focus of individual modules.

Those topics may include the provision of facilities, e.g. IT and library services, or they may reflect concerns that are specific to each cohort: for example, final year students might be concerned about internships and career advice whilst Year 2 students might wish for more advice on student exchange abroad. Because of this, there is considerable latitude in the scope of discussion within the LCF forum. The role of the Senior Tutor or the LCF staff

representative is either to address those points within, where possible, the meeting itself or, where they require further deliberation, to raise them at subsequent School meetings to determine the appropriate response (whether this involves a change in existing practice or policy) before communicating the School's response by reporting back to the student body.

Because of its nature as a student-led forum, rather than a top-down approach to collecting feedback, the success of the LCF in delivering change depends directly upon the quality and relevance of the feedback that is brought to the table by student representatives. And, unlike the generic questionnaire surveys that are uniformly administered throughout the university, the LCF has the potential to raise issues that might otherwise fall between the cracks – this is why the University takes LCF feedback very seriously. At the end of each academic year, a meeting between the Vice Provost for Teaching and Learning, the Campus Senior Tutor and the Faculty Directors of Teaching is held to review the year's LCF minutes across all faculties, identifying key trends and issues in feedback/comments to report back to the Campus Teaching Committee.

Challenges and the NAA as an instrument to address them

As mentioned above, there is considerable room for uncertainty and ambiguity, since the concerns raised within each School may differ widely; variation in student enrolment numbers within each School further compounds this. Given that there is a total of eighteen LCFs at UNNC, the major challenge here is to ensure that the LCF platform delivers equitable levels of student engagement and consistency in across-the-board feedback that may be actionable.

Three key factors make this difficult to achieve in practice:

Firstly, because the Students' Union (SU), which is in charge of training LCF representatives through its Education Network, is a student society at UNNC and not a professional body (unlike the SU in the UK), there is some limitation to the quality of training and recruitment services that could be provided for and expected by its members;

Secondly, student representatives may become demotivated and subsequently disengaged from the process if or when they do not see the University take immediate action in response to their feedback, as may be the case if issues raised at LCF within a given academic year are addressed and implemented only in the following year - systemic issues raised usually involve a change in existing policies or they require formal approval by Management Board because they involve significant expenditure in funding;

Thirdly, cultural differences between UK HE and our students from a Confucianist background should not be discounted, particularly in terms of what a "collectivis[t] and democratic representation" (NUS, 2012: 4) might mean within the Chinese context. This has a direct, negative impact on "the participation of students in quality enhancement and quality assurance" (QAA, 2015: 4) that could otherwise improve their educational experience. The majority of students participating in the LCFs are Chinese. After joining an LCF as LCF reps, they sometimes find themselves confronted by unique challenges (e.g. a general reluctance to voice and identify problems) that are rooted in their cultural and educational background. Compared to Western students, it appears at first sight that Chinese students in general are quieter and less engaged, yet our experience as LCF coordinators showed that these

students *do* want to engage actively in the LCF, though some of them, and especially Year 2 students, feel that they lack the means to do so. For example, some of these students might not only lack confidence to converse in English but might also struggle with writing feedback reports and meeting minutes. Language issues, however, are only part of the problem. In contrast to Western education, that in China places far less emphasis on developing students' independent analytical and critical thinking. When given the task of analysing data and open comments in an LCF survey and then summarising results, Chinese students, often struggling to identify the most relevant data and open-ended comments, ended up by paraphrasing the results in their own words and thus unintentionally preventing them from being actioned.

For these reasons, we needed an instrument or means by which to empower our Students' Union, by enabling it "to contribute to educational and institutional change" (NUS, 2012: 5) and provide students with "an inclusive environment for learning" (QAA, 2015: 4). The Nottingham Advantage Award (NAA) scheme described below offered us the ideal solution for enhancing students' engagement while maintaining the student-led nature of the LCF, as well as aligning it with the UK Quality Assurance Agency indicators (QAA, 2015) by ensuring "that student representatives [...] [had] access to training and ongoing support to equip them to fulfil their roles in educational enhancement and quality assurance" (QAA, 2015: 11). This in turn would serve to create an environment where "students and staff engage[d] in evidence-based discussion based on mutual sharing of information" (QAA, 2015: 12) and give "opportunities for all students to be heard" (QAA, 2015: 10).

To meet these challenges, the NAA scheme appeared to be the ideal solution because of its constructivist nature. According to Otting and Zwaal, "Constructivist views of learning emphasize learning processes in which students actively construct knowledge for themselves in interaction with rich and authentic learning environments. Therefore, pedagogical practices like project work, workplace learning, and action learning, which stress active and collaborative learning activities, might also fit in a constructivist framework." (2007: 172).

The NAA scheme is a cross-campus award (UK, China and Malaysia) that provides accreditation to students learning outside the formal curriculum. Students involved in this scheme gain transferable skills through participation in extra- and co-curricular activities that enhance leadership skills and boost the employability of students by providing them with skills that are not necessarily part of their usual academic learning outcomes (Speight, Lackovic and Cooker, 2012).

In addition to the QAA-related improvements described above, the added advantage of using this instrument to empower our students meant that LCF student representatives would see their contribution formally recognised and their employability improved.

The aim of the NAA is to help students – particularly Chinese students – to develop effective communication and report-writing skills in English by creating an environment in which they feel supported and encouraged. The NAA as a framework further supports students to develop the ability to engage critically with data analysis and open-ended comments in the LCF survey. In this way, the NAA module is committed to help students to exploit their potential in the best possible way.

Research Design

To ensure fitness of purpose as well as relevant student input towards the design of the LCF NAA module that would run in academic year 2015-16, we conducted two case studies within the Language Centre (LC) and the Department of Mechanical, Materials and Manufacturing Engineering (MMME) in the autumn semester of 2014-15, with the aim of identifying the areas within the LCF that were working well and those that needed improvement.

These two units were chosen for the following reasons: the LC teaches five languages (French, German, Spanish, Mandarin and Japanese) to students from such departments as International Communications (IC), English Studies (ES), International Business (IB), International Economics and Trade (IET) and International Studies (IS). In other words, the student mix taught by the LC made up two out of three faculties here at UNNC and was therefore an efficient way to ensure diversity in terms of disciplines and backgrounds. Meanwhile, the Department of MMME (belonging to the third remaining faculty) followed a strict procedure that was clear and explicitly designed with data-collection in mind and was for this reason an ideal choice as a control group. The two units taken collectively represented an exhaustive cross-section of the student enrolment at all three faculties.

For the interviews in both case studies, a questionnaire was set up. The questionnaire for the interviews was designed by the research group and consisted of three parts:

1. The questions in the first part inquired into the motivation and expectations of students before signing up for the LCF;
2. Questions in the second part touched upon issues encountered during the LCF process, such as leadership and team work within the LCF, the support structure and opportunities to develop personal and professional skills, commensurability of workload, the relevance of the LCF and the quality of feedback;
3. Questions in the final part addressed further issues, looking at how LCF reps benefited from their experience with respect to their future career, how the LCF could be made completely student-driven and how junior undergraduates could be encouraged to sign up for the LCF.

This questionnaire was approved via the ethics review process at UNNC. The two case studies are presented separately below with their findings, together with the organisation of existing LCF practices within each unit, problems identified within them and feedback collected through interviews from student representatives. A summary of common issues encountered will be discussed and, following this, the design process of the NAA module will be described to address the issues that emerge from the two case studies.

Case study 1: Language Centre LCF

At the beginning of the autumn semester, the SU recruited student representatives for the Language Centre LCF on a voluntary basis, from different schools and studying one of the languages delivered by the LC. The LCF consisted of thirteen student representatives from Year 2 to Year 4, drawn from five different Schools (IC, ES, IB, IS and IET), and a staff representative from the LC. As the LC is part of the School of International Communications

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(IC), it is mandatory for IC students to study a language component with the LC.

Previous LCF discussions at the LC were unsatisfactory, as many of the issues raised had already been covered by existing SEM and SET surveys. Apart from the replication of feedback, many of the issues were not specific enough and, at times, irrelevant to the majority of students. Because of this, the remit of the LC-LCF was to develop a new questionnaire that was meaningful and relevant to the Language Learning Process of these students (e.g. self-study, in-class activities, language labs, extra-curricular activities, workshops on specific skills) so that they might be addressed by language tutors as well as by the Director of the Language Centre. It also provided the Director of the Language Centre with the necessary figures and constructive comments to initiate such changes as rethinking the assessment method.

The better to organise the LCF, the following roles were assigned by the staff coordinator, based on students' interest and abilities:

- I. *Questionnaire representative*: This student was responsible for setting up the questionnaire on the Qualtrics software and making the survey accessible on Moodle for all students studying at the LC. After the survey was completed, this student gathered the data from Qualtrics and handed it over to the feedback collection representatives;
- II. *Feedback collection representatives*: After receiving the survey results from the questionnaire representative, the feedback collection representatives divided the data into nine categories, including survey results for IC students studying French, German, Japanese, Mandarin or Spanish (divided by language specialisation), as well as for ES, IB, IET and IS students studying a language at the LC (divided by external schools). The results of these nine different groups of students were then sent to the representatives for these groups;
- III. *Five IC representatives for French, German, Japanese, Mandarin and Spanish*: Each of these IC language representatives was responsible for covering one of the five languages taught at the LC. These representatives summarised the survey results and comments and afterwards sent the summary back to the feedback collection reps;
- IV. *Four representatives for ES, IB, IET and IS*: Though these representatives had the same responsibilities as the five IC representatives above, they represented the students from the four schools above, regardless of the language modules they took at the LC. For example, this meant that the ES student representative would cover feedback from all ES students, even if they were studying different languages;
- V. *One Meeting Minutes representative*: This representative was responsible for taking the minutes of the LC-LCF meeting at the end of the semester. For this purpose, the representative did a voice recording of the LCF meeting, wrote down the minutes and sent them to the LCF staff coordinator.

The questionnaire design was a team effort, to avoid any potential blind spots, as the LC-LCF team wanted to avoid replicating feedback covered by SEM and SET surveys as well as to limit the number of questions, in order to make the whole process more manageable.

The LC-LCF team brainstormed relevant broad-based questions and divided them into

seven categories consisting of thirty-eight questions in total. These included attendance policy, examinations, learning environment, availability of staff to students, communication and information, students abroad and on exchange, and other general questions. Students were given the option to indicate their response, using a six-point Likert scale ('strongly agree', 'agree', 'neutral', 'disagree', 'strongly disagree' and 'non-applicable') and they were also given space to provide further comments on each of the seven categories. In addition, the questionnaire also asked students to provide suggestions regarding other questions that might have been overlooked. The questionnaire was subsequently uploaded on Qualtrics by the questionnaire representative and made accessible on Moodle to all LC students; LC tutors were asked to give students fifteen minutes during class to complete the survey.

After the survey was completed, the results were divided among the nine language representatives, each comprising between thirty-four and forty-five pages of raw data, including figures, graphs and text. These were subsequently summarised in three to four pages. To ensure consistency across the different summaries drafted by each representative, students were asked to work in groups for proofreading and data-checking, using standardised pro forma. The summary for each group was forwarded to the LCF staff coordinator for final checking. If more information or clarification were needed, the coordinator would send it back to the relevant student representatives and the final version would be then circulated amongst LC tutors, seeking their response.

During the LC-LCF meeting at the end of the semester, the issues raised by students and the response of the tutors were summarised by the Director of the Language Centre and discussed by students and tutors attending the meeting. At the end of this process, the Language Centre Senior Tutor approved the meeting minutes and response from the School and these were uploaded to Moodle and Workspace.

Case Study 1: Findings and Interview

Although this was the first time the LCF had conducted an online survey, there were no substantial problems encountered in the process. The LCF received a total of 733 responses to the online survey, representing approximately 80% participation rate by the students. This fell short of the 100% participation rate that the team had hoped for. Some of the initial summaries of the received data needed revision up to three times, as they contained various inaccuracies or were structurally unclear. The same was true of the meeting minutes. As these would be published to the student body, it was crucial that both the feedback and the minutes were presented in a clear and professional manner.

Three student representatives were later interviewed on a one-to-one basis, to find out about their perception of the LCF in terms of its usefulness for the improvement of teaching and learning, as well as about the extent of its contribution to their own personal development. The students interviewed demonstrated an awareness of the importance of the LCF and saw their own involvement as agents of change, something shared by their tutors, in terms of how they planned or delivered teaching. The students also saw the LCF approach as being "democratic", offering an opportunity for "students [to] decide for students". In this regard, they felt empowered in the role they played as student representatives. Students also observed improvements in their personal and professional skills (such as team work, interpersonal communication, written communication and time-management) and believed

that participation in the LCF could be advantageous to their future employability. This is culturally significant in China, where there is an emphasis on extra-curricular activities and “good works” benefiting the community, in addition to academic achievement (Hustinx *et al*, 2010).

However, the student representatives also highlighted a number of issues that made their task more difficult, which were taken into consideration when designing the NAA module for the LCF. The top priority for student representatives was to ensure that the NAA structure was clear and did not impose further demands on their time, because, in addition to gathering student feedback and speaking to course peers, they were concerned that they would have to fulfil the module credits in order to receive the accreditation. Indeed, some student representatives were forced to quit halfway through the academic year because they needed to focus on their studies. If the NAA module were too time-consuming, it would make future recruitment more difficult.

The student representatives also indicated that they would like both a clearer definition of roles and expectations, to ensure that everyone in the group knew what s/he was doing, and a progress chart with clearly-defined deadlines, to minimise confusion. They also expressed some frustration with the multiple revisions of their report and hoped that the NAA module would include training in relevant skills such as report-writing, minute-taking and agenda-drafting. This would allow student representatives to carry out their tasks with greater confidence and professionalism. They also expressed a desire for team-building activities to foster better communication between team members, which might then have prevented some team members’ dropping out halfway through the year and some classes’ not being informed of the LCF questionnaire owing to a lapse in communication.

Case Study 2: Department of Mechanical, Materials and Manufacturing Engineering LCF

During their first week of the academic semester, students were given a short fifteen-minute presentation about the LCF and its importance during class. This presentation was given by the staff LCF representatives and was intended to raise student awareness about the LCF and its process. After the presentation, the lecturer and LCF staff representatives left the room for about ten minutes to provide students with an opportunity to have free discussion with their peers, following which they were asked to elect two student representatives. Two student representatives were elected for each year of study from two courses, namely mechanical engineering and product design and manufacture. Additional support was provided by the Students’ Union Education Network, by means of organised training for the student representatives, and all the representatives’ details were uploaded to the notice board outside the Faculty Office, to Moodle and to Workspace, so that students would be able to identify their LCF representatives.

During the semester, the departmental LCF staff representative requested feedback from student representatives a few weeks in advance of their LCF meeting and student representatives then collected feedback from their fellow students using any method they wished – e.g. face-to-face meeting, paper questionnaire, WeChat, and emails. They could also request time in class to do this with the lecturer absent. The student feedback was then sent to the departmental LCF administrator (a member of the Faculty Office) who combined

the feedback from all the student representatives into one document and passed it on to the staff LCF representatives. The departmental LCF staff representatives addressed the feedback, approached colleagues where necessary and then met with the student representatives. The chair was normally the LCF staff representative and the departmental senior tutor was invited to the meeting. The LCF minutes were then drafted by Faculty Office staff, checked and finally agreed upon by all members of the LCF; they were finally disseminated in the department and uploaded to Moodle/Workspace for the information of students and staff.

Case Study 2: Findings and Interviews

Four LCF student representatives from the Department of MMME volunteered to be interviewed following the completion of the LCF meetings at the end of the year. Among the motivating factors identified were: the opportunity to help fellow students; the ability to improve the student learning experience; the opportunity to interact with academic staff and other students in this LCF environment. It was observed that their motivation was not primarily influenced by the need to include their LCF experience in their student CV for postgraduate study or future employment, as these student representatives did not see the skills and experiences they obtained through participation in the LCF to be relevant and formalised enough to be included. Nonetheless, the student representatives interviewed felt that transferable skills gained in the process, such as communication, leadership and data collection, were important and wanted to develop them in a more formal and structured setting.

The four student representatives reported that their responsibilities did not take up too much of their time and felt that their workload was manageable, because, they affirmed, they had received adequate support from other student representatives on their team as well as from the LCF academic staff. This kept them motivated to continue their LCF responsibilities throughout the year.

However, there were some issues that were felt to be less than satisfactory to the student representatives interviewed. Chief among these was their perception that they were unable to create as much change as they had hoped. They felt that certain issues raised during the LCF meetings had not been adequately addressed by either the department or the University, and wanted the LCF platform to be given greater power to implement changes. This was, for some of the student representatives, a potentially de-motivating factor re continuing in their LCF roles. Whilst the university is committed to placing students at the centre of the learning and teaching process, there are various constraints, in terms of infrastructural change and government policy, that cannot be decided by the University without further consultation. The staff coordinator felt that greater knowledge and understanding of the University and how it operates would have helped to defuse some of the frustration felt by the student representatives.

Common Issues

From the data collected during both case studies, we were able to identify some common issues arising from the existing LCF practice that should be addressed in the design of the LCF NAA module. These include:

1. *Incommensurability of workload*: This was most apparent in the feedback from both sets of interviews, as student representatives from the LC felt that participation in the LCF was time-consuming compared to the student representatives from the Department of MMME. This was certainly owing to the number of students taking language modules within the LC, as well as to the fact that the LCF members in the LC comprised students from different departments and faculties. The mix of academic backgrounds presented an impediment to effective communication and organisation because of timetabling differences. In addition, membership of the LC LCF dropped from fifteen to eight members after Christmas, and this had a workload impact on the rest of the team. This was not an issue in the second case study, as the student representatives were from the same department. However, this also highlighted a need for structure and clarity within the LCF framework;
2. *Quality assurance in terms of training and feedback*: Relevant skills and training should be provided in a formal setting to support student representatives to support student representatives and boost their confidence. This would help them carry out their responsibilities with an equal level of support. The transferable skills learnt could then also be listed in the student CV for either postgraduate study or future employability;
3. *Understanding how the University operates*: This would help to manage the expectations of student representatives and to foster their greater professionalism, by increasing their exposure to University, academic faculty and department structures. The knowledge and understanding gained would allow them to identify more effectively areas of improvement to be implemented. It would also boost their level of engagement and enable them to work alongside academic staff to deliver change. Research on this subject indicates a positive correlation between the level of student engagement and the quality of their learning: students who engage in such extra-curricular activities are also the most engaged in their studies, and the assumption here is that the converse is true. Students who get involved in extra-curricular activities will eventually show more interest in their studies as a result (Graham Gibbs, 2016), especially if these activities bring a sense of satisfaction, fulfilment and belonging to the students in question. This will eventually have impact on the institution's image (Trowler, 2010);
4. *Formal recognition of student contribution to teaching and learning*: The accreditation offered by the NAA award is consistent with the University's commitment to placing students at the centre of our teaching and learning. It would also improve the future employability of student representatives and reward them for their time. More importantly, this would be a strong motivating factor in the recruitment and retention of LCF representatives, particularly for Chinese students, who highly value extrinsic motivation (Li, 2003). All student representatives interviewed, in fact, felt that the proposed LCF NAA module was attractive to them. One student representative expressed an interest in continuing to serve in this role only if it were possible for her to take it as part of the NAA. The retention of LCF student representatives is important as it would allow more experienced student representatives to take on mentoring and training roles within the LCF and the SU Education Network in future, thereby increasing its autonomy over time.

LCF Nottingham Advantage Award (NAA) Module Design

Following the findings from the two case studies, an LCF-NAA working group was formed and tasked with designing the NAA module for its pilot in autumn semester of 2015-16. The working group was composed of key stakeholders identified on the basis of the support they could provide, as well as on the direct and indirect effects on their work as a result of the NAA scheme. The different stakeholders were then assessed on the basis of their attitude vis-à-vis the project, their interest in it and the support they would be able to provide if we were able to engage them (Jisc, 2015). These stakeholders were:

- *Senior Tutor Network (STN)*: A cross-faculty network of Senior Tutors from different schools. As students would take the module from different schools it was felt that a campus-wide network would maintain focus and relevance to the content and objectives of the NAA module;
- *LCF staff representatives*: The LCF staff representatives' involvement was essential, as they were responsible for providing guidance to LCF student representatives and served as their first point of contact. Their participation was crucial in designing the NAA as well as guaranteeing workload equity across schools;
- *Student Representatives from the Students' Union Education Network*: It was felt by colleagues that, as it was a student-led forum, it would be beneficial for students to participate in the module design and approval so that it might more closely reflect their needs and demands. This was a significant move, as student representatives from the SU Education Network would eventually lead the workshops to provide the necessary training for LCF student representatives, after being trained on the delivery of these sessions by a staff member. In this way, students would be involved at every stage of the NAA design process, from the inception stage (via feedback from interviews), to the design and planning stage (via working group) and finally to the delivery and execution stage (via leading workshops and recruiting LCF representatives in elections). This was in line with the Developmental Model of Student Engagement (DMSE) that "locates students as partners in a learning community, and [...] places greater emphasis on student growth and development and is primarily concerned with the quality of learning and the personal, mutual and social benefits that can be derived from engaging within a community of scholars" (Trowler and Trowler, 2010: 3);
- *Teaching and Learning Enhancement Office (TLEO)*: In charge of advising the academic community regarding best practice and all quality assurance related work at UNNC; supportive of the SU Education Network members and all activities, procedures and policies related to Teaching and Learning;
- *Career Development Office*: In charge of the administration of the NAA programme;
- *Campus Teaching Committee (CTC)*: In charge of the University's academic quality standard. It reviews and develops the University's teaching and learning strategy.

The NAA module had three objectives and four components of assessment and could be taken either as a 10-credit module (100 hours in total for students on one semester exchange in Year 3) or a 20-credit module (200 hours in total). The three objectives of the NAA module were:

- 1) to ensure that students' concerns about their courses of study were represented to academic staff throughout the academic year;
- 2) to ensure that the views of students were given proper weight in the processes of course and module review;
- 3) to provide an opportunity for students to develop a broad range of transferable skills and to work in partnership with other students and academic staff.

In order to meet the above objectives, the method of assessment contained four components, in at least three of which students must attain a compulsory pass mark. The four components of the NAA module were as follows:

- i. *Knowledge*: Three sets of ten multiple choice questions deployed as online quizzes on Moodle. These questions covered knowledge of the University, including the University's Quality Manual and the services provided to students. A 100% pass mark was required on each set of questions before student representatives were allowed to proceed to the next stage, although they were allowed to re-take the quiz as many times as necessary;
- ii. *Application*: Writing of meeting minutes. Pass marks were awarded by the Campus Senior Tutor during the LCF annual review or by the School's LCF staff coordinator, based on the quality and value of the issues discussed at the LCF meeting;
- iii. *Team-work*: A peer evaluation of each individual student representative would be conducted by the team to ensure commensurable levels of participation and effort. This would also reinforce team-building and engagement within each team;
- iv. *Reflection*: Each team would produce a ten-minute self-reflective video, based on their experience as LCF representatives and what they had learnt in the process. This would be awarded a pass/fail mark by representatives from the SU Education Network, which was initially responsible for leading the workshops.

It should be noted from components iii and iv that students had equal weight and say in terms of the assessment for the NAA module. This decision was informed by the findings of the interviews as well as the LCF-NAA working group, in order to devolve greater responsibility and autonomy to the LCF representatives. According to Healey, Flint and Harrington, "engaging students as teachers and assessors in the learning process is a particularly effective form of partnership" (2014: 8). This would also be a motivating factor for student representatives and the purpose of the LCF-NAA was to support rather than direct the LCF platform; the LCF would otherwise lose its unique characteristic as a student-led platform and become re-appropriated as yet another formal means of feedback. The components were to be awarded pass/fail marks rather than graded because they were intended to be formative/evaluative. The module was also extended to include postgraduate students so that it might help in their personal and professional development; it was piloted successfully in autumn 2015-16.

Based on the Four Modes of Student Engagement model proposed by Dunne (2016), the LCF student representatives participated in student-led activities that were focused on both critical thinking (mode A) and design thinking (mode B). In mode A, student representatives proactively engaged with their peers to collect feedback, using a variety of data collection methods, and to perform an evaluation based on the critical analysis of the feedback data. In

mode B, student representatives utilised the evaluation results to initiate ideas and action to promote changes in their department via the LCF process. The LCF-NAA module, however, incorporated a more formalised teacher-led aspect to the whole process in order to improve student engagement in this mainly student-led activity. Various aspects were contributed by teacher-led critical-thinking (mode C) and design-thinking (mode D) activities, in which teachers guided the students through more formative assessment for developing their skills in writing meeting minutes and data collection methods, as well as for encouraging them to engage with their peers via a peer evaluation and team self-reflective videos. In other words, when the students undertook the LCF-NAA module, there was a gradual shift in focus and responsibility from teacher-led modes (C and D) to student-led modes (A and B). The aim was to leverage student engagement, first by guiding them through critical- and design-thinking elements and finally empowering them to take on effective leadership roles as agents of change through the LCF process.

Colleagues within the working group intended to gather more information and feedback on the LCF-NAA pilot at the end of the year for further development of the module.

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Technological Review: *Mentimeter* Smartphone Student Response System

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Mentimeter is a student response system (SRS), much like *TurningPoint* or 'Clickers'. Web-based systems such as this, or *Socrative* and *Poll Everywhere*, reduce the logistical burden on the instructor by letting students use their own mobile devices to participate in the activity via the device's internet browser and a six-digit code sign-in to the quiz. This removes the process of handing out and collecting voting devices, thereby saving valuable time for teaching and learning.

SRS can encourage an immediate feedback loop on taught content, informing both student learning and staff teaching practices, which has been linked to increased examination scores (Trees and Jackson, 2007). Heaslip *et al* (2014) also found that clicker devices can simultaneously improve engagement and offer an anonymity that class discussions do not. However, there is also some evidence to suggest that it is in fact the active presentation of questions, and not the SRS themselves, that leads to increased engagement and attainment (Morling *et al*, 2008). The positive effects frequently reported from SRS use are often indicative of more engaging teaching, in which regular checks on student learning are conducted by the practitioner anyway (Poirer and Feldman, 2007). There remains, however, a significant body of evidence which reports SRS to be a highly-effective manner of engaging learners, especially in large groups.

Features

There are two types of instructor accounts available - free and paid.

- The free version allows an unlimited number of participants, displays results live on screen and allows you to create a maximum of two questions per session.
- The paid version, with a discount available for educators, continues to allow an unlimited number of participants, but removes the limit on the number of questions you can ask and gives practitioners the option to export quiz results into a downloadable Excel file.

Mentimeter has multiple choice questions, provided by almost all SRS, and open-ended questions allowing the capture of qualitative data, a feature present in softwares such as *Socrative* and *Poll Everywhere*. It is in the range of available question formats that *Mentimeter* then begins to offer new options which could really energise a teaching activity: it can analyse results and produce word clouds based on the most common words used; you can create scales which move and adjust as each vote is cast; students can rate topics across a "2 by 2 matrix"; finally, practitioners could encourage students to distribute 100 points across a number of options, thus displaying group preferences and characteristics (Mentimeter AB, 2016). Combining these formats can create a dynamic and challenging survey, quiz or check of understanding in any taught session.

You can further customise your activity with a number of different personalisation options. Practitioners can select from a number of themes, opt to dictate the pace / allow learners to have control and choose whether or not to share the results with the audience immediately.

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Finally, practitioners can embed *Mentimeter* within *PowerPoint* slides, via a plug-in, allowing a seamless blend of lecture slides and interactive voting activities. A number of the key issues surrounding *Mentimeter* can be seen in the SWOT analysis found in Table 1.

Table 1: SWOT Analysis

<p>Strengths</p> <ul style="list-style-type: none"> ● Multiple question formats. ● Slick user interface. ● Unlimited participant capacity. ● Easy sign-in process - no additional software/app download required. <ul style="list-style-type: none"> ● On the spot selection of question format. ● Extremely easy-to-build quizzes. ● Works on any web browser. 	<p>Weaknesses</p> <ul style="list-style-type: none"> ● Requires mobile device like all web 2.0-based SRS. ● Fluidity of display can be a little distracting. ● Can be difficult to single out the impact of the technology.
<p>Opportunities</p> <ul style="list-style-type: none"> ● Paid account offers unlimited number of questions. ● Traditional use to quiz or check knowledge. ● Use to direct and guide teaching - free-form style. ● Location services can speed up sign-in process for learners. 	<p>Threats</p> <ul style="list-style-type: none"> ● Free account offers only two free questions – useful, but limited. <ul style="list-style-type: none"> ● Requires students to have devices, which may not always be the case.

Assessing the impact of any single factor upon student learning will always be complex and problematic. In this regard, *Mentimeter* is no different. Practitioners may use the software to gather feedback on the use of *Mentimeter*, but assessing its impact upon metrics such as attainment would be a complex and contested task (Morling *et al*, 2008; Poirer and Feldman, 2007).

How can I use this in my practice?

Mentimeter can be used in a number of ways to enhance teaching and learning activities:

- Quizzes - This is the traditional use of SRS technology to test taught content and highlight gaps in knowledge.
- Surveys/Evaluations - Software such as this could offer a method of in-session group completion of module evaluations, affording a rich data set with the varied question types. The word-cloud, 2 by 2 axis and 100-point distribution questions would be useful for performing in-house evaluations of assessments.
- Student-led teaching - While SRS can be used as a method of ‘testing’ learnt content, there is significant potential in deploying them to create free-form teaching activities

where the session is driven by the students' answers to in-class questions. This would be particularly useful in the lead-up to assessments, for recapping content or for reflecting upon assessments that have been completed.

Conclusions - Benefits to staff and students

For students, softwares such as this offer an opportunity to participate and engage without fear of making mistakes in front of peers, as well as giving an insight into the thoughts, feelings and knowledge of the rest of the group. A small sample of evaluative students comments, from an induction session delivered to international students in January 2016, demonstrates the potential of interactive voting software such as *Mentimeter*.

"The word quizzes helped me see how everyone else felt and it kept me focussed"
"The interactive nature of it kept you engaged the entire time"
"I liked using my phone for the questions"

For staff, *Mentimeter* offers highly-customisable activities which can facilitate an instant analysis of responses, provide downloadable data sets and create an interactive teaching and learning experience for groups of varying sizes. Fellow practitioners should visit www.mentimeter.com if they wish to try this fantastic teaching tool.

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