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JADE publishes articles, case-studies, papers, reviews, teaching tips, letters to the editors, interviews and student submissions about learning and teaching.

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EDITORIAL

Researching for enhancement in higher education: Beyond structuralism and Individualism
Prof. Paul Trowler provides an editorial piece for the fifth edition of the J.A.D.E. journal.

A Keele Perspective on Prof. Trowler’s Visit
Dr. Jonathan Parker

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Teaching and Research Synergy in a Competency Based Education Era
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Twelve tips for peer-teaching
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Qualitative Psychology Forum: Supporting Qualitative Research in Psychology
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The DKC People? The Student Learning team and the growth of embedding learning development in academic programmes
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ASSOCIATES

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Association for the Study of Medical Education (ASME) 2015 Conference Abstract: What can a safe effective clinical outcomes approach offer students in secondary care simulations?
Dr. Simon P. Gay et al.
Welcome to JADE. JADE was launched two years ago by the Learning and Professional Development Centre. The journal was developed as a space to share practice for Keele staff and students that wished to write about their educational experiences as part of their scholarly practice. It was established to publish reflections on and inquiries into the acts of learning and teaching and to disseminate that work. Staff and students at Keele University act as writers, readers, reviewers, editors; and perhaps most importantly as learners and collaborators in the endeavour to improve student learning experiences and outcomes through their contributions to JADE.

JADE celebrates teaching scholarship, an act I have previously described as a journey of discovery and personal growth, and makes teaching scholarship public – open to scrutiny and sharing with interested others. Over the past two years, the readership of JADE has grown and broadened to include colleagues beyond Keele, and in 2015, we took two decisions that will further support JADE to grow and flourish. First, we have decided to accept submissions for published articles from staff or student members of other Universities and to publish these if they are deemed to be interest to our Keele and wider readership. In making this decision, we have expanded the potential community of scholars that can contribute to JADE’s future but hold steadfast the desire to sustain the journal as a place for scholarly discovery of both staff and students. Second, in support of encouraging submissions from student scholars, we also took the decision in 2015, to appoint a student Associate Editor to solicit for and encourage student contributions.

JADE continues to be a space that models innovation and creativity in the scholarship of teaching and learning. I sincerely hope you enjoy your experience of contributing to JADE, as a writer, reader, reviewer or editor, and as a learner and collaborator in scholarly endeavour.

Dr. Jackie Potter
Head of the Learning and Professional Development Centre

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Prof. Paul Trowler
Policy Sociologist

Prof. Trowler is best known for his work on Academic Tribes and Territories. However his interests range across many areas of higher education, both substantive and methodological. These are detailed at http://www.lancaster.ac.uk/educational-research/about-us/people/paul-trowler

He is a policy sociologist, and applies that analytical lens across domains of research and evaluation which broadly concern policy production and enactment in different higher education contexts. Prof. Trowler works with an eye to making a difference: ‘enhancement’ is a watchword that guides his work. He has advised institutional leaders, higher education organisations and change agents in higher education around the world for many years. In this editorial, Prof. Trowler tells us about his recent visit to Keele by invitation from The Higher education Network Keele (THiNK) group (https://www.keele.ac.uk/lpdc/research/think/).

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RESEARCHING FOR ENHANCEMENT IN HIGHER EDUCATION: BEYOND STRUCTURALISM AND INDIVIDUALISM

In October I gave a talk to staff at Keele entitled Researching for enhancement in higher education: Beyond structuralism and individualism. What I wanted to do in the talk was to show how initiatives to enhance learning and teaching often focus on changing the attitudes, behaviours and choices of individual teachers. Where such attempts are underpinned by research, the research is also usually focused at the individual level. Clearly, individuals do make choices and can change their own behaviour, but realistically this should be seen as happening within the context of social practices: recurrent sets of practices in small social groups underpinned by emotions, assumptions and knowledge resources.

My talk therefore set out a picture of higher education contexts consisting of multiple sets of social practices in play, enmeshed with other social practices which sometimes had different, contradictory or even antagonistic purposes. This picture highlights the fact that contexts shape and sometimes limit the options of individuals themselves and so change initiatives need to recognise this and be pitched at the practice level and the way social practices mesh.

“is it realistic to expect that systemic change at the institutional or even national level can be brought about by interventions aimed at individuals.”
The key question for me is: is it realistic to expect that systemic change at the institutional or even national level can be brought about by interventions aimed at individuals? Without an understanding of the nature of social practices I think it is unrealistic to have such an expectation, and my talk offered some examples from another context, South Africa, to illustrate this.

At the same time I wanted to challenge accounts at the other end of the scale, ones based on structuralist ideas in which individuals simply act out social conventions. I used the example of the early academic tribes and territories research to illustrate such an approach. In contrast, an understanding of social reality, social change and enhancement sees both agency and structure in operation. Researching contexts of change from this perspective raises new challenges and new opportunities, and I briefly explored these.

The talk was based on research which set out most fully in the following five publications:


The slides from the talk are available here: http://tinyurl.com/o3uwoox
towards research and create tensions with policies directed at improving teaching.

The questions Paul Trowler asks are as deeply relevant to Keele University as they are towards higher education more generally. The university has set itself the ambitious goal of moving up into the more elite echelon of higher education institutions in the U.K. This goal raises the question of how efforts aimed at enabling and improving individual teachers will interact with these wider forces and imperatives, particularly when league tables are dominated by research reputation. While there are no clear answers at this stage, the questions are the right ones, which we will continue trying to resolve as these events play out.

Introduction

Learning is part of an initiation into a community of practice (Forman, 1994), therefore, group-based learning environments and subsequent group assessment makes up an integral part of the learning process. Problem-based learning helps in the development of communication, leadership, negotiation, problem-solving skills and prepares students for experience in the ‘real world’ (Mellor, 2009; Barber et al. 2015). Many of these skills are sought by the employers and thus it is critical to ensure provision for the instilling these skills into learning and teaching programs (Livingston, 2000; Flores et al. 2014; Ullah et al. 2015). In addition to the employability skills, problem-based learning and group assessments also enable critical evaluation of student’s own work and that of their peers (Bourner, 2001) enabling the effectiveness of individual actors in a group setting (Boud et al. 1999; McLoughlin et al. 2015). Moreover, group work and associated assessments helps in instilling skills that are highly critical in accomplishing effective team work in future (Jackson et al. 2014)

However, concerns have been raised about group assessments based on problem-based learning in the literature (Table 1). The pitfalls listed in Table 1 can have an impact on the overall value of group assessments in disciplines where problem-based learning is a core teaching activity and thus need critical assessment to identify actions for rectifying it for a positive learning outcome. Moreover, Maiden and Perry (2011) points to the difficulty of identifying the contribution of individual students to the group project assessment, thereby leading to a group mark assignment to all the members where ‘free riders’ could benefit without significant contribution. Nonattendance of group meeting by students leading to time management conflicts and passing on the burden of work to hardworking punctual students are some of the pitfalls reported in the literature (Maident and Perry, 2011). As the group assessment mark reflects a group activity applied equally to all members of the group, therefore, a need exist to evaluate if such an approach benefits the low-performing students and discredit the contribution of top performing students.

In this paper, we compared group and individual assessment performance of students in two different modules—one delivered through distance learning in China and another face to face at Keele University. The distance learning module consisted of three assessments including group work (based on a group project activity), a class test and final examination. Similarly, the face to face delivery module was also consisted of a group work (based on problem-based laboratory group project) and a class
test. The marks obtained by students under the diverse assessment approaches in 2012 and 2013 were collated and analysed. Moreover, the overall marks obtained in different modules by three low and three top performing students who were part of the face to face delivery module were averaged for each year of their Applied Environmental Science degree program at Keele University to evaluate if low or top performance in the face to face module was reflected in the overall performance of these students.

Overall, the group work assessment performance over the 2 years under the two modules exhibited relatively lower variance in the spread of marks compared to the individual assessments (Figure 1 and 2). Even though, the range of group assessment marks were well within the range of the individual assessment marks, the constrained spread in the group assessment marks does point to the existence of smoothing resulting in more uniform marks spread than under individual assessment scenarios. As group assessments represent a collective mark assigned to students of varied capabilities (Maiden and Perry, 2011), our data show that low performing student must have benefited from the blanket marking assessment, while the potential of top performing students must have been capped in achieving a mark commensurate with their potentials and performance. This result is consistent with what Healey et al. (1996) identified as a potential pitfall of group assessment (Table 1). However, the overall performance of the selected three top and three low performing students reflected a consistent improvement in case of top and a relatively static and/or stagnant performance over the course of their degree programs (Figure 3). Even though the scope of the available data is limited, yet the overall performance of the top performing students compared to the low performing students suggests that integration of problem-based learning and subsequent group assessments into the broader assessment package of a degree program can allow reaping the benefits of group assessments described above, and at the same time ensuring ample opportunities for individual excellence including high end support by the teaching team (Livingston, 2000).

Given the significance of group projects and subsequent group assessments in honing soft and technical skills highly valued by employers and ordained in the learning outcomes of degree programs, a balanced approach could be adopted to achieve multiple benefits and discourage the influence and/or manifestation of the pitfalls of group assessments (Livingston, 2000; Maiden and Perry, 2011, Ullah et al. 2015; Barber et al. 2015). From an analytical perspectives, inclusion of group assessments with a relatively lower overall credit-bearing weight compared to individual assessments in degree programs can effectively reduce any smoothing bias introduced by group marks as the students would have opportunities to exhibit their potentials through individual performance. Additional measures of appropriating a fraction of the overall group assessment weight to self and/or peer evaluation in terms of contribution to the group task could also be useful in addressing the cons of group assessments (Parsons and Drew, 1996; Mellor, 2009). The recommended analytical approaches coupled to high-end support and effective facilitation by the teaching staff seems to be the way forward to enhance performance, reduce marking bias and encourage effective participation.

1. Clever’ students do not get sufficient credit for their work.
2. Unequal contributions from team members unfairly affect grades.
3. Lazy students can ‘hide’ from staff members.
4. Group work slows down the learning process due to unproductive time, e.g. meetings.
5. Group work impacts on other work due to the extra demands on student time.
6. Group composition unfairly affects one group over another, e.g. skills make-up, personality clashes.

Table 1. Myths of group work providing an impediment to choosing it as an approach (After Healey et al. (1996), Parsons and Drew (1996) and Livingston (2000)).
Figure 1. Box plot showing 25th, 50th (central line) and 75th percentile with whiskers showing the 5th and 95th percentiles obtained by students in the three assessment types in 2012 and 2013 under a distance learning delivery mode. Asterisks show values below the 5th and/or above the 95th percentile. Mean score is indicated by the dotted line in the box.

Figure 2. Box plot showing 25th, 50th (central line) and 75th percentile with whiskers showing the 5th and 95th percentiles obtained by students in the two assessments in 2012 and 2013 under a face to face delivery mode. Asterisks show values below the 5th and/or above the 95th percentile. Mean score is indicated by the dotted line in the box.
Figure 3. Overall performance of three low and three high performing students in a degree program that involved group assessments above.

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Introduction: Formal definitions and tensions

The Oxford English Dictionary defines “teaching” as a way to convey knowledge; giving instruction or lessons, or communicating something to a person by way of instruction. It also defines “Research” as being the act of searching closely and carefully for or after a specified topic or person; an investigation directed to the discovery of some fact by careful study of a subject or a course of critical and scientific inquiry. This juxtaposition is interesting since the dictionary definition of research might also be considered learning in comparison to teaching.

In the last decade, there has been a significant increase in the attention paid to teaching and to the dynamic our view of teaching and learning; research-to-teaching links and teaching per se are much contested issues. The basic aim of the “scholarship of teaching movement” has been to promote the integration of research and teaching (Kreber, 2002), but there is still a considerable literature, which suggests that these roles or functions are in tension (Blackmore, 2009). In brief, the basic issue is how we to value research and teaching together, and how these might be brought together in a more symbiotic relationship (Elton, 1986). After all, most academics are employed for the purposes of research and teaching and research-led universities aim at promote learning by linking research, teaching and scholarship.

This article highlights the importance of a balanced integration of research into teaching, a synergistic relationship for a highly valued competency-based education that could enhance learning. It discusses different levels of synergy between teaching and research, thus depicting the added value of each component in an integrated curriculum promoting self-learning and aiming to produce life-long learners.

What is teaching and learning?

If the term “learning and teaching” incorporates both teaching and research (i.e. student research in the teaching setting as well as teachers’ research in their teaching context(s)) then perhaps there is an obvious synergy between teaching and research. Recent research has addressed the convergence and harmonization between teaching and research by focusing on curriculum and learning design which offer the best potential for connecting students and academics to knowledge communities and linking the research, teaching and scholarship mission (Adeyeye,2004;Berret,2011).
Perhaps this movement began with the work of Wilhelm Von Humboldt, whose vision, in 1810, of the future of the University of Berlin was one of integrated practice. According to him the purpose of a University, for both the teacher and the student, is a common quest for knowledge (Elton, 1986). According to Elton, Von Humboldt effectively “abolished the problematic nature of the research-teaching link” (Elton, 2001). However, the tension between the two central academic missions appeared less relevant or obvious for John Henry, a rector of a Catholic University of Ireland, who considered the University as “a place of teaching universal knowledge” and a source for the “diffusion and extension of knowledge”. He added: “If the university objective were scientific and philosophical discovery only then why a University should have students” (Elton, 2001).

The approaches taken by Von Humboldt have not proven to be longstanding as both the German and the British along with those of other western societies universities became increasingly research oriented during the 19th, 2oth, and 21st centuries. A commonly overlooked issue is the obvious point that learning is not always the outcome of teaching. In the US, this issue in undergraduate education was the focus point for a series of task-force reviews and reports (Goldman et al, 2006). Perhaps the most notable of these reviews was the landmark statement of Steven Mintz, which recommended the stimulation of a broader and deeper intellectual engagement by students in all undergraduate teaching settings. Consequently, a significant increase in undergraduate involvement in research and independent learning was strongly recommended in order to develop the skills of independent scholars, and to support students as they take advantage of the opportunity that only a research-led university might offer. This trend of emphasis on synergism between teaching and research has led to a parallel movement in the UK: the scholarship of teaching and learning (Kreber, 2002). What is evident is that there were many variations in how academics from different disciplines preferred to approach the scholarship of teaching (Lueddeke, 2008). Even if such concepts of linking research to teaching had been discussed extensively, there had been little consensus about the measurable impact upon the practices of university teaching-culture (Hay and Kinchin, 2008). However, there is evidence, nowadays, that in some areas of higher education efforts are being made to encourage more scholarly approaches in support of teaching and learning (Berret, 2011). In addition, more funding has been made available to support the growth of pedagogic research in teaching-led institutions both in UK and USA (Blackmore, 2009; Kinchin, 2009). Lee Schulman, president of the US Carnegie Foundation for the advancement of teaching, asserted that academics are members of at least two “professions”: there seems to be a “significant promise” for reconnecting the scholarship of discovery and of integration with the pursuit of scholarship of teaching (Schulman, 2004).

This review sets out to explore these issues and aims to review the current situation as it relates to the interplay between research and teaching and how they could promote knowledge acquisition and dissemination in the context of learning communities and society at large by reconciling tension when it arises.

Reconciling tension

Teaching and research are two valuable interrelated entities in the student learning process (Hattie and Marsh, 1996). Multiple perspectives have been developed over the years on the interaction of students with a learning situation. Two major schools or models have been discussed: the “Learning Styles” model and the “Approach to Learning” model (Entwistle, 1995). The Learning Style was more promoted among US education management personnel, US authors and scholars, while the Approach to Learning model was more favored by field educators in the UK and Australia, a country very much affected by the UK education system. However, it was stressed by many authors that the focus should be the learner, the student and the way he or she acquired data, processed knowledge, and used what he/she learned (Lueddeke, 2008, Shulman, 2004). In a report by Feldon and co-workers published in 2011 in the journal Science, it was concluded that in order to be a good researcher, one should try teaching. This report arrived amid an intensifying national USA debate about the proper balance between teaching and research by college faculty and its claim ran somewhat counter to the conventional wisdom underlying the training and rewarding of graduate students in the sciences, where teaching is generally seen as a distraction from research. The study reported that graduate students in the sciences, who teach and conduct research, showed greater improvement in their research skills than those who focus exclusively on laboratory work. They usually demonstrated significantly greater improvement in their abilities to generate testable hypotheses and design valid experiments. The study covered 95 graduate students at 3 Universities from 2007 to 2010. It resulted in important empirical data and it sparked a good debate, but it was also an extension of a debate-established before-hand, tended to point at the disaggregation of teaching and research (Feldon et al.2011).

In 1996, John Hattie and H.W. Marsh, then researchers at the University of North Carolina at Greensboro and the University of Western Sydney, respectively, surveyed the scholarly literature on
teaching and research for the “Review of Educational Research” and found no relationship between the two. They concluded that “The common belief that research and teaching are inextricably entwined is an enduring myth,” they wrote (Hattie and Marsh, 1996). According to Feldon (2011) that “myth” is one of the reasons graduate students in the sciences are often divided into two camps: the more-promising scholars starting graduate school tend to receive generous fellowships and grants, which allow them to focus on research without the distraction of teaching undergraduates; while the other group is assigned the job of teaching, and their research has long been thought to suffer as a result (Feldon, 2011).

This dilemma continues recognizing that higher education is a sector of the society, which involves two different principal types of activities: teaching and research. It is of course of highest interest to know and understand whether a synergy between these activities could exist and what are the mechanisms that govern this effect. After a few decades of teaching and academic experience, I came to agree with what is almost unanimously recognized that synergy between teaching and research is very important and exists in many forms. Actually, there are very few studies (Hattie and Marsh 1996; Jenkins et al 2007; Lueddeice 2008) that systematically analyze this issue and the existing frameworks in universities to explicitly stimulate the synergy between teaching and research, creating harmony leading to strong knowledge communities affecting society (Figure 1)

![Figure 1. Interrelationships between Research and Teaching](image)

**Historical perspective of research and teaching**

At best, the literature is divided about whether teaching is an asset or encumbrance when it comes to the development of research and/or career development in academic settings (Blackmore, 2009). One important issue is whether or not “research is an added value in the teaching process” or vice-versa, “the teaching is an added value in research” (Talaba, 2004). In this view, however, synergy is considered to be an additional effect that results from putting the two independent entities together. Using the metaphor of “chemistry” we might state that when two substances are combined, the outcome is more than the sum of the parts, and this, perhaps is what makes implications difficult to identify specifically. To measure improved teaching as a consequence of research is to measure development in teaching only. While to measure development of research as a consequence of teaching is likewise, to focus only on a single dimension. Perhaps, it is necessary to consider the development of the academic’s identity as a single whole entity. Then, it would be impossible to ask whether research develops teaching only: research and teaching must both, independently and together, lead to the development of the person who embodies these two.

Perhaps we can gain a further insight by trying to explore the research and teaching issue at two different academic levels: one at the level of university professor and one at the level of student-researcher. These aspects will be studied in a systematic manner in an attempt to provide a picture of what the author perceives today as being encompassing by the synergy between teaching and research. When this picture will be clear enough, another ingredient will be added in the chemistry that is “the cooperation between University and Society” (Talaba 2004).

**II. The Fundamental Question: Why Teaching in Higher Education is Traditionally Accompanied by Research?**

To answer this question one needs to answer first other fundamental questions as “WHAT is supposed to be taught in higher education”, “WHO is the most qualified to do it”, “WHERE is the most appropriate place for it” and so on. Then, other questions from this series such as “WHEN” and “HOW” may lead us closer to our target, i.e the teaching and research synergy. To answer these questions, an important observation must be considered, namely that both research and teaching are related to knowledge. The main function of research is to generate new knowledge, while the
main function of teaching is to prepare and disseminate knowledge in the society, both existing and new knowledge. Traditionally, the Universities have been regarded as places where the newest knowledge is available, and how can a University best demonstrate this if not by producing itself some of the knowledge, if possible the most relevant one for its own teaching? If we assume that knowledge is the “product” around which the University “business” is organized, then the model we look for becomes clearer: research is the “production process” of knowledge and teaching and learning is the “marketing” of knowledge. Starting from this model, it is clear that the two processes have been organized together in the first universities and this continued unchanged until modern times. The lack of change comes mostly from the very conservative nature of the old universities that over the years gathered another specific item that is the “tradition” (Healey and Jenkins, 2006). Of course, in our times of sophisticated business models, one could argue that the two processes could be perhaps better organized apart, since they are not very linked. For example, the professions of Teacher and Researcher became nowadays too different in their nature, and it has been demonstrated that very rarely the good researchers are simultaneously good teachers and vice-versa. Another argument from the management point of view is that both teaching and research could be better organized if the two processes were apart. All these debates have been exacerbated when the idea of “entrepreneurial University” appeared and increased the complexity of the problem as a whole (Jenkins et al. 2007).

III Different synergies between teaching and research

The synergy between teaching and research is not an independent item but rather a mutual enhancement in quality, effectiveness and profundity, even from the financial point of view. For this reason, the analysis of the synergy should be done both from the teaching point of view and from research.

A) Teaching: the research added value

A multi-university project developed in UK by Jenkins and colleagues in 2007 has led to important new interpretations of the links between teaching and research. The project investigated the nature of scholarship in relation to the advancement, synthesis, and application of knowledge. Results from the project suggested that at the curriculum level, the integration of research, teaching, and learning comes in a multiplicity of ways: Actually, the introduction of new knowledge, resulting from research into curriculum, will have thus the possibility to present not only what is already done in a subject but also the prospect from the research point of view.

Staff research activities should be visible to students; they will increase the extent to which student learning mirrors research processes. It will also enhance the ways and extent to which student research competencies are developed and assessed. (Jenkins et al. 2007)

Earlier research by Healey and Jenkins (2006, 2007) had demonstrated that students value learning from research active staff. The project has extended this understanding to suggest that students benefit from research processes and skills, and from developing and understanding the complex relationship between research, application, and knowledge. Synergy between teaching, learning and research opens up new venues for thinking about how the learning activities of faculty research might be brought into closer interaction with the learning activities of students through teaching, thus leading to the development of strong learning communities (Healy and Jenkins 2006).

B) Research: the teaching added value

Research seems like not having special direct benefits from teaching. However, it is obvious that an effective training of researchers could not be done without a strong professional research environment within the universities. Although training of researchers is still following the traditionalist model of master-disciples, schools and traditions, there is a level of postgraduate study where teaching is very much alternated with research, i.e. MSc studies. Indeed, MSc has become to a great extent the necessary entrance stage for any future researcher. Perhaps at this level, the synergy between teaching and research has the highest intensity since both types of activities are included into a unique program meant to prepare the postgraduate students for the future profession of researcher (Feldon et al., 2011).

Moreover, the last stage of preparation for a research career is of course the PhD, which is still a training period in which the student is gradually undertaking research tasks in a focused team, finishing by presenting finally a complete scientific approach that demonstrates his qualification at the end (Feldon et al., 2011).
C) Teaching and Research synergy at institutional level

A number of universities, especially those that claim to be research-led are directing their attention to ensuring that links between teaching and research are made explicit, and are incorporated into undergraduate as well as postgraduate courses. It seems that institutions are increasingly seeing the potential for using research in various forms as a way to improve teaching and learning. Actually, some of them have already a clear strategy for this purpose that includes a variety of measures such as:
- evidence-based teaching and research;
- learning environment which values research;
- greater emphasis on the project element of the undergraduate programs;
- research training for undergraduates and development of taught postgraduate programs within research centers;
- pedagogic research and its use in planning teaching and learning;
- formation of research centers of Excellency;
- formation of teaching and learning centers.

Addressing institutional strategies to link teaching and research, Healey and Jenkins in 2006 emphasized the need to link the two entities together. They provided evidence-based recommendations as to the way institutions “can and should act systematically to integrate staff research and scholarship with student learning”. Such a relationship between the two entities needs good management at the institutional level. Jenkins and Healey developed a framework to analyze the link between teaching and research in order to reach an understanding of the nature of this link (Healey and Jenkins, 2006). Accordingly, they suggested at least 4 categories of teaching:
1) research-led, 2) research-oriented, 3) research-based, and 4) research-informed.

When teaching and research are organized in the same institution (i.e. in Universities), from the logistic viewpoint, very often, equipment and other infrastructure elements that were developed for research purpose were transferred to the teaching process after the research objectives have been reached or sometime even before. This is a kind of synergy that is very often taken into account and planned even from the early stages. The synergetic effect is clearly measurable in terms of funds that are saved in the area of teaching and become available for other purposes. This synergy allows teaching and research sharing some costs that otherwise could perhaps prevent some research to be funded or the teaching to benefit from the appropriate infrastructure. Such an approach is already a practice in some universities that, when seeking approval for redesigned courses, the teaching teams have to demonstrate how the synergy between research, teaching and learning is achieved at various levels (Berret, 2011).

D) Teaching and research synergy at the teacher level: the dual nature of an academic

At the teacher level, the synergy between teaching and research is nowadays very questionable. It seems entirely plausible that heavy involvement in research and publication takes time and effort away from teaching undergraduates. Consequently, a balance between the two activities should be practically sought and defined. Unfortunately, in most cases, as soon as the research results are excellent, the way staff involvement in research enhance quality or effective teaching, and the issue of what is quality or effective teaching, is left implicit (Jenkins et al, 2007).

Most often the academic staff is facing an eternal dilemma that is best expressed by the question, “Teaching and Research or Research and Teaching?” Indeed, even making only a qualitative choice is a matter of crucial strategy for a teacher. In any case, the teacher is very often unhappy about the unavoidable unbalance between the two aspects. Perhaps instruments, like sabbatical year, are meant just to help re-establishing the balance between these two natures of an academic. In some other studies in 2002 Linking Research and teaching, it was suggested that a good practice would be to “… encourage staff to use sabbaticals to develop research based or research-led teaching”. “… Although curricula may offer students the chance to be taught by eminent researchers, pressures to maintain a research profile may well limit student access to these researchers“ (Linking Research and teaching: “Exchange” Magazine, 2002).

Balancing teaching and research is a very challenging task. According to Adeyeye in 2004, optimization of staff time can be achieved only if there is an explicit management strategy that promotes the interdependence between teaching and research. The effective allocation of time could stimulate a synergistic relationship between teaching and research by enabling staff to engage in each activity at a level, which enhances both activities. Accordingly, some of the main advantages of integrating research into teaching include:

- The teacher is able to give accurate and up-to-date information to students with relevant examples rather than second-hand knowledge from textbooks.
• The teacher’s research is also beneficial when presented and opened to challenges from students. This could, in turn, stimulate new research directions.
• Teaching could be a recruitment platform for attracting students with a passion for research. Such integration is especially important in the science and engineering fields where students form the backbone of the research undertaken.

E) Teaching and research synergy at student level

Synergy at the level of students exists both at undergraduate and postgraduate levels. At the postgraduate level, the synergy is very rich as the learner is in a transition towards the status of a qualified researcher. However, at the undergraduate level, the student participation in research is more limited and, therefore, the synergy is at a lower level, being done in principle with the main purpose to train students to become independent learners. The most used forms of involvement are students’ participation in research events (e.g. seminars, lectures, conferences and colloquia) and students are taught postgraduate involvement in staff research; However, some authors, like Jenkins, consider that it would be a mistake to expect students to engage too early in research (Jenkins et al, 2007).

The assumption that teaching diminishes research quality is reflected widely in graduate programs in the sciences, says Mark R. Connolly, a researcher at the Wisconsin Center for Education Research, at the University of Wisconsin at Madison, who commented on Feldon’s findings (Feldon et al, 2011). Actually, science-faculty members are rewarded largely on the basis of their research, notes Mr. Connolly. That reality naturally leads faculty members to place more value on time spent advising their graduate students on research than on teaching.

It is important to note that many teaching and learning activities may incorporate one or more of the 4 categories.

Discussion

A good balance between the 2 entities should be sought in the competency based USA medical school teaching. For the past 6-7 years, may academicians and academic leaders felt the necessity of synergism between teaching and research among medical school faculty members. The usual trend was to hire the faculty members that have the large research grants, and whose salary was basically paid through the research grants. Such faculty members did not invest much in teaching; they wanted the least involvement in teaching, giving priority to research, to publications, and having the grant renewed. After reviewing the situation, academic leaders opted to create a new faculty tract for teaching faculties, supported completely by school budget and trained for teaching and medical education. For these teachers, research was not considered as a priority and a measured element in their promotion, while teaching was highly valued, periodically assessed, and evaluated. This trend attracted a large number of faculties in the medical schools to be devoted to teaching with partial commitment to research. While there are many differences between the disciplines, the greatest convergence seems to occur when we consider the goal of student learning in higher education (Healey, 2005; Hay, 2010).

Rather than keeping research and teaching separate, Barnett (1997) and others advocated that undergraduate teaching should parallel research. Relating the learning of the methods used to carry out research in their discipline to inquiry-based or research-led learning, in particular courses could bring benefits for both students and academics. Students would become involved in the processes and language of inquiry at a much earlier stage than now, and staff could support student engagement applying the skills and knowledge that make them distinctive in their fields.

In an effort to strengthen research-teaching-scholarship relationship, one window of opportunity or a starting point that might be open for both teachers and researchers, might be the conceptualization or review of priority curriculum selected from the early undergraduate years. Such curricular modifications could improve learning design developments, which could in turn involve both research informed content as well as research-led learning, and might lead to new “ways of doing things”, as Elton suggested. They could also go further to “doing things no one else is doing” or even “doing things that otherwise can’t be done (Smith, 2002).

The re-emphasis of undergraduate education is probably the most pressing issue that universities must face in the next decade. The challenge is to demonstrate that the learning and research environments, at the undergraduate level, are not competitive but complementary (Piper, 2001).

The teaching literature suggests that, if there is to be a solution to the research-teaching problem then there must be radical shifts in the teaching culture from teacher-centered to student-centered learning, the integration of generic and discipline specific issues and
the use of radically different teaching and learning strategies such as enquiry-based learning (Blackmore, 2009).

**Conclusion**

More fundamentally, perhaps there is a need to acknowledge that teaching and research are often intrinsically linked in the individuality of a single academic. Through this article we have been exploring the ways that teaching might impact research and vice-versa, but we are also pointing to the fact that most attempts to show this synergy becomes problematic because we always try to measure a single and isolated dimension (i.e. teaching only or research-only). Perhaps the biggest change that we are suggesting is a shift at the level of individual academic identity whereby a persons’ capacity to be a good research/teacher (simultaneously), must be seen as both research and teaching together, and as more than the simple combinatory sum of added parts. In these aspirational learning contexts, where bridges are built linking research and teaching activity, students could learn to discover the world by doing ‘real’ research, underpinned by collaboration and scholarship, much earlier than at present time. Moving towards a more integrated model of higher education, one that values the scholarship of teaching and learning would provide a solid basis for giving students new exciting opportunities for enhancing levels of satisfaction, success and learning. The link between teaching and research has received a great deal of attention especially in this era of information technology and the explosion in knowledge which is uncontrollable. The growth of knowledge especially in the 21st and early 22nd century showed us the necessity to propose models which can define and specify the role of each player in the process of education, in knowledge transfer, in the teaching profession or in the research field. Each staff working in an organization contributes, one way or another, to what the organization do and do have specific tasks. Many models were proposed to analyze and explain how can we use the knowledge and human capacities to achieve an educational and professional development at the individual, group and organizational levels in higher education institutions and more will come.

**References**


Twelve tips for peer-teaching

Title
Twelve tips for peer-teaching

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Abstract
Background
Peer-teaching is emerging as an important new component of the undergraduate medical curriculum. Although widespread, such teaching usually takes place on a voluntary, extracurricular basis. Peer-teaching has benefits for medical schools, student teachers, and student learners. However, evaluation of peer-teaching has been of fairly limited scope.

Aim and Method
To provide tips to help promote peer-teaching within the undergraduate medical curriculum, using our personal experiences of peer-teaching, outcomes from local and national workshops we have organised and relevant educational literature.

Results and conclusions
There is significant enthusiasm among undergraduate medical students and their educators for providing peer-teaching within the undergraduate medical curriculum. Peer-teaching promotes clear, immediate benefits to student teachers and students taught and should be established within the medical curriculum. The long-term effects of extracurricular undergraduate peer-teaching to the health and educational economies are difficult to measure and remain to be identified and quantified.

Introduction
It is almost twelve years since Wadoodi and Crosby (2002) proposed their twelve tips for peer-teaching or ‘peer-assisted learning’ as they called it. Since then, there have been a number of significant developments in this area of undergraduate education and there is now a large body of evidence demonstrating the benefits of peer-teaching for medical schools, student teachers and students taught (Dandavino et al 2007, Field et al 2007, ten Cate & Durning 2007, Lockspeiser et al 2008, Silbert & Lake 2012, ten Cate et al 2012, Burgess et al 2014). Furthermore, there is now a great enthusiasm for peer-teaching amongst students and within medical faculties (Dandavino et al 2007, ten Cate 2007, Ross & Cameron 2007, Mackinnon et al 2009, Silbert & Lake 2012). Moreover, peer teaching has developed as an effective way of teaching medical students how to teach (Zijdenbos et al 2011). In recognition of such developments, teaching skills are being emphasised internationally as an important graduate outcome, as demonstrated by its inclusion in both the General Medical Council’s ‘Tomorrow’s Doctors’ and the CanMEDS 2015 framework. Peer teaching has been described, therefore, as an important skill for all undergraduate medical students (Blanchard, 2015).

We felt, therefore, that it was time to revisit this important area of undergraduate learning and produce our own twelve tips to promote peer-teaching in medical schools.

Methods
In developing our twelve tips we have used our personal experiences in peer-teaching: DSB is peer-teaching lead at Keele Medical School and has been involved in the development of a Teaching Student Teachers (TST) course; ER is a past President of the Keele Medical Education Society (KMES) which promotes extracurricular peer-teaching. Also, we have both organised local and national workshops on peer-teaching and have reviewed the relevant literature relating to peer-teaching from 2002 to date searching four databases (MEDLINE, CINAHL Plus, AMED and PsycINFO) through the terms ‘peer-teaching’, ‘near-peer teaching’ ‘peer-tutors’ or ‘peer-assisted learning’.

Tip 1: Carefully choose a name that avoids confusion and promotes your aims

A variety of names have been given to this type of teaching activity (Ross & Cameron 2007) with the most common being...
peer-assisted learning, peer-teaching and near-peer teaching. We prefer the term ‘peer-teaching’ as it is already widely used to describe teaching that takes place between medical students (Ross & Cameron 2007, Mackinnon et al 2009, ten Cate et al 2012). Moreover, we feel ‘peer-teaching’ is a more accurate description than ‘near-peer teaching’ as although the students involved in such activities are usually from the same medical school they might be in quite different academic years. Furthermore, near-peer teaching is perhaps a confusing description of an activity that can take place between students in different geographical locations (Lynch et al 2014). It has been our experience that the term ‘peer-assisted learning’ can be confused with ‘peer-mentoring’, which is an entirely different form of student-student interaction with the emphasis on both social and academic pastoral support (Jefferies & Skidmore 2010). Finally, we feel that ‘peer-teaching’ emphasises the importance of the teaching, rather than the learning, as in ‘peer-assisted learning’.

**Tip 2: Don’t underestimate student enthusiasm for this type of learning**

From our own experiences of organising peer teaching sessions at Keele, from student input at a workshop and parallel sessions at the Association for the Study of Medical Education (ASME) 2014 Conference and others (Field et al 2007, Ross & Cameron 2007, Lockspeiser et al 2008, Mackinnon et al 2009, Silbert & Lake 2012, Nelson et al 2013) it is clear that there is great enthusiasm among medical students to be involved with peer-teaching. There will, therefore, almost certainly be a great demand for peer-teaching if offered and organised outside the curriculum. There will, therefore, almost certainly be a great demand for peer-teaching if offered and organised outside the curriculum and it is important to provide an adequate number of places and to allocate these places equitably. At Keele we have successfully used free on-line sign-up packages (e.g. www.signupgenius.com) which facilitate the offering and fair allocation of students onto courses when places are limited. Of course, such issues might be avoided if peer-teaching activities were to be established as compulsory parts of the undergraduate curriculum.

**Tip 3: Find out what is going on already.**

Although Wadoodi and Crosby (2002) suggested the integration of peer-teaching into the medical course there are only a very few reported accounts of this actually taking place (Burgess et al 2014). At Keele we set out to develop intracurricular peer-teaching but found that a significant amount of peer-teaching was already taking place and almost exclusively outside of the School’s curriculum. Such extracurricular teaching involved student run societies such as the Keele Medical Education Society (KMES) and Keele Anatomy Society and also included regular exam revision sessions run by more senior students and some F1 doctors.

These well-established and well-supported extracurricular teaching schemes were encouraged and faculty guidance offered. However, this approach provoked issues in defining who was responsible for the content of teaching sessions and so leads onto our next tip.

**Tip 4: Clearly define and differentiate between intracurricular and extracurricular peer-teaching**

We found that it was necessary to clearly define who was responsible for the content of the extracurricular and intracurricular peer-teaching activities in order to alleviate the concerns of faculty staff with respect to the quality of teaching provided. As long as it remained professional, safe and responsible, as assessed, if necessary, by the Medical Faculty, the content of extracurricular teaching was deemed the sole responsibility of the society or students involved. Furthermore, such activities would explicitly state that the content of the teaching was not part of the curriculum, that it was student run and delivered, and the school was not responsible for it. In contrast, intracurricular peer-teaching took place within the curriculum and as such was clearly a school responsibility.

**Tip 5: Gradually introduce peer-teaching activities into the curriculum**

Establishing peer-teaching within the medical curriculum can seem a daunting task at first and within our workshops we have identified many challenges that schools throughout the UK have faced. How is the quality of the teaching assured? Can patients on the wards be utilised in peer-teaching? Do faculty understand the benefits of peer-teaching? How can peer-teaching be successfully integrated into the curriculum? Should all students have to participate in peer-teaching? It is clear from our workshops that solutions to such difficulties can be found. However, we believe that a gradual introduction of peer-teaching allows time for issues to appear and solutions to be developed.
Tip 6: Teach all undergraduate medical students basic teaching theory and skills

As doctors have a professional obligation to teach (GMC 2009, 2011) there is a clear need for medical students to be taught how to teach and it has been suggested that the acquisition of such teaching skills should commence within the undergraduate curriculum (Dandavino et al 2007, Lockspeiser et al 2008, Amorosa et al 2011, Silbert & Lake 2012). Medical students involved in peer-teaching have requested instruction on how to teach (Lockspeiser et al, 2008) and provision of basic educational training for students who teach other students has been suggested (Wadoodi and Crosby 2002, Dandavino et al 2007, Ross & Cameron 2007). Such a programme should provide students with knowledge of the basic principles of teaching, improve teaching skills and reduce anxiety related to future teaching responsibilities (Dandavino et al 2007). There are already established teaching courses which form compulsory parts of some medical courses (Zijdenbos et al 2011) but this is rare within the UK (Burgess et al 2014).

At Keele, in order to provide the opportunity for undergraduate students to develop teaching skills, we have piloted a new Teaching Student Teachers (TST) course with the aim of eventually establishing it within the undergraduate curriculum.

Tip 7: Provide opportunities for faculty observed peer-teaching within the curriculum

Although Dandavino et al (2007) argued that students should practice their teaching skills with ‘an appropriate balance of support and independence’ there are few published examples of students teaching within the nurturing environment of the undergraduate curriculum (Burgess et al 2014). At Keele we felt that if we were to teach students teaching skills, then we must also provide opportunities for those skills to be practiced in a safe educational environment with appropriate monitoring and feedback. To this end we have established, especially in the fifth year of the course, sessions within the curriculum where teaching by students can take place and be observed by faculty members so that developmental feedback can be provided. At present this includes optional student sign-ups to lead clinical and communication skills sessions and ward induction and orientation meetings between students.

Tip 8: Promote peer observation and feedback of peer-teaching activities

It is well-recognised that although the observation of a teaching session and provision of feedback by a peer can be a stressful experience for even experienced faculty members, it is an accepted mechanism of teacher development. For a student teacher, peer observation of a teaching session might be less stressful than having a faculty observer provide feedback and may also provide an excellent opportunity for the observer themselves to develop skills of teaching evaluation and feedback.

At Keele we provide specific advice on how to evaluate a teaching session and provide feedback within the aforementioned TST course, with the expressed aim of encouraging students to appraise each other’s teaching. Furthermore, peer-taught sessions organised by KMES are routinely peer-observed to support students’ development.

Tip 9: Establish a ‘peer-teaching lead’

It is clear, not only from our own observations but also the findings of others (Zijdenbos et al 2011, Nelson et al 2013), that student teachers welcome and derive great benefit from the support and enthusiasm provided by established faculty teachers. Therefore, at Keele, we have created the role of ‘peer-teaching lead’ with overall responsibility for school-wide intracurricular peer-teaching activities. The role also involves offering support and advice to any students planning, or engaged with, extracurricular peer-teaching activities. Creating such a role within a school clearly identifies a point of contact and help for both students and faculty with any issues related to peer-teaching and recognises peer-teaching activities as valuable components of the school’s curriculum.

Tip 10: Evaluate the effects of peer-teaching

Evaluation of any new peer-teaching activity is essential and should be ‘constructively aligned with the aims and learning objectives of the project’ (Ross and Cameron 2007). Dandavino et al (2007) suggested three levels of evaluation of peer-teaching which they termed reaction (participant satisfaction), learning (participant learning) and outcomes (do participants now teach better). Most published evaluation of peer-teaching in medical schools has been restricted to the first of these levels and the short term effects of
peer-teaching (ten Cate 2007, Field et al 2007, Silbert & Lake 2012). Ten Cate et al (2012), however, looked at the academic achievements of medical students tutored by near-peers and medical students tutored by faculty over a 5 year period. They used test scores for individual courses and demonstrated improved knowledge acquisition, information retention and exam performance in students that were tutored by peers. Furthermore, they found that student peer-teaching was at least as good as faculty tutoring. Nevertheless, it remains to be shown that the benefits of peer-teaching are due, as has been suggested, at least in part, to the social and cognitive congruence between learners and teachers (Lockspeiser et al 2008, ten Cate et al 2012), or that peer- teaching is appropriate for all medical students (Lockspeiser et al 2008).

But the even longer term effects of peer-teaching may be more difficult to measure. For example, how does learning to teach as a medical student affect abilities as a qualified doctor? Does it lead, for example, to enhanced skills in patient education? Will attendance on a TST course promote interest and involvement in a career in academic medicine? Will involvement in peer-teaching lead to a better development of professional values and behaviour as suggested by Dandavino et al (2007). With expansion of teacher training and peer-teaching within undergraduate medical curricula these questions may be answered.

One way we have evaluated our TST course is by contacting attendees one year after the course, once they had completed their undergraduate studies. Over 50% of the students responded and all offered positive comments concerning the value of the course to their final year of study. It would be interesting to follow these students further to see if attendance on the course had any bearing on subsequent career choice or performance as a doctor. However, such evaluation would be severely limited by the relatively small numbers involved and the lack of adequate controls.

**Tip11: Develop an educational environment that encourages spontaneous peer-teaching**

Wadoodi & Crosby (2002) stated that ‘peer learning initiatives must be seen as a student-led initiative to maximise the potential for free expression’ and that ‘involvement of the medical school should be seen as being as minimal as possible’. However, we believe that active promotion of peer-teaching by placing it firmly within the undergraduate curriculum will help to develop an educational environment that, by its very nature, not only provides opportunities for peer-teaching within the curriculum but also promotes and authorises spontaneous peer-teaching amongst students.

Not all peer-teaching needs to be premeditated and planned. Senior students often find themselves in situations where they could teach other students. We would hope that with the promotion of peer-teaching within a school, and the provision of teaching skills via an appropriate teaching course, that students would feel empowered and encouraged to seize spontaneous teaching opportunities.

**Tip 12: Do it!**

Teaching is a core clinical skill for medical students (Dandavino et al 2007, Blanchard, 2015) and there is now a significant body of evidence to demonstrate the benefits of undergraduate peer-teaching. Burgess et al (2014), reviewing current evidence, described peer-teaching as leading to improved teaching, facilitation, assessment and feedback techniques as well as development of confidence and leadership qualities. They reported perceived benefits to student teachers as increased appreciation of educational theory, ability to plan learning activities and effectiveness of feedback.

Although there is some evidence to suggest that involvement in peer-teaching might not in itself improve academic performance (Iwata et al 2014), medical student teachers enjoy the experience (Dandavino et al 2007, Field et al 2007, Ross & Cameron 2007, Silbert & Lake 2012, Burgess et al 2014), they develop skills essential for their role as future doctors and educators (Amorosa et al 2011, Nelson et al 2013, Burgess et al 2014) and provide a useful additional skill pool within the medical school (ten Cate & Durning 2007, Burgess et al 2014). They can help to develop a school’s curriculum (ten Cate et al 2012, Blank et al 2013), and have been shown to be at least as effective as more established teachers (Knobe et al 2010, ten Cate et al 2012). Student learners enjoy the experience of being taught by their peers (Field et al 2007, Nelson et al 2013, Burgess et al 2014), and show evidence of improved learning (Wadoodi & Crosby, 2002, Dandavino et al 2007) and exam performance (Silbert & Lake 2012, ten Cate et al 2012, Blank et al 2013).

With so much evidence in favour of peer-teaching what are you waiting for?
Conclusions

Twelve years ago guidance was provided on the establishment of peer-teaching programmes for medical schools. We believe that with recent emphasis on the role of doctors as teachers, increasing evidence on the beneficial effects of peer-teaching, and a growing enthusiasm for peer-teaching within medical schools, there is now a momentum to firmly establish peer-teaching within the undergraduate medical curriculum. We hope that our twelve tips will facilitate this development and, perhaps thereby, promote investigation of the longer term consequences of teaching medical students to teach.

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Lecture recording (often referred to as lecture capture) of material presented in a lecture to students in some manner is becoming popular with many institutions implementing campus-wide lecture capture facilities. On a smaller scale, many lecturing staff make their own recordings of lectures with laptops and digital voice recorders. Generally the lecture content is made available to enrolled students through a virtual learning environment but may be shared more freely online. Several methods of lecture capture are available from audio-only through to full video recording of the entire room. Screen capture is a popular means of producing lecture style recordings and can be carried out using a computer by capturing the projected output and audio using a microphone in a lecture theatre. (Davis et al. 2009) Bespoke screencasts or videos are often used by staff to supplement material delivered in lectures. These differ from lecture recordings in that they are recorded without an audience and may focus tightly on specific topics or procedures. (D’Angelo 2014) For clarity, the term ‘lecture recordings’ will be used to describe a recorded lecture while ‘screencast will be used to describe supplementary recordings.

Lecture recordings may be used to enhance the student experience generally, to make more use of contact hours, and to allow students to catch up on lectures that were missed. (Davis et al. 2009) Other lecturers may choose to record lectures for future use in more interactive styles of teaching including lecture flipping. (Seery 2015) The technology may also be used to support students with specific educational needs or non-native English speakers who may wish to review content and concepts. (Shaw & Molnar 2011)

General concerns about the use of lecture recordings are varied. A review of studies describing lecturers’ perceptions of lecture recordings indicates that the key concerns relate to attendance, lecturing style, access to suitable recording technologies, and the pedagogic value of lecture recordings. (Seckar 2010 and references within). For some the main concern is that it promotes passive learning where students simply re-watch lectures as part of revision processes. Other concerns relate to the specific technologies being used with staff reluctant to be video recorded during sessions, but screen capture may allow a satisfactory compromise. Some may feel that lecture attendance may drop if students know that recordings will be available while other lecturers believe their specific style of lecturing to be incompatible with recordings.

Some studies correlate the use of lecture recordings with performance in assessment. These studies report a range of

**Context and Objectives**
outcomes from no clear impact on learning through to both positive or negative impacts. (Danielson 2014 and references within, Ford 2012) Lecture recordings form part of a complex mix of resources and teaching sessions making such correlations inappropriate for this study.

The objectives of this study were to evaluate the students’ perceptions of lecture recording over 3 years of the Chemistry programme. In the 2014/15 academic year, three members of academic staff recorded lectures (two by screen-capture methods, one with audio only) and several members of staff provided some type of screen-cast or video material to supplement lecture sessions. The third year students surveyed had access to lecture recordings in all three years of study for certain sections of 5 modules. The second year students had access to lecture recordings for certain sections of 4 modules, and the first years had access for certain sections of 2 modules. All Chemistry students have also access to an extensive range of screen-casts for various purposes in addition to lecture recordings in some modules. These cover a wider variety of topics including ‘how to’ guides. (D’Angelo 2014)

Various requirements have been set in modules for access to the recordings by the author. These have ranged from the whole cohort achieving 80% attendance, access only available to those who attended or who had good cause for the absence, completion of a short multiple-choice quiz, or simply being enrolled on the module. Generally lecture recordings were made freely available for reassessment periods. The students’ perceptions of these access requirements were evaluated, in addition to how lecture recordings fitted into their study practice.

Methods

A paper-based questionnaire was given out to students during first and second year classes during the final week of spring semester 2015. An electronic version was prepared and circulated to first, second and third year students during the revision and exam period in May 2015. It was clearly indicated on the electronic version that first and second year students who had not already completed the questionnaire were being asked to complete it. The questionnaires were anonymous and students were able to choose whether to complete it. The students were told that the intention was to publish an article on lecture recordings and were asked for permission to use their quotes in the article.

There were seven questions, and a mixture of Likert scales, select an answer and free text responses were used. A series of statements were evaluated using a five point Likert scale from strongly agree to strongly disagree. For analysis, students selecting agree/strongly agree or disagree/strongly disagree have been combined and compared, along with those selecting neutral. No averages have been taken.

Access records on the Keele Learning Environment have not been analysed. These generally indicate the number of times a folder with tracked objects has been opened and viewed and are limited in usefulness. The data are not an indication that the lecture recording has been accessed, may be inflated if students have an issue with playing the recording, and must be set up in an inconvenient manner for students to access if any data are to be collected. More sophisticated analytics are necessary to investigate how students use lecture recordings. A small number of students with English as second language or specific education needs have completed the survey. It would inappropriate to assume that what helps one student, helps another in these extremely diverse groups and so specific questions related to this were not asked.

Results

Participation in the survey was dictated by attendance at taught sessions and willingness to complete the survey or willingness to complete the online survey. For first years, a cohort of 72, 47 paper questionnaires and 2 electronic questionnaires were completed (68%). For second years, a cohort of 50, 30 paper and 5 electronic questionnaires were completed (70%). For third years, a cohort of 41, 15 electronic questionnaires were completed (36%) and there was no opportunity to distribute paper based questionnaires.

1. Practicalities

A small number of students (12/99 responses) indicated that they used a phone or digital voice recorder to make their own lecture recordings. In most cases this is done without the knowledge of the member of staff delivering the lecture. Several students have permission to record lectures as part of their needs adjustments.

Students were asked what they would prefer if lecture recordings were to be made available for all courses and screen-cast and/or video was preferred (97/99 responses). Screen-cast only (e.g. capturing audio along with that which goes through the projector, and the method of lecture recording currently used by the author)
was most popular (61/99. Audio only was not thought to be useful.

When students know that lecture recordings will be available, there is some influence on the decision to attend. Only 5 students responding indicated that this does influence their decision to attend, 12 had never considered it and the vast majority in each year group indicated that there was no influence on their decision. Care must be taken to note that this survey was conducted with those first and second years students who were attending a lecture, knowing that it would be recorded. There were limited responses from those absent and those in third year.

A majority (63%) of students felt it was fair to limit access to recordings to only those students who attended the class, but only 36% agreed that it was fair to set short quizzes to access recordings (figure 1). There was some variation between year groups with 48% of first years agreeing with attendance requirements (statement 2, figure 1), but 77% of second years and 80% of third years. Second years found the idea of short quizzes least fair (46% agreeing with statement 1, figure 1) but had never experienced this mode of access control. First years had experienced quizzes and 28% regarded it as unfair, and 31% considering access control based on attendance unfair.

Use of recordings when available increased from first to third year with 53% of first years stating they used lecture recordings, 69% of second years and 80% of third years. The majority of students made use of them but some indicated that this was only sometimes (32/99 responses). Only 5 students responded indicating that they did not use the lecture recordings at all.

Of the students surveyed, 86 felt that all lectures should be recorded. 11 were neutral and 2 disagreed. The vast majority of students agreed that it was good to know that recordings were available (statement 3, figure 2).
Students were asked several questions relating to their study practice and where lecture recordings fitted within that (figure 3). Recommended textbooks were the least used resource by all years, and least useful to third years. Lecture notes are the key study resource for students, followed closely by doing problems (taken to mean exam style questions) and then using lecture recordings if they are available. Under half (45%) of students agreed that lecture notes contained all that was needed for revision purposes for exams (statement 2, figure 2). Other internet sources also provided a significant resource for students.

Discussion

The questionnaire was completed by 99 students across three years of the chemistry course. The paper-based questionnaire was distributed to first and second year students during the final week of the second semester which may lead to some bias in responses. This may be particularly evident in questions regarding attendance and recordings where a decision not to attend the lecture where this evaluation was carried out (knowing that it would be recorded) may already have been made. Reasons for not attending lectures that were recorded were not sought and so specific attendance data are not presented. Registers were taken in all sessions and indicate lower than average attendance for the sessions in which evaluation took place but within the typical range expected for classes at the end of the semester. In those responding, the fact that the lecture would be recorded did not have a significant influence on their decision to attend the lecture. A small number of students indicated they made personal lecture recordings and this would encourage them to attend. This may include those students with permission to record lectures as part of a statement of needs.

Students were very much in favour of lecture recordings and for as many lectures as possible to be recorded. In the second year class, several students very quickly started discussing the need to capture things written on the whiteboard and also gestures made by the lecturer such as indicating an area of the screen or using models. It is for this reason that many second year students indicated that video would be preferable, acting under the assumption that it would capture the entire of the front of the lecture theatre. Otherwise, the projected content and audio were satisfactory for students in all years. Audio-only was not a popular option.

In order to encourage attendance at the lecture, various methods have been tried including short multiple-choice quizzes to gain access to the recording (first year), or attendance requirements. The
majority of students felt that requiring attendance or submission of good cause for the absence was a fair way of controlling access to lecture recordings, but others indicated in comments that they felt fees had some roll in determining that they would attend lectures.

“I find it important to attend every lecture to ensure I understand as much content as possible. Plus I’m paying £9,000 per year!”
- first Year Keele Chemistry Student

The opportunity to ask questions was also mentioned by several students as good reason to attend. Setting short quizzes split the class responses with second years feeling it was the least fair. Third years were generally more in favour of methods that encouraged and rewarded attendance. The use students’ make of lecture recordings is a more complex issue. Students are very keen that lectures are recorded and that the recordings are available. The increase in use of recordings from first to third year could be due to several reasons. The students may have adapted their study practice by third year to make greater use of lecture recordings where available. The complexity and quantity of unfamiliar material delivered in lectures increases from first to third year and so the lecture recordings may be used to aid in coping with this material. Further investigation into this is warranted. Recordings are not viewed as a replacement for a lecture with 85% of students disagreeing that lecture recordings were only used if a lecture had missed (statement 5, figure 2). Many students indicated that they watched specific parts of lecture recordings, particularly where they felt they had missed some points or the topic is difficult.

“I would attend anyway, the recording would allow for me to go back and add extra notes where I may have missed some point, it would also help me better understand the lecture material because I could go back and revisit the lecture.”
- first year Keele Chemistry Student

Over half of the students find short screencasts on specific topics to be better than lecture recordings. In Chemistry it is common for screencasts to be prepared by lecturers to offer further explanation of single, complex topics, to work through the answers to exam style questions or to demonstrate the use of software or performing specific procedure.

Conclusion

Lecture recordings are well-received by students in a context where lecture notes are viewed as a very significant source of information for revision for exams. Traditional sources of information such as text books seem disfavoured by students in Chemistry by comparison. Access requirements such as attendance rules or short quizzes are accepted by students if they exist but have an additional workload associated with implementing them. Short, targeted screencasts were preferred to lecture recordings but this may reflect the variety of screencast topics already providing in Chemistry. Further work is needed to gain an overview of the impact of lecture recordings on student performance in assessment and those students with specific needs, and to quantify the use of lecture recordings within a course. This could then inform how we support students in their learning and help them to make effective use of very popular resources such as recorded lectures.

References


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On the 8th of September 2015, Dr. Yvonne Skipper and Dr. Russ Crawford (Keele University) organised and ran an event at Keele Hall entitled: Feedback to the Future. The conference brought together psychologists, teachers, academics and post graduate students from a diverse range of disciplines to share best practice around effective feedback delivery. The event was recognised by the Higher Education Academy and a key focus was in using psychological evidence to inform feedback delivery and the use of research tools to examine the impact this has on students. The day featured presentations, keynotes and group discussions, drawing a total of 60 attendees from a diverse range of backgrounds, including school teachers from primary to sixth form; Higher Education lecturers from several institutions across the country; post-graduate students from a range of institutions and several delegates from Stoke County Council.

The event received a wealth of positive feedback with representative highlights being:

“I enjoyed the range of topics and speakers - and the way that talks were mostly 20 minute slots. This made them really easy to take in. There was clearly something for everyone which was great. Well organised on the day, with good breaks and catering.”

“Great to hear about different perspectives on feedback - from primary schools through to HE!”

“Thank you for a lively, varied and supportive day”

Critically, many delegates also stated that the event had changed or would change their practice moving forward, examples of which are:

“I will ensure I am not just justifying the mark with my feedback to students!”

“Yes, to an extent. I looked up the Beaumont (2011) paper about the dialogic feedback cycle and this has made me think more about the details of my assessment and feedback practice.”

“Yes. We took several ideas back to our department and aim to roll out an assignment feedback form for students to complete when they submit and assignment. We are also planning to deliver sessions to help students get the most out of feedback.”

Acknowledgements

First, second and third year Chemistry and Medicinal Chemistry students in 2014-15 academic year.

The Keele Lecture Capture Project Group for many useful discussions.

The event was part funded by an award from the Teaching Innovation Scheme at Keele and principally funded by the British Psychological Society, Developmental Section which also provided a small pot of funds to encourage post graduate attendance in the form of small travel bursaries.

Deputy Vice-Chancellor, Prof. Mark Ormarod opened the event with some encouraging words and an institutional insight into the importance of feedback, drawing on his own teaching as well as his vision of the higher education sector. This introduction was followed by a presentation from Dr Andrew Morris (Keele Medical School) on feedback and its use in the Inter-Professional Education (IPE) programme at Keele, specifically talking about multi-source feedback and its application in this setting. Next up was Adrian Molyneux (Keele Medical School), who talked about his experience of using iPad / tablet technology to collect and improve feedback delivery in practical exam scenarios. BPS member Dr. Sarah Rose (Staffordshire University) then presented her work on improving students’ engagement with feedback from college to university levels. After a short break, the first of two keynote speakers was Prof. Paul Bartholomew (Aston University), who presented his own thought-provoking take on the importance of feedback, with some contentious ideas that promoted a slew of questions and comments and some deep discussion from participants. This was followed by Dr. Russ Crawford (LPDC) and Dr. Yvonne Skipper (Keele School of Psychology and BPS member) presenting their pilot work exploring the psychophysiology of feedback which was recently showcased at the annual European Association for Research on Learning and Instruction (EARLI) international conference in Cyprus.

After a top-tier lunch (including hot wedges!), the talks resumed with Nick Garnett (PhD student, School of Psychology, Keele) and Lizzie Marshall (The Wistaston Acadmey) who co-presented on their work using a feedback intervention in schools, followed by Lee Davies (Sandon College) who gave an interesting presentation on his evaluation of a full school feedback review. The next presentation was from Dr. Julie Hulme (Keéle School of Psychology) who talked about way of facilitating student learning through reflection on feedback, which again prompted discussion from the event participants. Then was second keynote of the day and the closing presentation from BPS member, Prof. Patrick Leman (Kings College London) who summed up many of the strands of research and inquiry of the day whilst adding some reflections from his own teaching experience.

The final activity of the day was labelled “speed dating” and involved research interests, given time to network and talk to one another and then each participant was asked to write two action points they would like to follow up on in the coming months, these were collected and posted out to the participants 1 month post-event as a reminder of their thoughts from the day.

Overall, the event was very successful in inspiring discussion and debate around feedback and promoting changes in practice. In future we hope to organise similar events to again bring together educators from different institutions and from school through to university to facilitate dialogue and promote good practice.
In January 2015, the School of Psychology were delighted to launch our qualitative research group - the Qualitative Psychology Forum (QPF). The primary aim of this forum is to support psychology members of staff and students who are interested in and/or conducting qualitative research. By including both staff and students (this includes our undergraduate students (UG), MSc, and PhD); the secondary aim of the forum is to bring all those with an interest in qualitative research together to share ideas and interests related to our research to help everyone improve and extend their skills.

The idea for the forum came from Dr Alexandra Kent, a psychology lecturer, who suggested the benefits of having a friendly, informal support network for qualitative researchers to touch base, and engage with qualitative specific issues. The QPF draws theoretical inspiration from social learning theory, in particular the concept of a ‘community of practice’ in which learning is viewed, not as the property of an individual mind but as a relational and cultural construction created through interaction with more knowledgeable others (Lave and Wenger, 1991; Hoadley, 2012).

Conducting qualitative research can, at times, be a lonely experience, with lengthy data collection, transcription, and time-consuming analyses being common practice. For qualitative psychologists in particular, we are often a fragmented and minority group within the larger, still predominantly quantitative discipline. By creating a platform for qualitative research practice to be discussed, shared, critiqued and modelled by active researchers we have the potential to help all members build their skills, but also value their membership of the group and their identity as qualitative psychologists.

The community of practice approach to learning requires learners to a) have access to experts and b) aspire to or already consider themselves members of a group to which the expert practices are central. “Through legitimate peripheral participation, learners enter a community and gradually take up more and more of the identity of group membership and centrality and more and more of the central practices of the group” (Hoadley, 2012, p291). In this respect the QPF represents a deliberate attempt to create a ‘knowledge building community’ focused on all forms of qualitative inquiry (Hoadley and Kilner, 2005). We want to use the QPF as a vehicle for enculturation into a community of qualitative psychologists where everyone’s emphasis is on learning and developing their research skills. The QPF is designed for all researchers (UG, MSc, PhD students and staff of all levels and experience). Novice researchers (e.g., UG students) or any one unfamiliar with a particular methodological approach (e.g., conversation analysis) can attend events and learn from and contribute more as they gain in confidence or experience.

The forum’s meetings and activities are co-ordinated by Jenny Taylor - a Teaching Fellow in Psychology who has recently submitted her qualitative PhD thesis. Since its inception, the forum has been holding monthly meetings consisting of an exciting mix of events. The events are organised and led/facilitated by members of the forum, which currently consists of psychology and counselling members of staff and PhD students. So far, these have included workshops, discussion groups, and research presentations.

Our first event was a World Café Style Thematic Analysis Workshop, which was met with great success. Over 30 people attended (including staff, and students of all levels), who enjoyed learning about how to conduct a thematic analysis in a fun world café style format, an engaging and commonly used action research method. The attenders worked collaboratively conducting a thematic analysis, which is a very widely used, foundational qualitative analytic method (Braun and Clarke, 2006). In terms of the world café format, for each stage of the analysis (following the guidelines outlined by Braun and Clarke, 2006), attenders worked with different people, which enabled them to discuss and share their thoughts on the analysis as it developed. Instructions and guidance for the different analytic stages were printed on menu cards, and refreshments were provided on each table. Feedback after the event was overwhelmingly positive, and those who attended commented on how they enjoyed learning how to conduct a thematic analysis, as well as engaging with an innovative action research method.

Other events have included a ‘Future Creating’ Action Research Workshop, which gave attendees a fascinating introduction to this innovative participatory research method. Developed by Jungk, Lutz and Muellert in the 1970s (Muellert and Jungk, 1987), in essence, the aim of this type of workshop is to engage a group of people in developing ideas and even solutions relating to an identified topic. All future creating workshops involve three key stages: critique, utopian/fantasy, and a final actualisation/implementation stage, whereby realistic solutions to the identified problem are noted and discussed. The event was a success in introducing attendees to the theory behind the workshop and also in providing a taster as to what it would actually be like taking part in such an event. As a result of its success, and the positive feedback from attendees, the workshop ran again, on a larger scale. It focused on the topic of qualitative research in Psychology at Keele, and generated useful insights that we have been able to feed back to the school.
As well as these workshops, the forum has also hosted several research presentations. Lois De Cruz, a lecturer in counselling, gave a very interesting and thought-provoking talk on reflexivity in the context of her PhD research. Reflexivity is a central consideration in qualitative research, and refers primarily to how the researcher as a person may have an influence on the research process (Willig, 2013). Alexandra Kent has also given a talk about her research entitled: “Is that your main concern?” Practices for managing misaligned priorities during calls to a Child Protection Helpline. Alexandra uses Conversation Analysis and Discursive Psychology in her research, which is typically focused on studying the practical accomplishment of social life. Angela Blanchard, a counselling PhD student, has also delivered a talk on her research entitled ‘emotionally neglected children: Not seen, and not heard.’ These talks have been well attended by staff and students.

We always start the academic year with an open afternoon in the school’s qualitative lab, the home for qualitative research within the School of Psychology. This is a dedicated qualitative research space for both staff and students to use. The forum continues to thrive in the current academic year and we have another full and varied programme of events. Events running this year include a Grounded Theory Workshop, a session on Autoethnography and Heuristics, one on the philosophical underpinnings of qualitative research, and a number of research presentations from staff and PhD students. We warmly welcome anyone outside of the School of Psychology who may be interested in coming along - for more information about the forum please contact Jenny Taylor at j.taylor@keele.ac.uk.

Acknowledgements

The authors would like to acknowledge Katie Wright-Bevans, Dan Herron, Lois De Cruz and Angela Blanchard, in particular, for their valuable contributions to the forum so far. They would also like to thank the other forum members for their support.
Context

Previously known as Curriculum Support and Development, the Student Learning team is comprised of a head of unit, a unit administrator, a learning technology officer and three faculty-based learning developers. This paper will document the growth achieved in engagement with our services and how successful these interactions have been for learners. Data from the 2013/14 and 2014/15 academic years will be used to demonstrate the growth within our service, the positive feedback received from learners and the potential directions for future growth and development.

Much of what the Student Learning team offers falls under the banner of the Distinctive Keele Curriculum (DKC). Consequently, we have become affectionately, or not so affectionately -depending on your point of view- known as the ‘DKC people’, although we do not have any direct responsibility for the DKC. This is, in fact, the University’s approach to the Student Experience (so my manager tells me). Our embedded learning development workshops, sometimes referred to ‘Away Days’ despite being neither ‘away’ or for a full ‘day’, form a part of and complement the academic curriculum. Workshops are designed to focus on articulating personal development and use the Keele Graduate Attributes as a starting point for our taught sessions.

Pedagogic context

Our department has a relatively difficult line to tread in supporting learners in a way that is developmental, not remedial, as has often been the case with student support services. Barlow et al (2011) note the pressures on such services to become grade-enhancement services via bolted on delivery models. Meanwhile, Hilsdon et al (2011) note the need for skills development services to be appropriately embedded throughout programmes so they can impact upon all aspects of teaching, learning and assessment, not simply act as a solution to a perceived deficit of skills. Allen and Clarke (2007) note the importance of metacognitive and generic skills as crucial to success both in HE and in the careers of learners. A deconstructed, separated approach is likely to only result in surface learning of these skills.

Across the three faculties, learning developers from Student Learning are involved in the curriculum design of this embedded content in various guises. In some schools, we are asked to contribute to modules to better inform students practices ahead of summative assessments while in others we additionally seek to co-design curricula in order to integrate explicit and implicit learning and skills development across the course.

The stats so far...

Our embedded skills sessions initially (2013-2014) took the form of 2 or 3-hour workshops at levels 4 and 5 of undergraduate programmes across all three faculties. However, in 2014-15 a more flexible model with a variety of formats emerged. Sessions can focus on a range of topics covering core academic practices such as critical thinking and academic writing, through to personal and professional skills such as time management and presentation skills, amongst others.

The content of sessions and methods of delivery are negotiated between ourselves and discipline leads, highlighting excellent collaborative working practices. These embedded workshops run throughout the academic year and the success of them is also accredited to the efforts of colleagues in fellow central services. Careers and Employability, Library Services and Counselling and Emotional Wellbeing also work with us to design and deliver workshops alongside colleagues within Schools. The impact of this collaborative approach can be seen in a steady growth in student attendance at our embedded events, as detailed in Figure 1.

The above data shows a significant increase in attendance across all faculties, with average cross-faculty attendance rising from 51% in 2013/14 to 60% in 2014/15. This marks a significant improvement from 2012/13, which was at 47% across all faculties.
Measuring the ‘success’ of such taught interventions can often be difficult. We currently record evaluative student feedback at the end of each taught session, as many central services do, via student evaluative questionnaires (SEQs). Some scholars note that SEQ’s can lead to a dumbing down of data with regards to teaching and learning (Johnson, 2000). However, they still serve as an efficient method of measuring students immediate experiences of teaching and learning in the absence of any institutional and longitudinal method for evaluating the development of these practices.

We ask learners to rate workshops on a scale of 1-5 (1 = poor, 5 = excellent) as well as requesting qualitative data on what they found useful in the session and what else they would like to see. Figure 2 shows the feedback ratings received in the 2013/14 and 2014/15 academic years.

We are working towards more longitudinal means of measuring impact and will be discussing these with colleagues in due process. However, we have seen a significant growth in student attendance and a positive rise in the average feedback score in each faculty. This data shows the benefits of an embedded approach indicating positive experiences for learners at our taught sessions, with feedback scores and attendance rates rising as these sessions become more integrated throughout programmes.

**What next?**

We would encourage JADE readers to contact us if they would like to engage with our service or would like to work with the team on embedding learning development strategies within their practices. Please direct queries to the following faculty-associated learning developers:

- Humanities and Social Sciences: Angela Rhead, a.rhead@keele.ac.uk
- Natural Sciences: Jayne Eagles, j.eagles@keele.ac.uk
- Health: Chris Little, c.w.r.little@keele.ac.uk

The team is currently delivering its embedded provision for the 2015/16 academic year and beyond. In addition to this, the team continues to provide the Write Direction Study Skills service and freestanding development workshops. Follow the hyperlinks for more information on these services.

When attending a recent conference, colleagues from institutions in the local area were amazed at the levels of ‘embeddedness’ that we in Student Learning services have at Keele. This is something for the institution to be proud of and serves to demonstrate the university’s commitment to providing learning and development opportunities to our students.

**Acknowledgements**

I would like to thank Tim Hinchcliffe, Head of Curriculum Development and Student Learning, for his comments in refining this short piece.
Unimatch.com is an outline for an app that will help future first year students at Keele University and other universities across the rest of the United Kingdom and the world find their place and feel more comfortable in their first year at university. The app would have similar features to match.com, a dating website to help people find their perfect match, as it would match students up with clubs, organizations, and other students with similar interests and characteristics. Other features include information on how to get in touch with teachers and help centers around the university, walking satellite navigation around the university and into the buildings, and information on international support and off-campus housing.

This app would use the theory of informal learning, which is learning that is controlled by the learner, because the program does not involve a teacher or specific plan. It would be used by students to help them meet new people, join societies they are interested in, and find their way around the campus more easily, among other things. In informal learning, students learn through experience. The goal of Unimatch.com is to help students find their place in a new school so they can have those experiences.

The first thing students will do when they join Unimatch.com is fill out a questionnaire. They would give their name, age, university, and student identification number. This information provided will help determine the student’s profile, which would provide the student with information. This information will include: a timetable, teacher contact information, and walking directions to classes. Other information, such as hobbies and interests, whether the student is an international or national/home student, and whether they live on or off campus, will also be a part of the questionnaire and this would help the app determine clubs and other students to match the student with.

If a student says that he or she is an international student, they app will provide this student with additional information. This includes information on where the international department is on campus and who to get in touch with for any questions about the host university. International students would also have links to helpful travel websites and programs offered such as Host UK. If the student lives off campus or wants to live off campus, the app would give recommendations for cost-effective and nearby apartments or houses as well as a way to get in touch with potential roommates. Off-campus students would also be able to type in the name of the street they live on and get information on nearby restaurants, bars, shopping centers, and more. This would be helpful to students in university because often times the student is not from the area where the school is located. It would be beneficial for students to have easy access to an information system about the surrounding area until they
can figure out their own way around.

The app will also have a section similar to Google maps to help students find their way around campus. Two versions of a map would be available. One would be for the computer if a student wants to consult a map before venturing out. These maps would also include student comments about different places on campus. These could tell students where a good place to study is or where the food is especially good. This would be helpful for students because it is good to know some inside tips about the campus so they don't feel lost in the first few weeks. The second version of the map would be available on a student’s smartphone. This map will run like a navigation system to provide students with walking directions to get to various places around campus. The student could use this to help get around campus and even find his or her way to a classroom. This would be helpful for students because the buildings around campus can be very confusing especially in the first couple weeks of classes starting.

A fourth section of the app is on the classes the student is taking, which can be determined each semester by the student’s identification number. In this section the student will be given contact information so he or she can easily get in touch with teachers. Hence, students would be able to more easily get in touch with teachers and ask questions about readings or papers or ask for advice. There would also be information on how to get in contact with student services and finance and income offices. This section would also include a link to a timetable with the student’s schedule for the current semester. This could be equipped with a timer so students would be reminded when they have a class, something that would be especially helpful to new students in the first couple weeks of classes. It would be advantageous to students for them to have easy accessibility to a class timetable so they can remember when they have to be at class in order to make other plans. This part of unimatch.com is similar to what already exists in the Keele University app.

A fifth section is on clubs and organizations that could be offered to a student based on his or her interests and hobbies. In order for students to gain information about this section, they would type in some interests and hobbies such as running, dance, etc. If a student has an interest in joining a specific club, he or she can simply click on the name and will then be redirected to a page with links to Facebook groups, websites, email addresses of club leaders, and dates and times of meetings. Clubs and organizations are very important to students in university as they help them continue to do what they love and find a group of friends who also enjoy the same things. The app would simply make it easier for students to find these clubs and join them.

Finally, students would be matched up with others who the program believes could become a friend or colleague. These students would be matched up based on similarities in interests, degrees, age, and/or hometown. This would be the part of our app most similar to match.com only the use here would be for friendships. This feature would be beneficial to students because it would make it easier for them to make new friends. This section would also have a chat option so students would be able to talk to those matched up in order to get to know each other better and find places or ways to meet up.

In summation, the app unimatch.com would be beneficial for students, especially those entering their first year of university. The students who use this app would still get the university experience of coming to a new place and finding their own way to fit in, it would just be made easier. With access to faculty and staff help, maps to keep them from getting lost, and links to clubs to join, unimatch.com will help students find their place and become comfortable in their first year at university.

https://prezi.com/vjbbrdx_lr6x/unimatchcom/
Background

Untimed simulated clinics in a general practice setting, focused on safe and effective clinical outcomes (SECO) and unobserved by faculty, were first developed and introduced into undergraduate medical student education in Otago, New Zealand in 2004(1). These clinics offer students opportunities to make decisions, implement management plans and conduct complete consultations. Formative feedback is provided by the simulated patients based upon achievement of pre-determined outcomes from the patient perspective, and from faculty assessment of case presentation skills, medical records, prescriptions and other outputs generated within the consultation. In the 2013-14 academic year, Keele University School of Medicine piloted SECO clinics in a general practice setting. This approach was well received by students and it was decided to not only continue the primary care pilot project in the academic year 2014-15 but also to extend the pilot into a secondary care setting.

Aim

To determine what medical students value about the SECO approach in a simulated secondary care setting.

Method

Ethical approval for this study was obtained from the Medical School Research Ethics Committee. Six 90 minute SECO simulated ward sessions were conducted over an 18 week period. A total of 95 final year medical students were eligible to take part in the secondary care SECO sessions. Students completed an end of session feedback questionnaire and 8 students were invited to take part in each of two semi-structured group interviews immediately after their simulation sessions. Data collection is currently still underway but, when complete, thematic analysis of the questionnaires and the group interview transcripts will be undertaken.

Results

Preliminary analysis of data gathered so far (45 students) suggests that students highly value the educational experience. The completed analysis of all data will be presented at the conference.

Discussion

The preliminary analysis indicates that unobserved safe effective clinical outcomes clinics can offer additional educational value to final year medical students. Students considered the experience to be of benefit for a range of reasons including the challenging nature of the cases offered, increased realism in comparison to OSCEs and multiple perceptions of the benefits of not being directly observed. Additional themes arising from the data will be presented at the conference.

References

January…a month synonymous with assessment in Higher Education (HE). As I write this, winter has yet to descend upon Keele but there is no mistaking the palpable aura of intensity all across campus as staff and students prepare for the first assessment period of 2016. This year more than any other I have been faced with a plethora of emails from student learners (I use that word intentionally as it encompasses both undergraduate and post graduate / staff learners) in relation to assessments they will shortly submit. So far, so normal, but what makes this year so different is that I have noticed for the first time a commonality in tone, content and urgency, irrespective of whether the person writing the email is staff or student and I also noticed a marked conservation in the types of inquiry I am getting. This observation is contrasted with my own current interest in inclusive teaching practice and facilitating learning in an inclusive environment, where the central idea is one of catering to diversity in the learner population in all types of classrooms. However, I am seeing a great deal of similarity in the drivers of learning from a very diverse range of learners…to give an example, my very first question (which came through on xmas eve!) was about clarifying word limits and whether there would be a penalty if these were exceeded…from a member of staff! As an aside, I am always impressed at how quickly certain staff can display behaviours they themselves ascribe to some students when they become the learner being assessed. I’m not even going to get started on the number of people who missed the formative deadlines I set…you know who you are.

The most consistent request from learners getting in touch was for formative feedback on work prior to submission. Formative feedback has always been essential to develop autonomous learning skills and it has never been more important as many course leaders move towards a self-directed pedagogic philosophy to underpin their curriculum design. Hand in hand with good formative feedback provision is the necessity to give it in a timely and useful manner to ensure it has the greatest beneficial impact on learning…apparently, even if that’s the night before the deadline…again, you know who you are.

As a teacher, this means I have to be flexible in my marking and provision of formative feedback and even, as happened for the first time this year, creative with my time management skills to ensure that it can be provided…..a pain sometimes, but it is worth the investment and the learners appreciate it greatly. It was in my hour of need that I turned to technology as a solution to help speed up my ability to provide feedback and used it effectively in conjunction with the “snack writing” practice suggested by Rowena Murray in our very first issue of JADE all those years ago. Thinking of this, we are all aware of the inherent learning curve associated with adopting a new piece of learning technology, but in my experience the benefits and time savings can be significant if the correct technology is adopted…..notice the word “correct”!

In this issue alone (indeed, over the last five issues) we have had a number of examples of technology used to effectively aid learning and whilst these all have inherent pros and cons, it is here in JADE that we aim to give the reader the chance to make up their own minds about wanting to try something new. Speaking of something new, very soon we will be publishing our first ever JADE Special Edition with Internationalisation as the central theme and we have some very exciting articles to share…incidentally, this editor has learned his lesson about scheduling two editions of JADE close together and if you see me around campus then don’t comment on my hair getting whiter…please. Enjoy our fifth edition of JADE and have a think about what you might submit to the sixth.

Dr. Russell Crawford
Managing Editor
Open Call for Submissions

The Learning and Professional Development Centre is pleased to announce an open call for submissions on any aspect of teaching, learning or assessment for the next issue of J.A.D.E.

For those interested in publishing their educational research in J.A.D.E there is a short video introduction to the journal and full instructions for authors available at:

http://jadekeele.wordpress.com

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