Disrupting Traditional Pedagogy: Active Learning in Practice

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A note from the editors

This book is the result of an interdisciplinary collaboration between a number of academics at the University of Sussex, who are all members of the Active Learning Network. The network is an international network that aims to bring together academics, industry partners, those working in education more generally including students themselves, to discuss, collaborate and share good practice in active learning.

Active learning involves engaging students in activities that often enable them to produce an end product of their learning. It moves students away from the rote learning that is increasingly endemic in the exam-focused system of schools, to learning which values their personal contribution and effort. Active learning, by its very nature, fosters creativity and innovation, qualities favoured by employees in a rapidly evolving digital workplace. The proliferation of active learning as a philosophy and practice in many higher education institutions is testament to the increasing recognition of its importance in preparing students for both the workplace and life-long learning.

Modelling the process is essential. What is good for students is good for us as pedagogical practitioners. In the true spirit of active learning, we ourselves ventured into the unknown in the process of publishing this book, beginning with three "book sprints", where we came together to plan, write and edit our individual chapter contributions.

The chapters cover everything from taking an active approach to designing and developing modules to using the principles of Argentine Tango to teach concepts of business and leadership. We explore the world of active essay writing and attempts to turn the feedback process from a static and passive activity for both marker and student to one which involves the student in actively engaging visually with feedback. There are chapters on specialism based

learning where students become the experts within their discipline, on active approaches to supporting international students and on the strengths and the pitfalls of using team based learning as an active pedagogical approach.

Within each chapter, we have given an outline of what we did and what worked well but also what didn't go to plan, what needed modification or what was unexpected. The point of this is to demonstrate how we all moved out of our comfort zone in trying out new pedagogical practices. We often hit upon unexpected outcomes that required us to innovate or amend our approaches further and we wanted to share this as much as the bits that worked well. In moving out of our comfort zone, the hope is that we can encourage students and employees to do the same. In this way, creativity, innovation and meaningful learning, it is hoped, can be fostered.

As in all good stories, there is a cliffhanger but in this book it is simply the anticipation of what comes next. As the variety and diversity of active learning progresses, we envisage many more reflections of this kind including contributions for members of our other network groups, promoting the sharing of good practice and the continued collaboration of all.

Wendy Garnham, Tab Betts and Paolo Oprandi
Active Learning Network

Foreword

RORDEN WILKINSON

Active learning has a long history on university campuses, and simulations and role play exercises such as Model United Nations show little sign of vacating university calendars anytime soon. Indeed, a steady proliferation of simulations based on international institutions is a noteworthy feature of learning in international relations and political science. Yet, they are just some of the forums in which students can now assume the identities of key players to gain deeper understandings of economic, social and political events, and the context within which pressing issues are negotiated and—on occasion—resolved.

It is not just thinking and learning through simulated negotiations and debates in international institutions that are a familiar feature of university education. Diplomatic crisis simulations and other role play exercises also abound. The Princeton Interactive Crisis Simulation (PICSim) is one of the countless opportunities for students to role play in an inter-collegiate setting. There are many others that are implemented at the classroom level or through computer-assisted and online environments. Other popular active learning tools include service learning, experiential learning trips, internships, volunteerism, collaboration on group projects and many more.

It is not hard to appreciate why these and myriad other activities populate university curricula. Active learning is designed precisely to spark critical reflection in students encouraging them to take part in the construction of their own knowledge and understanding of the world through "doing." It should be a self-reflexive process that results in the articulation, evaluation and development of skills, ideas, beliefs and attitudes. The role of the educator is not to impart knowledge *per se*; rather it is to provide students with the tools to

access information, examine issues from a range of vantage points, and engage in the critical evaluation of new ideas.

In this regard, simulations and role play offer unique opportunities for positioning students inside complex and dynamic social, political and economic processes and encourage them to tease out power dynamics and asymmetries, constraints, interests, behaviors, resources and interactions. They are widely thought to promote what Greenbalt identified as the six dimensions of learning: cognitive learning; affective learning; student engagement motivation and interest; longer-term learning; increased self-awareness; and improved student-teacher relations.

Simulations and role play—among other forms of active learning—are not without problems.[1] Much active learning involves asking students to assume fixed identities or existing theoretical lenses. Poorly designed, this can reify existing power relations and make students blindly complicit in the maintenance of exclusions, injustices, silences and violence. The very best active learning moves beyond enabling students merely to see the complexities and constraints of the social world through simple exercises that illustrate existing social, political and economic orders to inspire critical consciousness and praxis. It constructs learning environments that provide students with the tools to perceive and resist social, political, and economic oppression. It encourages students to reject their role as passive recipients of knowledge, providing learning environments in which they can actively construct alternative views of the world.

The essays that follow are united in their motivation to get active learning right. Each offers insights into the practice of creating active learning environments across a range of disciplines and among groups of students preparing for, and who have already entered higher education. Taylor, Garnham and Ormerod's endeavor is to promote active learning through essay writing as a ratchet on passive regurgitation. Kirby reflects on the design and evolution of a foundation year module cognisant of the problems of transitioning from school to university, and mindful of the need

to enable students to relate to their own experiences to deepen engagement and learning. Steinberg's reflection is on active learning through embodied experiences in the use of performance and movement—in this case the Argentine Tango—to investigate complex situations and topics. Oprandi and Murphy examine the utility of "specialism-based learning", focusing on a single word as an optic for understanding different and changing meaning. Bett's contribution turns to the use of technology as an enabler of active learning and the extent of its application. Walden's chapter explores how peer assisted study sessions can be used to support student learning in study skills. Ashall's intervention examines the practical rollout of technology-based active learning exercises, focusing on Poll Everywhere. While, Garnham and Taylor explore the possibilities provided by video-based feedback for active student engagement among foundation year students.

Each paper offers valuable understanding; in combination they provide powerful insight into the development of programmes of study and methods of learning that simultaneously showcase understanding, embed knowledge, develop critical skills and enlist learners as collaborators in the search for new ways of thinking unbounded by a tendency to reinforce the status-quo. This is far from an easy challenge. It is, nonetheless, one to which this fine book rises.

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[1] For elaboration and critical engagement of the use of popular culture as active learning see Erin Hannah and Rorden Wilkinson, 'Zombies and IR: A Critical Reading', *Politics*, 36: 1 (2016), pp. 5-18

Active Essay Writing: Encouraging independent research through conversation

HEATHER TAYLOR; WENDY GARNHAM; AND THOMAS ORMEROD

Outline of case study/project

In an educational forum increasingly dominated by league tables and exam performance, students entering Higher Education are faced with a significant challenge of moving away from "spoon-fed recipes for success" to adopting "self-learning skills" (National Audit Office, 2002, p.15). Many enter university bringing a "reproductive" or "rote-learning" strategy with them, where learning is seen as a process of memorization (Wilson, 2018). Knowledge is seen as owned by tutors and learning is equated with "passive absorption" (Gamache, 2002, p.277).

The transition to a new form of "independent" learning, can be a major hurdle for many (Beaumont, O'Doherty & Flanagan, 2011) and contributes to a sense of alienation (Hernandez-Martinez, 2016) and failure (Haggis & Pouget, 2002). Lowe and Cook (2003) found that up to 21% of students in their sample reported difficulty with self-directed study that was greater than they expected and Haggis and Puget (2002) point to the "lack of preparedness" for learning in higher education. Academic difficulty has been cited by some (E.g. Tinto, 1996) as one of the most common reasons behind withdrawal from university education. Barefoot (2004) describes this as "Higher Education's Revolving Door". Essays are often rife with personal opinions or description which is at odds with the demands of the tutor for argument and analysis (MacLellan, 2004). Students focus

on content is often at odds with tutors' focus on argument (Norton, 1990).

The difficulty reported with essay writing assignments early on in a degree programme, contrasts with the views reported by students in the final years of their degree (Christie, Tett, Cree & McCune, 2016) where confidence in tackling essays is reported, suggesting a gradual process of accumulating knowledge and skills. The question then arises as to how such skills are promoted and developed in students.

Until recently, models of skill development relied on the deficit model (Wingate, 2007; Haggis, 2006). According to the deficit model, students are seen as lacking the competence to produce academic work of the standard required so courses and/or training is required to enable this gap to be filled. However, although study skills courses are frequently provided, these are often seen as generic and perhaps irrelevant to specific courses so are avoided (Durkin and Main, 2002). Hathaway (2016) suggests that such courses are resisted due to the impression they give that an institution feels that there is a problem with students' linguistic abilities and Wingate argues against their use completely, given the implicit assumption that these are an additional "extra" to the basic course requirements rather than an integral part of the course itself.

Rawdon (2000) instead promotes the use of reflection and opportunities to develop a deep understanding of the learning process as a means of enabling students to become autonomous learners (Fazey and Fazey, 2001). As writing is essentially a social act (Rubin, 1998), it has been suggested that collaboration and the development of learning communities might be an effective means of achieving this (Matthews, 1996; Tinto 1998).

The active essay writing project was an attempt to move away from the concept of providing "support" for essay writing and instead to trial a transformative approach (Hathaway, 2016). Rather than expecting students to research their essay title and then attempt to extract their arguments from this, students were encouraged to generate their own thoughts and opinions about an

essay title before using research to support, refute or justify these arguments. Such an approach transforms students' thinking from "How do I summarise the research that already exists?" to "What arguments can I generate and is there any evidence to support or refute them?". It allows students to bring their own experience and understanding to the task before moving them to a deeper level of understanding based on research evidence.

The project was trialled with a cohort of Foundation Year students studying a Psychology module that explored Applied Psychology specifically. At the beginning of the module, all students were given access to a document prepared by Professor Tom Ormerod which detailed an approach to essay writing that moved away from reading then writing, to thinking and planning before reading. This document underpinned the active essay writing activities that students were asked to try.

The "How to" Guide (in 10 easy steps)

1. Modelling the process. Present students with a hypothetical essay question. Ask students to suggest three general themes/ ideas that might be useful to explore in answering the hypothetical question
2. Give students a selection of essay titles and ask them to select one that relates to their interests.
3. "The casual conversation". Ask students to imagine they are in conversation with another person and the topic under discussion is their essay title. What sort of arguments might arise? If you present one argument, what might the other person say to contradict this? Is there any additional argument to be made in support of what you have said?
4. Ask students to narrow down the arguments into two or three "themes" or groups.
5. Using the hypothetical essay question, model the process of

adding structure to an essay. Identify a minimum of one "for" and one "against" argument for the topic and model how to structure this into a meaningful response using either a mind-map, infographic, flow diagram, or similar.

6. "The geographer's dream". Encourage students to create a structure for their own essay.
7. Using the hypothetical essay question, model how to research peer-reviewed journal articles and books to identify relevant and appropriate evidence.
8. "Sling your hook!". Ask students to use the tools demonstrated in step 7, to help them research evidence for their own essay structure.
9. "Let the story flow". Ask students to take some of the arguments, now with evidence, from the hypothetical essay title and put them in a logical order to give the idea that there is not one correct way of using the information obtained.
10. Model the process of moving from structure plan to finished product. Show an example paragraph for instance and demonstrate how the structure plan translates into the finished product. Ask students to work their way through their structure plan, now with evidence linked, to produce their final written response.

What we did

This project began when we recognised students' confusion and anxiety around not knowing where to begin with their essay assignment. Some students were attempting to read everything on the general topic of their chosen essay title and were getting lost in not knowing what was and wasn't relevant to consider. Other students were realising the unachievable nature of this task, and thus giving up at the first hurdle and opting to not read anything at all. Ironically, the latter pupils probably had the right idea! While

it might make sense at A-Level to read a given chapter and then write an essay based largely on regurgitation of that chapter, that is not what is expected at University. In the same vein however, while university assignments often require students to read and write about peer-reviewed research, it would not be possible (or practical) for them to read everything available on a certain topic before beginning to write their assignments. Increasingly there is a need to train students in how to avoid plagiarism and this is easier when they are freed from the onus of engaging in huge amounts of reading and then having to decide how to use that in an original format. As such, we presented students with the alternative they had not yet considered.

Step 1

We began by presenting students with a hypothetical essay question; in this example we used the question "Is *dog man's best friend*?". This was selected as it was distinct from the core content of the module so could not give any student a particular advantage in their planning and preparation for the assessment. In their seminar groups they were asked to help their tutor come up with three general themes that could be used to help answer this question. Students came up with a variety of different themes including "people's feelings towards dogs", "usefulness of dogs" and "factors associated with owning a dog". We then asked students to come up with potential arguments that could support or refute the idea that dog is man's best friend, within the themes they had suggested. With some prompting from the tutors, students were able to come up with some potentially relevant arguments and counter-arguments. For example, for the theme of "factors associated with owning a dog" students suggested benefits of dog ownership such as them offering companionship and helping to keep their owners active, as well as potential drawbacks of owning a

dog such as cost and time commitment. The emphasis here was on getting students to generate thoughts and have confidence in their own ideas before the opportunity to read academic articles and feel constrained by what they had read, had set in.

Step 2

Students were asked to look at a selection of essay titles, all of which had relevance to the key content of the Spring Term course, a module on applied psychology, and to identify the one that they were most interested in taking forward as their summative assessment topic.

Steps 3 and 4

At the following seminar, students were asked to sit in pairs or small groups of three and hold what we called the "casual conversation". Students would take it in turns to ask each other their essay question and assist them with prompts and follow-up questions to identify general arguments they could consider as well as viewpoints for and against these. They were asked to imagine that the conversation was about their essay topic and they had to identify as many different ideas and arguments as possible, similar to what had been modelled in step 1 for the hypothetical essay question. Towards the end of this seminar, students were asked to use the information and ideas gained from the conversation, to identify two or three key themes or groups of arguments to use in their essay. At this stage, it was again emphasised to students that they should not be engaging in any reading around this topic yet as the purpose of the activities was to generate their own thoughts, opinions, arguments and ideas without constraint.

Step 5 and 6

In the next seminar, we modelled the process of adding structure to our hypothetical essay arguments. We used the dog example, to show how the arguments could be organised in the form of a mind-map to show the outline of the essay. Students were also introduced to infographics as an alternative way of organising the arguments. Following this, they were given the opportunity to have a go at structuring the arguments identified using one of these (or a similar) method. The idea is that at this point, students have not begun to read around the topic. They are simply constructing a meaningful narrative that incorporates their own thoughts and opinions and has a sense of logical structure to it. The structure itself should serve as a starting point for reading and research.

Steps 7 and 8

The next task (for both the tutor and the students!) was to independently find reliable research evidence to support their arguments and counter-arguments. In the seminar, we demonstrated some of the ways that reliable research evidence could be identified using library search tools and tools such as Web of Science and Google Scholar. As part of this modelling process, we emphasised to them how to determine whether a reference is credible and how to reference these sources correctly as well as how to use appropriate search terms.

We advised students to spend no longer than half an hour trying to find research evidence for each argument, suggesting that if they could not find anything within this time frame, then it was possible that no such evidence existed. We emphasised that not finding evidence for every single potential argument they had considered was not an issue, and just to use what they could find to help

them think up other potentially relevant arguments and counter-arguments to find evidence for. We also advised students not to read too widely. Their task was simply to find one piece of evidence for each of their arguments and to summarise it on their Mind Maps or structure tool used; at this stage they did not need to know all the ins-and-outs of a piece of research, they just needed to know that research existed (or didn't) to back-up their proposed arguments.

Step 9

While students had been collecting evidence for their own essays, their tutors had been doing the same for the hypothetical essay question of "*Is dog man's best friend?*". In the students next seminar session, they were presented with each of these pieces of evidence on separate pieces of paper and asked to work in small groups to arrange them in a way that facilitated a logical sense of flow. There were two key purposes of this activity. Students who come straight to University after studying A-Levels often seem to think the only way to present for and against arguments in essays is to dedicate the first half of their essay into 'for' arguments and the second half of their essay into 'against' arguments' (or some paragraph-by-paragraph variation of this). While this technique is helpful for ensuring a balanced essay, this way of presenting information does not necessarily lend itself to a seamless sense of flow and can seem rather rigid and disjointed. Secondly, when identifying more than one theme, we envisaged that students would similarly get stuck in presenting their essay content one theme at a time and this activity enabled us to show students how the overall flow of information was important.

Once students had completed the activity, tutors went around to each group and asked them to explain what order they thought the arguments should be presented in. The tutor then presented them with their own ideas for how they thought the essay could be

structured and emphasised that there is not necessarily one "right" way of doing this – in fact students and tutors often had arguments presented in a slightly different order – but rather, if the arguments flow into each other, then the job is done correctly.

Step 10

Once students had completed the above activity and realised that they need not be restricted in structuring their evidence in order of argument type or theme, we asked them to independently structure the pieces of evidence for their own essays. We explained to them that in doing this they could see if/ where points and pieces of evidence were unable to flow into each other. We explained that this could be due to certain pieces of evidence not fitting the general narrative of their essays (and hence they might wish to consider dropping these pieces of evidence) or due to insufficient evidence being presented and thus they could use this knowledge to find additional evidence to bridge the gaps.

In doing this, students had a 'bare bones' outline to follow for writing their essays. Their next job was to flesh out the skeleton, with important details of research, and further evidence-based interpretations to make for a well-rounded, evidence-based and highly-focused piece of writing. Again this was modelled with example paragraphs for the "dogs" essay title. Students could then use the planning and preparation to guide their own writing for their actual assessed essay.

The successes (what worked well)

From our perspective, many things appeared to go well. Students who appeared invariably confused and anxious at the prospect of

reading everything ever published on the given topic of their essay title, were able to realise that doing this was neither expected or encouraged by their tutors. A-Level education arguably taught many of these students to read first, write second but fails to consider the overwhelming scope for reading in Higher Education, while neglecting the pivotal element of thinking! As such, we redirected students towards a new way of producing essays, namely thinking and discussing before reading and writing. Such an approach enabled students to take a personal interest and investment in their writing as it offered a means of showing that their own values and opinions are valid and worthy. The move away from the idea of a "model answer" or a "correct response" was refreshing for both students and tutors and this was reflected in much of the feedback received from students in their end of term review. When asked what they had most enjoyed about the seminars for this module, students' responses included:

"I like the ideas which are brought up and how we are encouraged to think outside of the box, able to present any idea without restriction"

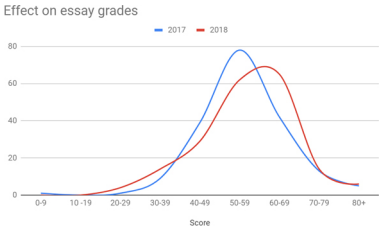
"The support for creativity in writing the essay"

"I'm finding that it is supporting the way I would normally write an essay so it is not shocking or scary"

Another key benefit of this project was that both the students, and us as tutors, could monitor their progress. It is probably quite common, especially as students progress through their University careers, that they are given an essay topic at the beginning of a term and the next time tutors hear of this essay is when they are marking it at the end of term. While this approach is arguably fine for those students who are already well-established in their Higher Education studies, for those who have either not written a university-style essay before or not written in this style for some time, more structure and support are needed. Breaking the essay preparation down into stages, as we did, not only enabled us to monitor our students progress and to realise when and where they

were getting stuck, it also enabled students to identify if they were "keeping up" with the work. This can be very useful to new students, as while they might be informed of when to attend lectures and seminars, and what reading they should do in preparation for these, they are less likely to be guided around what assignment work they should complete and when. The success of this project was reflected in students' ratings of the seminars for this module at the end of the term. In 2017-18, where traditional essay writing practice was used, 60% of students rated the seminars as either "Great-really enjoyed them" or "Most were engaging and some were useful" with 4.6% saying they did not enjoy the seminars at all. In 2018-19, with the active essay writing project in place, 75% rated the seminars as "Great" or "most were engaging" and not a single student said they did not enjoy the seminars at all, even though a greater proportion of students completed the survey.

Lastly, the biggest success seemed to be that we received some fantastic essays that really raised the bar in terms of what we assumed our students were capable of. Some of the essays we marked were of excellent and even outstanding quality; with students thinking outside of the box and drawing relatively novel conclusions from the research they presented, while also producing work that flowed well and was immensely engaging to the reader. In terms of overall performance, the effect on summative assessment scores was interesting. Although we have to remember we did mark these which is potentially an issue, we did so as blind markers and sticking strictly to the detailed mark scheme so the potential for bias was minimised in this respect. As far as the extreme ends of the mark scheme were concerned, the active essay writing project appeared to have little effect. However, it was towards the middle of the mark scheme that students benefited the most. Whereas the previous year, the most common score was in the range of 50, for the term in question, the most common score was in the range of 58-60, suggesting an upward shift of scores.



The unexpected difficulties (what went not so well)

It would be naïve to call it unexpected, however one of the key difficulties we faced was students not completing preparatory work on time. The project is deliberately set in pre-determined stages. As such, for a student to fully benefit from each seminar and lecture dedicated to the essay assignment, it was important that they had completed the previously-set work in advance of the subsequent sessions. While tutors are unable to dictate what students do outside of lessons, two possible solutions exist to grant tutors better control of students' time management. Firstly, we could try to set more time aside within lessons for students to complete essay preparation work. If this were not possible, another option would be to set formative deadlines where students could submit work for feedback, which might motivate them to keep up-to-date with the work they are set. An alternative explanation is that we did not allow them enough time to complete this work in the first instance. Seeing as tutors completed the work alongside students for the hypothetical essay questions, this explanation seems unlikely, however in future we may wish to begin essay preparation work earlier in the term, giving longer for students to complete each stage, to see if this is beneficial.

Another issue is that some students appeared resistant to the change in approach to essay writing. Some students found it difficult to comprehend how they could think up themes and

arguments without reading widely first. It must be said that not all our essay question options lent themselves as well to the model as others, however it was not impossible to think up general themes and potential arguments even for the least-well-known topics. One of the barriers to our new approach was the reliance that students had had instilled in them, on model answers.

Whilst we had some outstanding essays, we also had a considerable number of essays that appeared to be of A-Level standard. Many followed the traditional argument/ counter-argument structure with little attention paid to whether points flowed in a logical order and a lot of points and arguments were made without citation to any relevant research evidence and/ or based largely on opinion. Some essays not only followed the A-Level structure, but also the A level curriculum, citing outdated studies from text-books instead of peer-reviewed research evidence to support the contemporary essay questions students were assigned. As such, it may be naïve to think that one term of teaching is enough to help all students successfully transition from further education to meet the needs of higher education assignments. That being said, it appears that some students were fully ready to make this transition, with excellent outcomes, and even for those who did not fully meet the challenge, this can be considered as a first step in the leap between secondary and university education and expectation.

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Taking the teacher out of the classroom: Supplementary-Instruction Peer-Assisted Study Sessions as student support

VICTORIA GRACE WALDEN

Outline

For a long time, remedial study skills programmes have proven ineffective (Ruth Talbot Keimig 1983), but tutor-led workshops about reading, presenting and writing are often still the norm. As a study skills convenor providing these types of sessions, I often sat in an empty classroom, or had to adapt learning experiences designed as group workshops into one-to-one or one-to-two tutorials, "on-the-fly". This article discusses a pilot supplementary-instruction peer-assisted study session scheme (SI-PASS) that ran at the University of Sussex in 2018-19. It was designed to support first year students on a Media and Communication BA degree. The aim of this SI-PASS pilot was to consider how research into peer-assisted and active learning might enable us to offer subject specific study support provision that is well attended and helps a wide range of students in contrast to the much under-used remedial sessions we had previously offered. I will discuss how this scheme was setup, before exploring the successes and difficulties of the programme as assessed at the pilot's mid-point.

What is SI-PASS?

SI-PASS stands for Supplementary-Instruction Peer-Assisted Study Sessions. It is one of a growing number of internationally-developed Peer-Assisted Learning (PAL) schemes. Whilst PAL is an umbrella term for a wide range of student-to-student relations from tutoring and mentoring to coaching (Alexander Olaussen et al 2016), SI-PASS is a specific scheme that was introduced by Deanna Martin for the University of Missouri in Kansas City (UMKC) in the 1970s. Its basic premise is that newer students can be supported by those who have progressed slightly further in their studies to develop independent learning skills through the students in the higher years coaching and leading them to problem-solve in groups. Here, we can see the shared values that SI-PASS has with active learning. The latter involves students questioning more than listening to instructions, and working in a collaborative environment in which they try to address real problems without a designated leader (Robert L. Dilworth 2010). What could be a more ideal active learning environment than one in which students work together to tackle problems that they identify for themselves from their own study experiences in a learning environment in which the professional 'teacher' is removed altogether?

Martin's SI-PASS scheme was based on three key principles:

1. There are 'at risk courses' not 'at risk students'
2. Slightly more experienced students are the best influencers for new students given they can empathise more closely with the latter's experiences than staff
3. Collaborative learning helps students to problem solve most effectively.

(Leif Bryngford 2018)

Many empirical studies of SI-PASS programmes evidence that Martin's principles have been enacted. Perhaps the strongest advocates, Harry West, Rhiannon Jenkins and Jennifer Hill argue

that SI-PASS offers an all-round supportive environment that helps with the transition from other educational contexts, and enhances subject-specific knowledge, study skills, confidence, retention, engagement and enjoyment, and the transferable skills of participants and student leaders in an empathetic 'safe space' (2017, p. 460). This article was in part written by student leaders. For Enca Longfellow et al., the greatest benefits of peer-assisted learning are better subject knowledge, more confidence tackling assignments and a safer, less intimidating learning experience (2008, p. 98). SI-PASS is particularly helpful for supporting students with their transition to university in terms of developing their independence as learners and helping them confront anxieties (Green 2008; Court & Motesworth 2008; Zacharopoulou & Turner, 2013). Attintas, Gunes and Sayan are perhaps slightly more pessimistic about SI-PASS, nevertheless, they claim that the scheme supports 'social aspects of learning' even when it might not explicitly inform students' assignments or study skills (2016, p. 330).

The theoretical grounding of PASS is not new. As Alexander Olaussen et al. recognise, collaborative, argumentative learning dates back to the dialectic practices of Socrates and Plato (2016, p.1). The basic philosophy of peer-learning is that 'students learn from students' (*Ibid.*). Yet, it is influenced by specific learning theories. PAL, in general, adopts a socialist constructivist approach (influenced by the work of Jean Piaget 1972; Lev Vygotsky 1978) as student leaders act as facilitators 'to help learners process and understand information and construct their own knowledge' rather than giving their peers information (Ning & Downing 2010; Longfellow et al, 2008; Roscoe & Michelene, 2007). SI-PASS is particularly grounded in social and co-operative approaches to learning in which a 'well-functioning community' is 'underpinned by consensual moral and behavioural codes which are passed on through informal learning processes' (Ning and Downing 2010, p. 242). As Nancy Falchikov argues, co-operative peer learning offers a 'genuine exchange of thought and exploration, and assimilation of new ideas' (2001, p. 95). Thus, students in SI-PASS sessions learn to

adapt to the structures and expectations of university education, which are often starkly different to their previous encounters (Sally Baker 2017).

The fundamental structure of SI-PASS in practice is as follows: a staff member trains to become an SI-PASS supervisor via one of the international centres. They then train a group of student leaders, who will facilitate study sessions with newer students. The leaders should be at least one year of study ahead of the participants. SI-PASS works best when the sessions are not rooted in general study skills, but rather are attached to a specific module on the students' course and are led by the students' agenda. SI-PASS sessions are designed so that participants first identify the questions they have related to the module then find answers to these questions by problem-solving in groups, usually through creative or research tasks. Student leaders do not deliver taught content. The supervisor meets regularly with student leaders and offers feedback on their performance through lesson observations. The student leaders and supervisor also feed forward comments from participants to the module convenor and tutors. Best practice in SI-PASS schemes includes convenors and tutors acting upon the participants' comments so that the latter play a significant role in the development of their curriculum. Rather than target 'at risk' students, SI-PASS is available to all students and is driven by an agenda they create collaboratively rather than an imposed curriculum.

The "How to" Guide (in 10 easy steps)

1. Establishing an SI-PASS supervisor
2. Identifying 'at risk courses'
3. Budgeting and Timetabling
4. Recruiting Student Leaders
5. Preparing Training

6. Training Student Leaders
7. Establishing Initial Support Mechanisms for Student Leaders
8. Student-led Sessions
9. Continuing Support for Student Leaders
10. Students informing Teaching and Learning

What I did

I qualified as a SI-PASS supervisor by attending 3 days of training with the European Centre for SI-PASS. The international centres run training days sporadically throughout the year. Details for training at the European Centre can be found here: https://www.si-pass.lu.se/en/frontpage. Once qualified, I needed to identify which modules were going to be attached to SI-PASS. Research shows that existing SI-PASS schemes have defined 'at risk courses' in different ways. For example, Altintas, Gunes and Sayan (2016) selected a particularly challenging computer programming module in the second semester of their undergraduate degree. One might apply this logic by applying SI-PASS to modules that have a history of low attainment or retention, regardless of its place in the academic cycle. Alternatively, Green (2008), Zacharopoulou and Turner (2013), and Tariq (2008) instead suggest using SI-PASS as a tool to support transition from school-based educational contexts to university. It is the latter approach that I adopted so that our study skills provision could be as inclusive and as useful as possible to our cohort.

Adopting SI-PASS for our biggest first year core modules – one in the autumn term and one in the spring term – meant that it would guide all of our first year students towards the level of critical, independent study that we expect of them as university students. SI-PASS sessions are not designed to be workshops each dedicated to a specific study skill or as general subject specific training. They are attached to a particular module and students work together

to solve intellectual, administrative and skills-based problems they discover whilst studying this specific class.

Once the need for SI-PASS provision was identified, perhaps the most difficult part of setting up the scheme was compromising with timetabling and budget resources to consider how it can work in practice. Many universities today are faced with increased pressure on room availability and are being confronted with budget cuts. My ideal budget would have allowed us to pay student leaders for:

- 3 days of training at the beginning of term
- 2 half days of continuing professional development
- 1 hour for pre- and post-lesson observation support
- 3 hours of work per week for the 12 weeks of term, which would include 1 hour of planning, 1 hour of delivery and 1 hour debrief.

Realistically, the budget available allowed for students to be paid only for their weekly teaching and debrief at 1.5 hours per week. This helped inform how I planned the training conferences, to maximise the potential planning time embedded in our activities here. In terms of timetabling, ideally, SI-PASS classes would not be larger than 15 students. This was not always possible: In the autumn term, we had 4 classes for our cohort of 77 students, which had to be divided as follows: class 1 (20 students), class 2 (14 students), class 3 (27 students) and class 4 (16 students). Sessions were timetabled to encourage students to attend as previous feedback from student representatives suggested that the fact remedial sessions did not appear on their timetable was one of the reasons that they forgot about them. Sessions were scheduled for 50 minutes to run as soon as possible after each lecture for a first year core module.

Student leaders should be in the second or third year of their degree and should be familiar with the module that they are supporting. There is some debate about how to recruit student leaders. Some universities promote it as employability and skills training and thus do not pay, others recognise that with the demise

of grants many students rely on work to support their studies so do offer financial reward. Given the philosophy underpinning our media curriculum, it seemed inappropriate for us to adopt the former option, so students are paid. SI-PASS is designed to be inclusive, therefore, many advocates of the scheme advise that one should not pick leaders based on attainment. In this spirit, my application form asked students to respond to questions about coaching and leadership, and asked for their grades for the relevant modules purely as evidence that they had completed it. Students were not asked to provide any personal data apart from their name in order to minimise unconscious bias in the selection process. The final cohort of five student leaders represented the diversity of our student body and included students from a variety of cultural and ethnic backgrounds, and queer and trans-identifying individuals. Many of these student leaders had decided to apply for the role because they had faced challenges in their own educational experiences and wanted to help others.

Once student leaders had been recruited, they then needed to be trained. I developed the training resources for the conference, enrolled guest speakers (more on this later), booked rooms, and worked with our Student Experience Officer to arrange catering. I arranged for students to have free drinks and food throughout the conference days, created training certificates for them and offered to provide professional references for the future. Before the training started, I also contacted our administrator responsible for payroll to ensure I was prepared for the processes of paying our students leaders. It is worth noting that there is substantial bureaucracy for Tier 4 students, and it is important to familiarise oneself with the systems in place in your institution to best support these students to follow the rule of employment law. Approximately two weeks before the training, I emailed the leaders with the training schedule. To ensure the student leaders would be available, the application form included a question asking students whether they were free on the training dates. At this stage, it was also necessary to establish contact with the module convenor, to incorporate the module

structure, assignments and potential issues into the student leader training.

I ran two student leader training conferences in September 2018 and January 2019. The European SI-PASS Centre recommends that student leaders have at least two full days of training before beginning their role. I established two intensive programmes of 2.5 days each, one for each cohort of student leaders, which were modelled on the structure of SI-PASS supervisor training sessions and inducted the leaders into the specifics of the scheme. They learned and practised teaching and learning theories and techniques, planned and delivered mock sessions, designed their session plans for the term, and considered ways to manage group dynamics, and learned about support mechanisms so as to provide a safe learning environment for all. Following the strategies presented at the supervisor training, the conference introduced student leaders to Bloom's Taxonomy, and Collins and Biggs' (1982) SOLO taxonomy, but I also added Geoff Petty's (2014) Learning Pyramid so students could see that several theories of learning promote similar beliefs. I also introduced Puentedura's (2013) SAMR model for using technology in the classroom to help leaders assess in what contexts educational technologies are appropriate. In keeping with the social constructivist grounding of SI-PASS, leaders were trained to encourage student-to-student interaction with techniques such as redirecting questions, wait time and checking for understanding, rather than how to give information from the module to participants. I strongly encouraged the leaders not to re-visit the module content to help them avoid adopting a 'teacher' role. We were fortunate in the respect that there had been a substantial re-write of our first-year modules in the academic year in which we introduced SI-PASS. Therefore, whilst the student leaders were familiar with the approaches and concepts discussed on these modules, they had not necessarily attended the same lectures or completed the same readings as the students they were supporting. This meant that it was easier for the student leaders to avoid slipping into teacher mode.

During the training conference, I modelled learning techniques and the structure of a PASS session for them and demonstrated how they could use technologies such as Poll Everywhere and Padlet to check understanding and gather feedback, before asking the leaders to assess the usefulness of these programs and to devise scenarios in which they might be helpful.

A final element of the conference was the inclusion of guest speakers from our study and student support services, whose involvement I enlisted several weeks in advance of the event. These professionals offered short sessions about referrals to ensure that the student leaders felt fully supported in dealing with participants disclosing issues to them. It is imperative that student leaders do not take on the role of a pastoral tutor or mental health specialist for which they are not qualified. Student leaders were also encouraged to access services on campus to support themselves too.

Now that the student leaders were trained, they were able to run their weekly sessions independently. They shared their session plans, developed during the training conference, via Google Drive. Student leaders do not have access to our register systems, therefore I created Google Spreadsheets via which they could share their attendance data with me easily and I could update the system for our records. Once the programme was underway, I met with the student leaders once a week for a half hour debrief where they could collaboratively solve any problems they faced and could pass on feedback from the students to me, which I in turn could communicate to the module convenor. Student leaders also had at least one lesson observation per term from me. We worked collaboratively at the conference to design their observation feedback form so that it most benefited their career development, and each leader had a one-to-one feedback session after their observation. At the weekly debrief sessions, student leaders would disclose feedback from their groups about the module content, assessments, and teaching and learning styles which were then passed onto the module convenor. This forum empowered students to inform curriculum and pedagogical changes.

The successes (what worked well)

Student feedback regarding this pilot scheme was gathered using anonymous online surveys via the Qualtrics platform at mid-term and end of term points. Students were encouraged to identify their biggest concerns about the module in the first week and to express the extent to which the SI-PASS sessions helped tackle these.18 students completed the first survey on November 8th 2018.Some of the problems students identified were managing readings, how they would be assessed, expressing ideas as an international student, knowing what to do, the work load at university, and the differences between university and school. The results showed that 77.8% (14) of students found the SI-PASS sessions specifically helped with the issues they identified. 16.6% (3 students) suggested that the sessions were more helpful than their seminars. Two students particularly commented on the learning environment created through these peer-assisted spaces as follows:

- 'I can breakdown stuff I don't understand without judgement'
- 'The environment and the colleagues were very supportive and showed me that they were also unsure of what had to be done. Through their questions I was able to learn or deepen my knowledge'.

Both of these comments suggest that SI-PASS sessions offer students a supportive space where they feel they can make mistakes and yet be challenged in a safe way. The only criticism in any of the comments was from the second student above who suggested that the sessions could be longer in order to allow time to 'trully [sic] feel sure that all your problems have been solved and all the unknown topics were debated'. The end of term survey was completed by 14 students. 78.6% (11) of the participants said that they found the sessions helpful, very helpful or extremely helpful. 1 of the remaining students, who had been in the class with the student leader who had to stop their sessions before the end of term stated

that they wished they had been able to carry on with SI-PASS, which suggests that they did find helpful the few sessions that they had been offered. 7% (2) of the other students who had not found the sessions particularly useful were also from the classes that did not run to the end of term. Some of the comments from students at the end of term included:

- '[SI-PASS] gave us advices [sic] on anything in our course or uni life'
- 'The pass session helped me a lot on lectures and especially some difficulty in the lectures'
- 'The sessions helped me a lot in understanding the module topics and how to do my assignments'

These particular comments highlight specific elements with which SI-PASS offered support. Here, we can see that it helped students prepare for their assignments, offered them a space in which they could breakdown challenging ideas and topics in the module, and offered support beyond the remit of the module. As such, SI-PASS did not act as a general, remedial study skills provision, but as a space for tackling subject, and indeed module, topics, but where broader issues relating to the transition to university could also be discussed. Many of the students' positive comments praised the expertise of the student leader, referring to them by name, which suggests that a good comradeship was developed between leader and participants, and that students recognised the core value of SI-PASS: that their slightly more experienced students can be their influencers. Generally, this initial data evidences that SI-PASS was valued by those students who attended all or most of the sessions across the whole term. Some of the positive responses even came from students who admitted to attending only a few classes. Whilst participation in the survey was low, the small number of students who actually responded to the questionnaire still represents a larger cohort than attended our remedial study support undergraduate sessions in the previous autumn term. Although, student leaders

encouraged students to complete the surveys in the final few sessions, in the spring term, I would bring this data collection forward to week 8, before the attendance drop that happened towards the end of term.

The autumn term student leaders generally felt well-supported and prepared to deliver their sessions. Their feedback suggested that the training could have involved planning most of their sessions for the whole term. This was the plan, but unfortunately due to the low recruitment of student leaders for the first term, we were only able to cover half of the term during the training conference. In the spring term, this was rectified as we now have a full roster of 4 student leaders and the conference activities included planning, modelling and practising a number of sessions each, which meant by the end of the training we had planned all 11 sessions for the term. One of the other autumn term student leaders highlighted that it was particularly difficult managing a large group and that running a session every week came with a high level of pressure. The suggestion of having a catalogue of plans before term start might also alleviate this problem. The issue of the particularly large class of 27 was rectified in the spring term when classes were divided into 19, 18, 21 and 19 students, respectively. In the first week, most of these classes' attendance figures were at 2/3rds, which was much more manageable for the student leaders in general.

Alongside student feedback, I gathered some data of the relationship between attendance at SI-PASS sessions and attainment in the related module, and attendance at seminars. The results evidenced that students who attended SI-PASS generally did far better than those who did not. There were two formal assignments in the module which was attached to SI-PASS. The first was a portfolio, developed week-by-week and the second was an essay. The data showed:

- **100%** of students who attended **all SI-PASS sessions** achieved **2.1** in their portfolio
- **100%** of students who attended **all SI-PASS sessions** achieved

at least 2.2 in their final essay (**33.33% 2.1 / 33.33% 1st**)

- Of students who attended **at least half of the SI-PASS sessions**
  - **75%** got **2.1 or 1st** in the portfolio **(41.67% 1st)**
  - **66.67%** got **2.1 or 1st** in the essay **(41.67% 1st)**
- **33.33%** of students who **never attended SI-PASS failed** the portfolio
- **33.33%** of students who **never attended SI-PASS failed** the essay
- Students who attended **at least 50%** of **SI-PASS sessions** attended all of their **seminars**

From the data there appears to be a strong correlation between attendance at SI-PASS sessions and success in the assessments. I would also infer that the fact 100% of those who attended all sessions achieved a 2.1 in their portfolios suggests that it is not simply high-achieving students who are engaging with the scheme, i.e. it is not those who would already attain the highest scores. Such a grouping of results infers that the programme may be helping students, who might otherwise achieve lower scores, to improve their grade potential (although more data would be needed to confirm this). Another significant result from the data is that those who attended most SI-PASS sessions attended all of their seminars, suggesting that these students were heavily invested in their studies for this module. It will be useful, going forward, to find out more about the correlation between attendance here. Does SI-PASS encourage students to attend seminars? Or do those interested in the module want to seek all the possible avenues for support available to succeed, so attend SI-PASS? We must be cautious of reading this data as conclusive that SI-PASS improves grades or attendance. Students self-selected whether to attend these sessions and it is possible that the most committed and studious students may attend SI-PASS because they want to seek all the opportunities they can to shape their success. Nevertheless, we should certainly encourage these individuals to do well by offering such provision. Furthermore, when compared to students'

attendance at their seminars and their final grades, this latter data represents a more standard bell-curve, which suggests SI-PASS does have some effect on attainment. As with much educational research, it is difficult to quantitatively measure the impact of SI-PASS sessions. We do not know whether, for example, the critical thinking skills developed in these classes may have more of a long-term than short-term effect on students' development, and it is difficult to isolate the influence of just these sessions. Therefore, qualitative student feedback remains the most productive form of analysis.

The unexpected difficulties

Some of the challenges I faced introducing SI-PASS into our curriculum were foreseeable. These included budgeting, timetabling, recruitment and retention, and the student leaders taking on too much of a 'teacher role' and thus just reiterating the learning styles of the lecture format rather than offering something else. Whilst SI-PASS might sound like a fantastic solution to many problems, we must be careful of considering it a magic wand. SI-PASS can be expensive, particularly if applied to large core modules. We pay each of our student leaders for 1.5 hours of work per week during term time, which covers their 1-hour teaching session and debrief. SI-PASS groups should be relatively small to enable the student leaders to manage them effectively. Ideally there should be no more than 12-15 students per group. With a cohort of 100, this could lead to 7 groups, which equates to 10.5 people hours per week based on our structure. This also has an impact on timetabling, as the university needs to find the rooms for these groups and SI-PASS works most effectively if the study sessions can all run immediately after the lecture, when questions are still fresh in students' minds and so that the sessions can work as a bridge between the lecture and readings, and the seminar. With students taking increasingly

diverse curricula, including electives, and working during university hours, it can be challenging to find slots when both the student leaders and students are all free. In both terms, we did not succeed in timetabling SI-PASS so that it could be adopted by every single student, there were a handful whose schedules could not be reconciled. One potential resolution to this problem is to divide our current 2-hour seminars into 1-hour SI-PASS sessions and 1-hour tutor-led seminars. On the one hand, one of the students commented that the sessions were currently not long enough, so would this be feasible? On the other hand, several of the students commented that SI-PASS was more useful than their seminar, so perhaps structuring the teaching and learning so that students problem-solve as a group independent of any faculty member, and then consolidate learning immediately after this with a tutor might be a useful strategy. It is likely that this would encourage higher attendance and would solve timetabling issues if the sessions ran consecutively in the same room.

As Yvonne Hodgson et al. (2013) have noted, retention in SI-PASS can dip later in the year, as is common on most undergraduate courses. Foreseeing this difficulty, I included a session on promoting SI-PASS in the student leaders' training, and weekly attendance monitoring helped us to reflect on strategies to encourage students back in the classroom. Some student leaders have been excellent at using email to communicate with their peers between sessions to encourage attendance. In the two autumn class groups that ran for the entire term, there were two significant points when attendance dropped, which were as predicted. The first was in week 3, once students came to realise that the SI-PASS sessions were not compulsory and therefore self-selected whether they wanted to continue with the support. The second was towards the end of term, after the mid-term assignment had been submitted. This drop was similar to trends in seminar attendance which often trails off as timetables become lighter, self-study dominates students' schedules, final essays are due, and flights home for Christmas are cheaper than the weeks after term finishes. However, the drop

towards the end of term was more significant in one class than the other. Whilst the class sizes were uneven at the beginning of term, they levelled out to approximately 10 students in the middle of term. The attendance drops at week 3 and towards the end of term matched the experiences shared by other SI-PASS supervisors at the training I attended.

A final issue identified by Court and Molesworth (2018), in their study of SI-PASS on a Media Practice module, is that student leaders can creep into a teacher role and then students can expect this of them. Encouraging student leaders to explain their pedagogical choices in the weekly debrief can help to identify times when they have become too much like a teacher and offer opportunities to help steer them away from this. The lesson observations also support this process. The main points I identified for improvement in early lesson observations of student leaders were: (1) that they needed to prepare less content and feel confident enough that their students' agenda will help shape the session; that they only need to come with a toolbox of learning strategies not content. (2) That student leaders could encourage participation by circulating around their class as students work in groups to try to solve problems. In the spring term, one student leader was particularly productive at allowing their students to lead the agenda. She asked her group in week 1 not only what they would like the content of their session to cover, but how they would like it to be structured. The students, by now, used to SI-PASS from the autumn term, explained that they would like to problem-solve in groups as much as possible. This suggests that, as a cohort, they are mostly invested in the pedagogy of the scheme.

There were two unexpected difficulties with the programme, both of which were related to student leaders. These were recruitment and retention of leaders, and the protection of these individuals' well-being. It was very challenging to recruit the first group of student leaders despite creating a process designed to encourage high levels of interest. As SI-PASS was completely new to the university, I ran an information session for students who were potentially interested in becoming a student leader, which was

advertised to the cohort by email in our weekly School newsletter and through reminders. This attracted approximately nine students, who were all very keen. Nevertheless, only four applied and two of these dropped out before the scheme started due to work and study pressures. The scheme therefore ran in the first term with only 2 student leaders, each of whom took on 2 classes. Unfortunately, however, one of these leaders later stepped down from their position due to feeling stressed. How to manage the well-being of student leaders appropriately is a question that will underpin any further developments I make with SI-PASS. We must remember that our student leaders are both coaches for their peers and still students themselves, many of them in the midst of the most stressful parts of their degree. Also, the type of students who are likely to be attracted to the role are those that are keen and ambitious, and may well be taking on part-time work, apprenticeships or internships, and likely incredibly studious. An element of pastoral care is necessary on the part of the SI-PASS supervisor towards the student leaders. It is important to encourage student leaders to also create a supportive community amongst themselves. In the spring term, once SI-PASS had been running for one term, there were 3 new applications and we had a full cohort of 4 student leaders, each running 1 study session per week. We have numerous applications for the well-established student mentor programme in our School, so I would predict that as SI-PASS becomes more established, recruitment will grow. Particularly now that a large number of students have experienced how these sessions run. However, it is vital to not only support student leaders through induction to the scheme, but to continue to support them through the process. This both aids retention of student leaders and provides a duty of care to them. Allocating budget allowance for student leader team-building exercises or social events could help create a cohesive, social bond between them so they feel like a team. As has already been noted, one of the concerns for the student leader who left before the end of the term was the size of one of their classes (27 students). This number of students is much

larger than the typical seminar group in our School (15-20 students) and it is unfair to expect that a second or third year undergraduate might be able to manage such a large group. Ensuring that training offers time and space for the student leaders to develop a cohesive, supportive community in which they can work together to create their plan for the entire term, continuing pastoral and professional support for student leaders throughout the academic year, and imposing strict class size limits can all contribute to providing the best care for student leaders. Training more leaders than needed would also offer a buffer to cover sickness or leaders that leave.

Two student leaders, one in each term, had difficult sessions in their first few weeks that affected their motivation, which further evidences the need to offer them pastoral support. Their groups were resistant to the practices of SI-PASS and instead demanded that the student leaders explain content to them, and expected that the student had done the readings and attended the lecture for them. In both instances, I coached the student leader, emailed the class involved to reiterate the SI-PASS ethos and expected behaviours and sat in their next sessions. In the communication with students, I re-emphasised what is the student leader's role and that the sessions are not compulsory. Despite this, the first of these two troubled student leaders left soon after. The second student leader clearly adopted techniques from the training to manage her class and immediately sought support from me. By this second term, it is likely that I was more aware that this problem could arise and was better positioned to offer pre-emptive training and structured guidance. The experiences of these two student leaders emphasised the need for careful, micro-management of both the student leaders and the SI-PASS groups. It might seem too easy to let the student leaders manage their groups and only support them, but regular communication with the students involved in the scheme could also help manage the behaviours of all.

Concluding thoughts

After our SI-PASS pilot scheme has run for a little more than a term it is clear that many of the benefits identified previously have been evidenced here. My experience of leading this scheme mirrors Longfellow et al's (2008) conclusions that SI-PASS helps students strengthen their subject knowledge, develop confidence about how to complete assignments, and offers a safer, less intimidating learning experience than seminars and lectures. Contrary to Attintas, Gunes and Sayan, our scheme demonstrated that students got much more out of these peer-assisted study sessions that solely the 'social aspect of learning' (2016, p. 330). SI-PASS is a productive practice to support students to independently problem-solve issues they encountered related to a specific module and with more general queries about university life, thus also aided their transition to higher education. Nevertheless, this does not mean it comes without challenges. With the increasing marketization of the university sector, it is important to be prepared for, and think creatively about how to tackle, budget and timetabling restrictions. Furthermore, given the so-called 'mental health crisis' characterising higher education today, we should be particularly attuned to strategies for supporting the well-being of student leaders.

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Specialism-based learning in action: why, how, when?

PAOLO OPRANDI AND M. LYNNE MURPHY

Outline

The chapter introduces the concept of specialism-based learning, a methodology and curriculum design that derives from research into an English module at the University of Sussex. In a specialism-based learning module each student is assigned a different specialism or focus, to which they are expected to apply the theories addressed through the teaching. It is an approach that we have seen adopted within linguistics, geography and psychology, but it is relevant to teaching across the arts, humanities, sciences and the social sciences. It is based on pedagogic principles that foreground the development of learning autonomy amongst students, which Marshall and Drummond (2006) suggest is the spirit of education, and it recognises the importance of curriculum design to develop our students' ability to "know, act and be" in the world (Ashwin et al, 2015; Barnett and Coate, 2005). The assessment methods it employs create competition between peers that is open and based on their ability to discuss and explain the theories in relation to their specialism. It is a method of teaching and assessment that encourages students to adopt disciplinary ways of thinking and practice criticality, resourcefulness, inquisitiveness and communication skills. It triggers a thirst for knowledge that does not only rewards students with a grade, but also a deep disciplinary affiliation and belonging (Oprandi, 2014).

Higher education strives to develop inquisitive, analytical and critical thinkers with an ability to develop and communicate ideas

based on established theories, but many of the teaching and summative assessment practices demotivate students (Crick & Harlen, 2003) and encourage dependency on teachers for feedback (Dweck, 2000; Nicol & MacFarlane-Dick, 2007). Many of the skills that higher education students are learning in order to achieve good grades lead them to practices that are contrary to the spirit of developing learning autonomy (Boud, 2012) which includes developing for themselves a deep discernment and an inner critique. Instead, self-defeating skills are rehearsed by students and are rewarded by inappropriate assessment methods, such as uncritical memorisation of facts and examination questions which are right or wrong and do not require reflection (McDowell 1995; Biggs, 1999; Prosser and Trigwell, 1999; Haggis 2006; Pryor & Crossouard, 2010; Sambell et al 2013). Torrance argues, "The aim of Higher Education is, ostensibly, to develop independent and critical learners, while in practice highly conformative assessment procedures are being designed and developed" (2012 p.324). Specialism-based learning addresses these concerns. It is a curriculum design which allows students to become experts in a specific field of their discipline and therefore begin to "feel part of" the discipline. This chapter sets out a case for the suitability of specialism-based learning, with appropriate modifications, for all disciplines.

The case study

This case study was originally one of three produced as part of a Doctoral degree. It looked at the teaching and assessment methods in a first year, undergraduate module in Linguistics, called Approaches to Meaning, that was originally designed by Professor M. Lynne Murphy. The module runs at the University of Sussex and lasts for twelve weeks and has approximately fifty students taking it per year.

The aims

The aim of Approaches to Meaning is for students to learn to use disciplinary theories and practices to understand language, words and their meaning across contexts. They attain disciplinary-specific analytical skills, develop an understanding of the theory and practice within the discipline and an understanding of their application.

Learning outcomes

By the end of this module, you should have:

- An understanding of distinct levels of linguistic description
- An understanding of basic concepts relating to words and meaning
- An understanding of some of the applications of linguistic analysis (social, historical, psychological, pedagogical, lexicographical)
- Discipline-specific skills in linguistic definition and analysis, the use of linguistic reference tools (dictionaries, etc.), finding linguistic resources in the library (beyond the reading list), accessing linguistic data resources (corpora), collecting linguistic data, and representing linguistic data in writing.

In addition, the successful student will have practised and improved their skills in:

- independent, creative and critical thinking
- academic writing, reference and citation
- independent and group research
- oral presentation/academic discussion

The teaching method

The teaching method comprises a lecture where the tutor delivers the module content; seminars where students engage in discussions and activities in the presence of the tutor; and online activities that students engage in in their own time. These aspects of the teaching method will be familiar to those who have been exposed to traditional undergraduate teaching, particularly in the arts and humanities. The innovation in the method, however, is that each student adopts a word within the first week of teaching (Murphy 2007; Murphy 2010). This adopted word gives the students a personal application for the module content and disciplinary theories introduced. This simple difference to the traditional undergraduate method affords massive benefits to the students' learning.

In week 1 the students are introduced to the idea of specialism-based learning and expected to choose a specialism (a word in this case) to focus their studies through the coming weeks and in their final assessment.

In week 2 students are introduced to lexicology (the study of words) and ways to understand their adopted word including how it is pronounced, the way it can be used grammatically, if there are differences in its use in spoken and written form and the meanings of the word. In the seminar they respond to quiz questions in a group which requires them to interrogate their understanding of lexicology. Once a common understanding is achieved through the cohort, the students consider which lexicological fields will be of interest to their own adopted word.

In week 3 the students are introduced to sociolinguistic approaches to understanding words. During the seminars the students are given the opportunity to use tools to interrogate the use of their adopted-word in everyday language and writings.

In week 4 the students are introduced to prescriptivism which is the formal and correct use of words compared to the actual

use of words in everyday language. They are asked to prepare for the seminar by completing their own research about people within different age groups on their perception of where and when words and sentences are being used incorrectly. They are given the opportunity to consider how and when their word is used correctly and how and when it is used in everyday language. The teaching continues like this for the whole module. In parallel, the students maintain a journal of the ways in which the weekly topics provide insights into their word.

The assessment

The students are assessed via a portfolio of work into which the students are expected to submit an essay, presentation, their weekly journal items and notes from peer reviews that they gave another student about their draft essay. It optionally includes a module participation record where students could get credit for participating in department open events, their online word journal and the discussions they had online.

The successes (what worked well)

The adopted word (their specialism) gives the students a focal point for the seminar activities and an application for the theories and practices being presented in lectures. By applying the theories and practices, they learn them at a deeper level. One of the students explained:

"When someone's giving you knowledge and you don't have an opportunity to use it and use it again, it just sits there and deteriorates. Whereas if you put it towards something such as a discussion, essay or presentation then you're using the knowledge,

and when you think of it again you've got something to relate it to and therefore you know the context and how to apply it".

Furthermore, while applying the teaching to their word they naturally evaluate it if it is a useful. This evaluation allows the students to take a critical position towards the curriculum content, understanding the strengths and and weaknesses of its different parts.

During seminar activities, such as discussions, debates and student presentations, the students are expected to share the relevance of the topics to their adopted word. The students develop personal knowledge, different from their peers, relevant only to their context of their adopted word. As a result communication between peers becomes more natural and less guarded. One of the students described the seminar discussion as more enjoyable than other modes of learning because:

"Rather than just you saying your point and then the tutor talking, it's everyone having discussions".

All the students, independent of ability, have something new to bring to curriculum-based discussions with peers: the relationship between the concept being discussed and their unique adopted word. This makes social interaction spontaneous because there is a genuine interest in each others' words.

Although the students specialised in one word, they got to know many words and how their peers had come to understand them through the interactive seminar activities including peer review and student presentations. The students described how by listening to their peers they saw how others were applying the syllabus, and this gave them new understandings and strategies that they could use to make meaning of the module. In such a way, knowledge is transferred and re-adopted between student peers in different contexts. The peer work is not plagiarism or collusion but it is learning from one another in its truest sense. Furthermore, setting an expectation that students interact and converse on topic-based

issues motivates the students to investigate and research the topics deeper than they would if they were only using the knowledge for summative assessments or the necessarily judgemental gaze of the marker.

My research indicates that specialism-based learning encourages students to gain a deeper understanding of the topics than they do through traditional teaching methods. One student exclaimed:

"I didn't think that you could go into so much depth about it. I just can't believe there's so much to write about one word. I just find it fascinating!".

The fact that they are developing knowledge that is different from their peers (and even tutor) sparks motivation to investigate the topics deeper. It means students are invited to take elevated roles with respect to the creation of knowledge (Pryor & Crossouard, 2008). They become experts in their word, which is a field of linguistics, and this gives them a sense of belonging to the discipline beyond their identity as students or novices. One student said that for most of her educational career she felt she was "just receiving knowledge" but that the specialism-based learning approach made her feel like she was "producing it".

Student presentations change the dynamics of the group from one of students being passive recipients of the tutor's "incontestable" knowledge to students being co-creators of knowledge. It gives the students the opportunity to be experts in their subject and a senior peer for the duration of the presentation. One student said, the presentation motivated her to:

"really work on something and shape it and develop it and put so much effort into it".

The post-presentation question time forces students to contextualise and defend their knowledge and interpretations. It provided further evidence for Sambell et al.'s observation that "the requirement to explain one's thinking to a 'live' audience, which will

ask follow-up questions and probe the rationale for decisions that have been taken, prompts many students to adopt deep approaches to learning in an effort to really understand the material" (2013 p.25).

The "How to" Guide

The deep learning witnessed in the case study is not attributable to affordances of the discipline but the curriculum design. Similar curriculum designs can be employed whatever the discipline and whatever the signature pedagogy of your discipline. In disciplines where students are often assessed via an essay, employing a specialism can broaden the extent to which the students cover the topics introduced in the teaching because in a specialism-based learning assessment they are expected to reference them in relation to their specialism. The curriculum activities will also provide them with opportunities to share their application of the topics to their specialism with their peers.

In the case study described above the teaching and assessment methods are not very different from any disciplines that use a lecture followed by seminar pattern, and are assessed by essays and presentations. The key difference to the teaching and assessment tasks is that the students are required to apply the theories presented in the lectures to a specialism of their own. In disciplines where the teaching traditionally does not comprise seminars and the assessment is via examination applying a specialism-based learning method requires more fundamental changes, but still has as much value. Just as in disciplines where learning is traditionally assessed through an essay, applying a specialism-based learning approach to your curriculum design provides students with autonomy, supports their intrinsic motivations and encourages them to employ resourceful approaches. To achieve the success of the module described above the author has broken up the process the tutor went through in the table below.

Linguistics case study	
Give the students a specialism	*Students adopt a word*
Deliver teaching content that can be applied to student specialisms	*Lexicology, sociolinguistic approaches to understanding words, prescriptivism, and so on*
Teaching method	*Lectures, seminars, group quizzes, word journals, student presentations and tutor and peer reviews of draft essays*
Assessment method	*Portfolio including essay, presentation, peer reviews and module participation record*

In order to adopt transforming your curriculum from a traditional approach to a specialism-based learning approach there are four steps as follows.

Step one

Students choose or are given a specialism

Consider what the specialisms in your area would be. Make a list of the possible specialisms that the students can use. It works best if you have one specialism per student so that no two students are applying their knowledge to the same artefact. Although you can allow students to pick their own specialism it is important that your moderate their choice and ensure that the theories you wish them to learn about can be applied to their specialism.

Step two

Check they can apply the topics to the specialism

Consider the content of what you are teaching. Is the content applicable to the student specialisms? If your teaching involves the learning of facts that are only applicable to limited contexts then it probably needs to be revised. The types of content that is suitable to be covered in teaching includes analytical frameworks for interpreting information, tools and methods for representing knowledge, and practical skills for interrogating and researching knowledge. Such content can then be applied to the context of their specialism. Teaching can include examples of findings, artefacts and events, which help to explain how analytical frameworks can be applied in order to understand them, but the examples preferably would not overlap exactly with the students' specialisms, as this would undermine the students' opportunity to apply the framework themselves.

Step three

There are learning activities that promote cross-fertilisation between specialisms, ownership of their learning and confidence in students' own disciplinary expertise

Consider the method of your teaching. The methods you apply should provide you as the teacher with a means to share your knowledge and students with opportunities to interrogate that knowledge for themselves, opportunities for the students to apply the knowledge you have shared to their specialism and opportunities for the students to share that application of

knowledge with you as their tutor, and their peers. You might choose to employ interactive lectures to introduce the disciplinary content and hold seminars for students to interrogate the content deeper and support the students in applying the topics to their specialism. The support might come in the form of discussions, debates, quizzes and/or group-work activities. Opportunities might be created for students to present to each other where peers are invited to ask questions. Peer reviews might also be employed. In specialism-based learning peer reviews do not suffer from students plagiarising each other's work or colluding because their specialism is different. Ultimately the teaching method should provide a space for students to deconstruct and contest knowledge in personal contexts and to share their knowledge.

Step four

Use an assessment method that allows them to apply the topics to their chosen specialism

Consider the method of assessment. The assessment should evaluate the students' use of the analytical frameworks you have introduced them to, their methods of representing their knowledge, evidence of their practical skills in interrogating the topics and their ability to share their knowledge in a formal way with their peers. It may require the students to have completed a peer review of another student's work where the assessment is focused on their appraisal skills. In order to encourage the students to engage to some degree in the entirety of your teaching material it will be useful to include a reflective element to the assessment. The reflective element should require the students to describe the critical and evaluative processes they have undertaken with respect to the teaching material and how these processes have resulted in

them selecting the concepts and practices that were useful when interrogating their specialism and backgrounding the concepts and practices that were less useful to them. Portfolio assessments are ideal for specialism-based learning curricula because they allow students to evidence a range of skills, including criticality, resourcefulness and communication skills.

Examples of how specialism-based learning can be used in other disciplines

Neumann et al (2002) divided academic disciplines into hard and soft, pure and applied. They argue that disciplines with knowledge constructs which are provable through experimentation, such as Chemistry, are hard; disciplines with knowledge constructs that are open to interpretation and political stance, such as English, are soft; disciplines with knowledge constructs that are not directly usable outside of academia, such as pure branches of Mathematics, are pure; and disciplines with knowledge constructs with an obvious use in industry, such as Medicine, are applied These knowledge constructs often translate into the teaching methods used in education. Teaching within hard and applied disciplines can involve delivering concrete facts to students and expecting them to practice procedural tasks because this is what is valued in the field. In contrast, teaching in the soft and pure disciplines can give more space for the students to communicate their opinions because personal interpretation is valued in the field. I use Neumann's divisions to give examples of how specialism-based learning may be adopted in different fields.

Hard and applied disciplines

In the hard and applied disciplines students are often expected to have a wide understanding of the curriculum, but often this leads to a shallow understanding and a wide proportion of the student cohort being demotivated. We often see little room for difference, autonomy or opportunities to gain a deeper understanding the parts of the teaching content that is of interest to them (Laurillard, 1997; Biggs, 1999; Torrance, 2012). The sharing of knowledge between peers is often considered collusion as the final assessment is the same for all students. However using specialism-based learning as an approach can help teaching practitioners overcome issues experienced by their students such as a lack of control, a lack of motivation and rote learning. We would expect that tutors taking a specialism-based learning approach to their teaching will see an increase of enthusiasm amongst their students, a sense of ownership and a cohort taking a deeper approach to their learning. Although teachers may be concerned that taking a specialism-based learning approach will not see students getting a full grounding in the discipline or having the facts at the top of their heads, they should see the students gain transferable skills that can be applied in many contexts. Furthermore, the sharing of knowledge by students to peers that this approach requires will introduce the students to the complete curriculum.

An application of specialism-based learning within a hard, applied discipline might look like this example in Organic Chemistry, where the students' specialism is an organic molecule, such as an alkane, alkene, hexane, ether, alcohol, or halide as a specialism. The teaching content within the module includes an introduction to the analytical frameworks to understand the molecule such as its structure, its reactivity and its chemical and physical properties (rather than the structure, reactivity and properties themselves), ways of representing molecules (rules for nomenclature) and ways of researching molecules (practical experimentation techniques).

The students are given opportunities to interrogate the molecule using the practical skills introduced, investigating its physical properties and appropriate separation techniques. They apply their learning to understand and represent their adopted molecule and to share their learning with the rest of the cohort through a video presentation, to which their peers leave comments. The students are assessed through a portfolio of work including a written report including a reflective journal kept throughout the term, their experimental skills and understanding, their video presentations, and peer reviews of each others reports.

Organic Chemistry example	
Give the students a specialism	*Students adopt a molecule*
Deliver teaching content that can be applied to student specialisms	*Molecular structures, chemical properties, physical properties, reactivity, experimental methods, separation techniques*
Teaching method	*Lectures, seminars, experimental practicals, group quizzes, video presentations and tutor and peer reviews of draft reports*
Assessment method	*Portfolio including reports, video presentation, peer reviews and experimental practical reflections*

Soft and pure disciplines

Soft and pure disciplines often assess students on a narrow part of the overall curriculum. For example, in our experience essays often expect students to only engage in one or two of the topics that the tutor has covered in their twelve week teaching term. Furthermore assessments are often at the end of a module and are only read by the person who marks it, which can be demotivating for students (Boud and Falchikov, 2006; Hammer, S., 2016). In contrast, through taking a specialism-based learning approach students are encouraged to become familiar with the complete curriculum, to

apply their knowledge to a personal context, to become an expert in that context and share it with their peers.

An application of specialism-based learning within a soft and pure discipline might look like this example in an English Literature module, where the students' specialism is literature from a period (for example 21st century literature), for a specific audience (for example children's literature), from a specific place (for example American literature) or it may be specific novels. The teaching content includes analytical frameworks that allow students to understand their specialism, such as through the lens of race, gender, colonialism and power, conventions for discussing the themes and methods for researching them. The tutor introduces the content during the lectures and sets group exercises during the seminars which expect them to interrogate the content and apply its relevance to their specialism. The students are assessed via a portfolio of work which includes an essay interrogating their specialism using analytical frameworks introduced during the teaching to understand them, a presentation on their specialism that they give to you, the teacher, and their peers, and a reflective and critical report of their learning journey.

English Literature example	
Give the students a specialism	*Students adopted a book*
Deliver teaching content that can be applied to student specialisms	*Gender, race, colonialism, power*
Teaching method	*Lectures, seminars, group quizzes, video presentations and tutor and peer reviews of essays*
Assessment method	*Portfolio including essay, presentation & peer reviews*

The unexpected difficulties

A number of issues could be raised about specialism-based learning. Some might argue that adopting this approach will not give students a broad understanding of the disciplinary area and will leave gaps in students' knowledge (Christodoulou, 2014), as the students only become familiar with their specialism. However, in a specialism-based learning curriculum we provide plenty of opportunities for students to share knowledge on their specialism and, if designed correctly, the students will all have gained experience of applying the academic theory – the important, transferable knowledge. Furthermore, in my research I have seen that content-heavy curriculum can leave large gaps in student understanding, in part because students forget much of it as soon as the examination is over or the essay is written. In contrast a specialism-based learning approach leaves memories through grappling with the issues on a personal level and applying theories to the problems the students are confronted with. Finally, I would question why we must give our students a broad base of knowledge about specialist areas of the discipline when as we become experts our field of knowledge is increasingly narrowed.

And finally, others will claim that a specialism-based learning approach is more time-consuming than traditional approaches (Sambell et al 2013). It is true that the reviews of essays and presentations might add to your workload, but peer reviews will allow this approach to be scalable and, once in place, will provide a better service to our students, which, in turn, will be more rewarding for staff. Education is already expensive so let's make it worthwhile for our students. Creating spaces for discussions, breakout groups and presentations might help deliver this kind of curriculum and assessments.

Conclusion

If you are designing a new module or are redesigning an existing module I would encourage you to consider taking a specialism-based learning approach. In traditional teaching setups, where all your students are learning the same thing with the same assessment goals, many of you will have witnessed that a large part of your cohort becomes demotivated and engages in rote learning behaviours – mimicking understanding and criticality, becoming traditional students but not experts in the disciplinary field they are studying. However, in this chapter, I outlined a case study that uses specialism-based learning as a teaching and assessment method to motivate students to engage with the theories in a discipline at a deeper level. The method expects that the students do their own research, are adequately discerning and have opportunities to practice communicating their knowledge to different audiences (Sambell et al, 2013; Oprandi 2014; Boud and Soler, 2015).

In this chapter we have set out a formula for university teaching and assessment based on students being given specialisms to which they apply the academic theories we introduce them to. This formula provides the students with core understanding of the theories and practices and simultaneously develops their learning autonomy. By slightly tweaking our models of teaching and assessment we can piggyback on human motivations for learning such as developing expertise in niche areas and triggering desire to impress peers. We think we have come up with a formula for learning that can work across disciplines and that will be recognised by academic and curriculum designers and urge readers who can to incorporate such ideas into their curriculum designs.

The niche specialism acts as a glue for the theories being presented on the module and allows the students to apply the theories to something over which they have ownership and that is different to their peers. The learning we witnessed was authentic and not mimicry for passing assessments. Authentic practice has

been described by Boud and Soler (2015) as learning that is relevant and personal. In the case study we saw that the students engage in the disciplinary theories with genuine motivation and interest in order to develop a personal relationship with the knowledge. The specialism provides a basis for the students' engagement, criticality and desire to communicate effectively. It allows students to share their understanding with peers, review each other's work and do presentations to one another without colluding.

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A Tango for Learning: An innovative Experiential Learning format using Embodied Learning

MARGARITA STEINBERG

Outline

This chapter presents a method for investigating complex situations through the medium of movement. This method is inherently interdisciplinary, as it uses a format that originated in a practice for teaching improvisational dance (Argentine Tango). It lends itself particularly well to exploring the interpersonal aspects of any discipline practice (e.g. the study of International Development) and also of teaching practice.

The format fosters experiential learning that can complement and enrich text-based learning. An exploration of potential uses for learning about International Development highlighted how creating an embodied representation of the concepts and dynamics under consideration created a new level of personal understanding. One student commented "I had read that the effort to coerce a community group by a government agency can inadvertently create a drain on the agency, but that had remained an abstract concept for me. Having attempted to coerce a partner to move while they were not cooperating, in this format, has given me a vivid, visceral sense of what that paragraph in the textbook had been talking about."

Creating tangible embodied expressions of theoretical concepts is one use of the format. Another application is for investigating

situational problems and devising potential solutions that draw on more than formalised data and instead integrate information on interpersonal, emotional and intra-personal aspects as well. This may be particularly relevant to disciplines such as Business and Leadership, and also all of the Humanities. The format has particular affinity with the themes of teamwork, problem solving, and enhancing interpersonal skills. Interactions between tutors and students, within groups and teams, larger-scale configurations at organisational level, and more abstracted notions, such as the relationship between a company and its founder, can all be investigated using this format.

In this type of application, the goals of the session would be:

- Making available information about aspects of a situation, increasing awareness of the emotional, interpersonal and intrapersonal elements present
- A way of devising and testing options for future action

This chapter is aimed at readers interested in learning both a technique for embodied interactive learning and some of the theory that underpins it. The examples reported are largely drawn from situations where participants are reflecting on workplace relationships that are not functioning optimally. These are chosen to
>illustrate the general technique in a way that most people can appreciate, but are not intended to signal a limit to the scope for applications of the technique.

This chapter is organised into three main sections. First, there is a brief introduction to various theories that have a bearing on interactive embodied learning. The idea here is to point the reader to more detailed sources on these theories, but not to cover the theories themselves in great detail. The next section is a practical guide to conducting a particular kind of interactive embodied learning, based on the physical interactive movement of the participants themselves. The final part of the chapter offers some

thoughts about the value of this approach derived from a workshop conducted at the 2nd annual Active Learning conference at the University of Sussex in June 2018.

Interactive Embodied Learning

Any interpersonal situation will involve, at the basic level, at least two autonomous agents and a connection, their shared context. This is reflected in the configuration taught initially in this format – two people with a point of contact. The configuration is also relatively undemanding on the co-operation skills of the participants, in movement terms, which makes engaging with the format more accessible.

Argentine Tango danced improvisationally qualifies as a dynamic complex system. Briefly, a dynamic complex system is composed of autonomous agents, and exhibits four key attributes: diversity, connectedness, interaction and adaptation (Rickards, 2016). This underpins its affinity for modelling other dynamic complex systems and situations, and for exploring phenomena such as distributed leadership. Interpersonal intelligence (insight into what is going on between us and other people) and intrapersonal intelligence (insight into how we're operating inside) has been demonstrated to be enormously important in the workplace, as well (Wilber, 2000).

Deep learning is required to change how people act. This is particularly true for changing how people act in challenging situations. Hence in education today we need learning formats that can foster personally meaningful learning that impacts the short-term and the long-term evolution of a person's conduct. The approach presented in this chapter, therefore, seeks to move away from a focus on declarative knowledge (which is readily available in the modern environment) or on right-or-wrong answers (which are insufficient for negotiating complex challenges with an emphasis on needing to generate new solutions), and towards promoting deep

learning resulting in functioning knowledge, to use a distinction formulated by Biggs (see e.g. Biggs and Tang, 2011).

Precursors & situating this approach

Active Learning approaches

Bloom (1956) refers to the three learning domains of knowledge, skills and attitudes (KSA), also known as Knowledge-Skills-Self. The learning format presented in this chapter addresses all three levels, in particular its embodied nature binds these three levels together through the experiential format.

Guided Discovery Learning and Experiential Learning inform the practical shaping of this learning format. In particular, David Kolb's (1984) Experiential Learning Model illustrates the sequence of steps used:

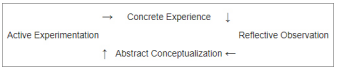

Figure 1: Adapted from Kolb (1984)

The details of how this conceptual model was applied are discussed in the How-To guide section.

Creative practice

Translating from one idiom into another, or into a different medium, is an accepted practice in the creative arts as an approach to exploration. In Drama this approach might inform the task to re-tell a novel as a script for a five-minute silent movie. Translating

situations (which people generally describe using language) into an embodied medium takes them out of familiar narratives and prompts a fresh look.

Embodied cognition

This learning format involves a type of embodied cognition. Briefly, one type of embodied cognition can use physical representations of what is being thought about (an example of this might be chess, where the figures and the field represent two warring states and the terrain of battle). In contrast, this format uses the participants' bodies and movements metaphorically to represent the characteristics of a specific situation, in order to explore its dynamic properties and the options for action. To flesh out what this might mean in practice, consider the example of a founder of a community interest company (CIC) exploring the dynamics of leading his organisation. To model this scenario, one person could represent the founder and the other his organisation. The gesture and movement versus each other would model the characteristics of the interaction. On another occasion, a participant wished to model their current workplace situation versus her line manager. The interpersonal experience would be expressed in movement, creating an opportunity to recognise aspects of the situation that had not yet become apparent to the person in the situation.

The field of psychology

The psychology modality of Gestalt (see e.g., Koffka, 1935) posits that our sense of a situation contains a lot of information in a diffuse format that Gestalt refers to as 'the Field' or 'ground'. To make that information more available to our conscious awareness,

an expression needs to be found (referred to as 'the Figure') using the medium of any sensory sense, visual, auditory, etc. Once that information about the interpersonal and intrapersonal aspects of a situation is available to our conscious awareness, expressed in a metaphor or symbol, we can work with it in a more intentional manner. Even simply recognising what they already knew in some way commonly triggers an 'aha' moment for people. The learning format presented here focuses on expressing the information in the field through the medium of movement or gesture. Constellation work (Cohen, 2006), originally developed by the German psychotherapist Bert Hellinger for family therapy, and Systemic Coaching, similarly work with spatial expressions of relationships. The learning format presented here takes this into a more dynamic direction, which readily permits not just an expression of the current situation as perceived by the participants, but also options for acting within the situation, facilitating devising a course of action to introduce change.

Systems and eco-systems

The familiar metaphor of organisations as machines is losing ground with an increasing recognition that an eco-system comes much closer to describing the properties of a community of living entities (Bragdon, 2016). Tangible, personally relevant exploration of the dynamics of eco-systems is therefore relevant for anyone who is, or is preparing to be, functioning within an organisation – which is to say, the majority of those attending schools, colleges and universities.

Dynamic Complex Systems

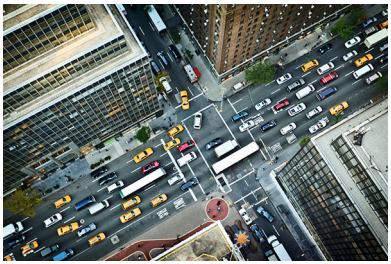

Figure 2: City traffic as an example of a dynamic complex system, illustrating the properties of diversity, connectedness, interaction and adaptation.

Modern complexity theory began in 1960's with the work of Edward Lorenz, an MIT mathematician and meteorologist (see e.g. Lorenz, 1963). A subset of complexity science investigates dynamic complex systems, described by James Rickards (2016) in his book 'Road to Ruin':

A dynamic, complex system is composed of autonomous agents. What are the attributes of autonomous agents in a complex system? Broadly, there are four: diversity, connectedness, interaction and adaptation (Rickards, 2016, page 11)

Many natural and human systems exhibit these characteristics, with one example being the traffic systems in a city. The complexity arises from the varied nature of the agents participating in the system (*diversity*), each acting within a shared context (*connectedness*) yet each making decisions based on their individual take on the situation (*autonomy*), with each action taken potentially influencing the decisions that other agents will make in the wake of it (*interaction* and *adaptation*).

A number of disciplines are currently using complexity science to investigate fields as diverse as economics, climatology, ecology and social systems (see e.g. The Health Foundation, 2010). It is a

particular strength of the learning format presented in the chapter that it facilitates modelling and investigating dynamics within a complex dynamic system. Once I realised that an Argentine Tango dance event qualifies as a dynamic complex system, the possibilities of the learning format for exploring phenomena such as distributed leadership became a point of fascination for me.

Complex situations and the focus on 'what could be'

This learning format fosters a nuanced exploration of complex situations and systems, and focuses on "what could be" rather than "how it ought to be" (the last tends to engage our expectations, whereas the first keeps us focused on discovering). Because of the relational nature of the format, it is most readily understood initially by applying it to real-life examples.

The founder of a CIC (mentioned earlier) began this process by putting into movement terms his experience of leading his organisation. He started out by taking the role of himself, with another person representing the CIC organisation. The founder's portrayal in movement of his actions included a lot of jerky movements, which he described as "somewhat erratic and swinging from tight control to periods of uncertain focus when I would be tempted to launch lots of initiatives without a clear objective because I was feeling panicky and overwhelmed". He then took the role of his organisation to get a feel for what it might be like to be on the receiving end of such lead input.

Rather than offering a prescription for 'a better way' of approaching his organisation (an equivalent of 'how it ought to be' input), the learning format facilitates an exploration of options, with the aim of showing respect for the person's autonomy and for their greater awareness of the nuances of their particular situation. The CIC founder explored how he might prefer to interact with his

organisation ('how it could be'). He considered how he might adjust his stance, first trying out in movement terms the option of allowing himself to pause until he was clear on the next step. Finding this an appealing option, he then converted the new approach into his situation, by determining to treat his periods of wavering focus as an opportunity to reconnect with the intended outcomes for the next time period, rather than generating additional tasks which previously had reflected his temporary sense of confusion.

Preparing to run the workshop

You will need to have some minimal practical experience of leading and following, so that you can provide a demonstration to the group. A few minutes with a volunteer to help you try the instructions for yourself ahead of hosting the workshop would be ideal. Follow the instructions for setting up a connection, agree on the role you'll try first, then swap. Reporting on your personal experiences exploring this format can be very encouraging to the learners at the workshop.

The "How to" Guide

The rhythm of the work: doing and reflecting

Active learning "involves students in doing things and thinking about the things they are doing" (Bonwell, C. & Elson, J. 1991). This is further refined by working through the stages of the Kolb Experiential Learning Model (see section on Active Learning Approaches). The sequences described work through two learning cycles (more details to follow). The sequence of activities that the

participants are guided through could in addition be mapped using the revised Bloom taxonomy stages as:

Understanding -> Applying -> Analysing -> Creating (Learning Cycle 1) ->
Creating -> Applying -> Analysing -> Creating (Learning Cycle 2).

Outline (What happens)

Learners are guided to connect with their personal perspective vis-à-vis a situation they'd like to explore (or introduced to the elements of a discipline the session will focus on). They temporarily set this aside in order to gain an initial experience of the learning format. They are then guided to use the learning format to model the situation they are considering, and reflect on what the modelling process had revealed for them. Learners are guided to build up connections between the symbolic model and the real-life situations/discipline-based concepts being explored throughout.

Preliminary preparation

In order to set up personally relevant material for the Active Experimentation phase later on in the session, it is suggested that participants are initially asked to jot down several interpersonal situations that they would be interested in gaining a fresh perspective on. These would optimally involve two people, reflecting the shape of the activity to come.

Demonstration

Figure 3: The author demonstrating the Butterfly Lead.

A demonstration by the tutor is recommended as the first step, to introduce the practical aspect of the learning format. This involves the tutor pairing with one person (optimally someone with at least some prior experience of the format) to demonstrate setting up a connection (see below) and moving around as a unit. The participants are asked to clear a space where the demonstration can take place.

Experience at previous workshops suggests that it is best to demonstrate two kinds of connection, one involving minimal physical contact, and one that does not involve any physical contact at all. This provides the participants with options that are acceptable to them, and thus enhances the inclusivity of the activity.

Connection involving minimal physical contact

The connection between two partners can be through the fingertips of one partner resting lightly on the back of the hand of the other partner (this is based on a practice in Eastern martial arts sometimes referred to as 'Butterfly Lead', designed to train sensitivity and responsiveness).

Connection that does not involve any physical contact

If either of the partners within a pairing prefers to avoid direct physical contact, an intermediary object can be introduced that acts as a conduit for the exchange of information within the partnership. Objects such as a cup or a pencil readily lend themselves to this purpose: two people each holding one end of a pencil are connected spatially, and will receive information about their partner's movements. Other objects can be pressed into service, with preference given to those that would not pose a risk of injury, i.e. fragile or sharp objects ought to be avoided.

Moving collaboratively

It warrants stating explicitly to the learners that the goal of the interaction is to jointly maintain the connection while their 'unit' negotiates moving around in the space. Unlike competitive formats, this one very much prioritises collaboration.

Instructions on leading and following

Repeated experience with the format has revealed the minimum necessary instructions to allow people to get started in practice.

Guidance for those about to play the leading part, aka 'leaders'

- Expand your awareness to encompass the larger entity you're going to lead to move, a new unit of the two people in your pairing. This bears some similarity to the switch from driving a car to driving a truck: the enlarged dimensions of your unit have to be borne in mind, you need to recognise moments when you will need to change speed or direction earlier, before they affect your partner, as well as keeping yourself safe. Also, since you're the primary determinant of where and how your pairing will move, you need to keep some of your attention on the developments in the space around you, so that you can pick a safe path of travel. You bear the primary responsibility for the safety of both the partners (and, by extension, of everyone else in the room) – so it is recommended that you have a clear view on your intended direction of travel at all times, so that you can see conditions ahead.
- Move yourself, rather than attempting to move your partner. You will quickly experience that your partner will move themselves to maintain the connection.
- A reminder that one of your goals is to maintain connection with your partner. This means that you may need to change pace and slow down if your partner is having trouble keeping up with you, etc. Your task is to make moving together safely as easy as possible for both of you.

Guidance for those about to play the following role, aka 'followers'

- As your partner moves around, it is easiest if you move in

response swiftly, rather than delaying until the connection is strained and in danger of rupturing. This applies to taking a step to maintain distance as much as to rotating round to keep your partner roughly in front of you.
The optimal range of distance is indicated by a comfortable bend in both arms involved in the connection (yours and your partner's): a fully outstretched arm indicates the distance is getting too wide, and a sharp bend at the elbow indicates that the distance is collapsing and likely to cause discomfort.

- Agency of the 'follower' role
It is entirely possible that you will be aware of an impending collision or an approaching obstacle before your lead is. It is in the interests of your pairing for you to take action to prevent collision, i.e. slow down or stop; your lead will need to adjust to your action, which is likely to protect them, as well. Although your role is dubbed 'the follower', there are active contributions you can make, and this one related to safety is the first and most important.

Learning Cycle 1

Figure 4: Participants practicing the Butterfly Lead at the 2nd Active Learning Conference, University of Sussex

Initial Concrete Experience

Active experience with the format is introduced by pairing people and instructing them to set up a point of contact. It is worth reminding participants to establish within their pairing whether a connection with or without physical contact is agreeable to both parties. (At a previous workshop which only demonstrated connection using physical contact, one participant exited immediately after the first practical exercise; their swift exit was later revealed to be caused by their discomfort with the physicality of the learning format).

The pairings also need to agree who is going to play the lead first (partners will swap roles within the pairing, so that each participant gets to experience both roles within the partnership).

Between one and two minutes is sufficient duration for the initial experience. Playing a music track on low volume in the background is optional. There is no requirement for the participants to pay attention to the soundscape in the space, other than sounds that might alert the participants to an impending collision. It is helpful to suggest that people refrain from talking until after the active experience, however.

Option to act as observers

The option for participants to act as observers during a segment of the workshop, or for the entire session, is useful to posit early on in the workshop for a number of reasons. It enhances the inclusivity of the format, by accommodating those who would hesitate to get actively involved in an embodied exercise.

The second reason is that observers can actively contribute to the learning in the group, and this needs to be stated explicitly. Observers are in a position to perceive what participants may be too preoccupied with their immediate tasks to pick up on. The

phenomenon of our scope of attention being limited, and potentially diminished by a high-priority preoccupation is described in the book 'Scarcity' as 'mental bandwidth tax' (Mullainathan & Shafir, 2013).

A third reason for someone to act as an observer for a portion of the workshop might be an odd number of participants. It is suggested that the tutor avoid making up the numbers by participating, as this limits their ability to recognise moments when they may need to intervene or give additional input. Instead, the 'odd' person can swap in with another if they wish to get some direct experience of at least some of the session.

Caveat: Although the option to act as an observer is useful, the learning from active participation is cumulative. This may make it harder for learners to join in later, without the benefit of personal experience of the earlier stages.

Dealing with collisions

If you observe that a lot of collisions are taking place, this is likely because people are prone to turning most of their attention to what is happening in their pairing. While understandable, this diverts their awareness from what is happening outside the space their pairing is occupying. This is a very natural response to the intensity of a first experience, and participants need to be reassured of this. Two prompts in combination reliably diminish collisions. The first is to point out that this activity is not a race, and the objective is rather to develop greater sensitivity and subtlety in coordinating with one's partner. The resulting gentler pace allows people to notice their surroundings more readily, which sets up the second prompt reminding the participants, and in particular the leaders, to turn a greater portion of their attention to the changing available space around them. With the enhanced awareness of their environment, groups tend to harmonise their movements more readily. At this point, the tutor can also point out that a larger

community is being enacted, an 'us' larger than the pairings, uniting everyone in the space in a 'whole', an entity operating on another level, which is also amenable to investigation and reflection (more on this later).

Initial Reflective Observation

After you've called an end to the initial experience, prompt the members of each pairing to discuss with each other (small groups discussion) how they have found the experience, and share any observations on what had gone as they'd expected and what had surprised them. This permits each participant to learn both from their own and their partner's observations. The findings can then be pooled in a brief plenary discussion, which is also an opportunity to bring in those who had acted as observers, to make sure that they are included in the session.

Swapping roles

Participants have another go at the same activity, now playing the role their partner had played initially (for expedience, rearranging partnerships is delayed to a later stage). Re-stating the instructions for the leading and following roles is warranted here, as people would have previously focused on the detail they needed for the most immediate task they were preparing for. In addition, you can also invite each pair to swap tips they'd generated from the experience they'd just had (thus further validating the learning they had already generated).

Again, an experience between one and two minutes is sufficient, and should be followed by a discussion within the pairings and then expanded into a brief plenary, as before.

Additional Reflective Observation

If the larger community of the whole group is of interest, you can invite people to comment on the dynamics of the entire room.

Abstract conceptualisation

To assist with abstract conceptualisation, this is the point where a brief analysis of the system each pairing had represented can be offered, as two autonomous yet inter-dependent agents and an interface/connection point. This is relevant as preparation for the next task, which will ask the participants to design an experiment of their own.

Active Experimentation (preparation)

The participants are now asked to work in groups of three (mixing up the previous pairings) to generate up to 20 configurations of connection. The tutor can offer prompts that configurations of connection can involve different modes of contact: different parts of the body can be involved (e.g. elbows), different intermediary objects can be considered, no-contact connection could be devised etc. (see also Appendix A: Worksheet for generating 20 connection configuration, at the end of this chapter).

It is useful to encourage the learners to go beyond discussing concepts for configurations, and actually test out what they are envisaging. This activity can also be used as an opportunity to incorporate those who had acted in the observer role earlier, as there is scope for people to participate in group work without needing to enact the embodied experiment.

Once the initial ideas within each group have been explored, they can consider some prompts provided in the accompanying

worksheet (see Appendix A) to stimulate further investigations. Once the time allocated for this activity has elapsed, the groups are asked to share the configurations they had devised (up to three configurations from any one group).

Learning Cycle 2

This learning cycle starts with the participants already equipped with a direct personal experience of the format and some conceptual understanding of its elements and capabilities. Learning Cycle 1 worked through the first four steps of the Bloom Taxonomy map. This is approximately related to the Kolb Experiential Learning Model in the following way:

Understanding -> Applying -> Analysing -> Creating (Bloom)
Concrete Experience -> Reflective Observation -> Abstract Conceptualisation -> Active Experimentation (Kolb)

Learning Cycle 2 is going to ask the participants to take their learning into new territory by starting with creating. This learning cycle starts by asking the participants to review the situations they had listed during the preliminary preparation and, within their groupings (they can stay with the same people as in the previous step), to choose which scenario they are going to model using the format. The participants are now equipped to exercise judgement on which scenario might lend itself better to consideration through the metaphor of movement. The person bringing the scenario to the group (the *scenario holder*) provides a detailed description to their group of the two people (the *agents*) involved and how they are behaving in the scenario and the flavour of how they are interacting with each other (the *connection*). The tutor can provide support to each small group in turn in considering the properties of each agent in the scenario and the physical movement that would best express the qualities of the connection as described by the scenario holder.

The configurations generated during the previous activity can act as a resource of options to consider. This is the initial step (Creating) in the sequence outlined earlier.

This is often the stage when a sense of emerging clarity gets commented on by a participant. The participant who was disconcerted by a lack of steer from her line manager expressed a sense of relief at simply finding a way to name or voice what she had found so troubling: a shift from receiving clear guidance (which she portrayed by hands placed by the representative of the manager on the 'subordinate's forearms) to a "hands off" approach (portrayed by a shift to the 'manager's' hands being applied on their partner's back and then removed completely). The physical situation of the 'lead' person standing behind their follower and removing all contact palpably conveyed how "at a loss" the recipient of such a management approach might feel.

Once the design of their experiment is ready, the groups are instructed to carry out their embodied scenario in practice. One person in the group can act as an observer, or pairs within each group can take turns to run multiple repeats of their experiment. The groups can then discuss (among themselves and with the tutor) any observations on the model they had devised and implemented.

At this point, the element of Time (Abstract Conceptualisation in Learning Cycle 2) is pointed out: the experiment so far modelled a 'how it is' interaction between the agents. The participants are now asked to consider how the interaction could be changed over time, either by changing the behaviour of the agents, changing the connection configuration, or both. This introduces the element of dynamics, i.e. how things change over time. The participants have already explored a range of connection configurations they can now draw on. This can be supplemented by a worksheet listing some options for agents' behaviour (see Appendix B: Worksheet on Options for interacting dynamically).

Groups can test a number of options for the development of the scenario over time, using different adjustments at each iteration, with a particular emphasis on the situation holder's agency. To

illustrate, the participant who had modelled her situation with her line manager would, at this point, be invited to test options for adjusting how she operated in the scenario. Thus, she could try turning around to look at the 'manager' to gain a stronger handle on the situation, or taking the lead by making contact herself, or expanding the horizons of enquiry etc.

The conclusion to the process would be to translate back into situational action the options discovered through the embodied exploration. This anchors the personal relevance of the learning process: the scenario holder now has new options for future action, as well as a visceral experience of how situational dynamics can be changed. A plenary discussion of the whole group's experiences over Learning Cycle 2 can be hosted at this point.

Learning Cycle 3 (optional)

More advanced models using this format can consider situations involving more than two agents. A systemic-level model can express in embodied terms a situation involving, for example, an entire department in an organisation, or a larger group / community, e.g. a Student Society.

Creative medium

The capabilities of this learning format are open-ended, and it is best approached as a creative medium. This is to say that, rather than asking what it can or cannot do, it seems more useful to wonder how a given brief could be met and encouraging creative thinking to explore how an embodied representation could be devised for what you're seeking to include, in the spirit of open-ended enquiry.

In the practical guide section of this chapter, I have limited the

situations that participants were to reflect on to those involving just two individuals. This was a pragmatic decision, and does not represent a limit on the applicability of this learning format. The situations to be explored could equally involve more than two individuals, or the interaction of groups rather than individuals, or indeed the interaction between one set of ideas and another. Examples of these generalisations beyond two individuals include the example mentioned earlier of dynamics between a government body and a minority group in a state, or even the interplay between the individual needs of a learner and the demands of sequential teaching of a discipline.

To give an indication of some of the more expansive options, other elements of a system, beyond two agents and a point of connection, can be included in the model, building on the metaphor of an eco-system. The context in which a system operates could be modelled. As an example, the 'landscape' in which the agents act could include representations of obstacles restricting free flow of activity; the 'climate' (supportive/distrustful etc.) could be represented, for instance, by a soundtrack conveying a particular pace or mood. Conflicting messages within a system could be portrayed by a soundtrack setting one pace and 'someone in charge' clapping at a different speed, or giving instructions to speed up against a background soundtrack broadcasting a steady pace, and so on.

To illustrate, the participant considering her options for changing the nature of the relationship with her line manager could also expand the scope of the exercise to model how the whole department was configured, which could help identify previously unrecognised options or resources. In this example, the participant could add elements to represent the context in which her line manager operated and the constraints that emanated from the current situation at the department level. In embodied terms, a physical barrier could represent the limitations on the manager's scope for action, or their movements could be 'hampered' or they could be given an additional task, representing some concern that

was drawing their focus away from engaging with this colleague. In real life, this exploration played a part in the participant determining to negotiate a change of contract which shifted her into a different section of the department under separate line management. The inclusion of the previous manager's context had elucidated that there was limited scope for how that manager could re-engage with the situation holder, and so pointed towards seeking a new position within the department. The greatest gain from undertaking this exercise was a shift from a sense of bafflement and impasse to a direction for action.

The successes (what worked well)

All participants to date have succeeded in grasping the metaphor of an embodied expression of an interpersonal situation. They were able to translate situational information into movement (concrete to symbolic) and convert options discovered through movement into action in the real-life scenario under consideration (symbolic into concrete). All participants have succeeded in leading and following in the dynamic environment, once a personally acceptable connection configuration was settled on. All participants succeeded in devising an embodied expression of a specified situation.

Some participants commented that their initial hesitation and apprehension at the embodied nature of this format gave way to feelings of excitement at the visceral sense of discovery they experienced. Others commented on enjoying connecting their pre-existing declarative knowledge to the more personal embodied experience.

The unexpected difficulties

A greater challenge has been found in the tension between an academic setting, with an attendant association of a minimum of embodied interaction, and an embodied relational learning format. This tension was exemplified by one participant opting out of the workshop after the initial concrete experience had concluded. Expanding the range of options for contact (e.g. through intermediary objects) and the option to act as observer may reduce the discomfort for some participants. It ought to be acknowledged, however, that it is still possible for the focus of attention on the emotional and interpersonal domains to trigger discomfort for some participants. If further accommodations prove insufficient, the person may need to sit out this session.

Concluding thoughts & looking ahead

The importance of addressing the affective aspects of the learning process and of functioning within society cannot be overstated. This work aims to contribute to an evolving body of practice creating innovative approaches to facilitating learning in such areas as team working, leadership and organisational development. I would be interested in developing further inter-disciplinary applications using this format in other arenas.

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Figure credits

Figure 1	Adapted from Kolb (1984)
	Downloaded from the internet
Figure 2	https://www.cisco.com/c/en/us/solutions/industries/smart-connected-communities/city-traffic/_jcr_content/Grid/category_atl_9054/layout-category-atl/anchor_info_471b/image.img.jpg/1509700255133.jpg

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Appendices

In practice, both the worksheets that follow are best printed out in the Landscape orientation, to provide more space for participants' notes.

Appendix A. Worksheet for generating 20 connection configurations (in groups of 3)

Aspects of connection: some prompts	**Your group's 20 (or thereabouts) designs**
• Proximity of partners (how close or far apart) • Is there direct, physical contact? • If yes, how large is the area of contact & what part(s) of the body act as the connection point(s) • Symmetrical or asymmetrical connection (impacts on whether vulnerability is shared equally) • Flavour of connection, e.g. where on the cooperative <-> coercive continuum • What other aspects / flavours of a system could you model within the pairing, and how?	

Appendix B. Worksheet on options for interacting dynamically

Actions and responses (some examples)	**Your group's experiment**
Actions/ responses from either party within a pair • Propose • Comply • Compel • Resist (from position of following or leading) • Insist • Redirect / convert into something new • Break contact • Change the nature of the connection • What else?	Which actions/responses did your group try out (these needn't be limited to the examples listed)? If time permits, also record some of your qualitative experiences/findings.

Appendix C: Sample session plan (60 minutes)

Time	Topics	Activity
		Write down 3 situations
1 – 5	**Potential topics for participant design later**	where increased understanding / new ways of interacting would be desirable for you
	Introduction to the session	
6 – 10	• Rhythm of the work: doing then reflecting • Options to participate and/or observe • Confidentiality	
	1. First experience of the learning format	0 – 1 Demo + instructions
11 – 20	• First go at 'Butterfly lead' (or alternative) • Switch roles, remain with the same partner	2 – 3 First go 4 – 5 Discuss in pairs 6 – 7 Swap roles 8 – 9 Discuss in pairs Include comments from observers, if present, throughout
	2. Explore configurations for connection (in groups of 3)	
21 – 35	• Analysis of the pair as a system: three elements • Distribute worksheet (Appendix A)	1. Generate 20 configurations of connection 2. Plenary: Share your group's configurations (up to 3) with everyone present
	3. Consider options for responding from either position/role (Appendix B)	Groups try out their ideas or prompt the tutor to demonstrate dynamic responses
	4. Design & run your own experiment	1. Option for new Observers 2. After the 'experiment': How would the movement responses explored be 'translated back' into action in the situation being investigated
36 – 45	Optional: new groups of 3 Optional: Instruction for groups to select a situation from those jotted down at the start of the session	

	5. Plenary discussion	
46 – 55	• What are your findings? • What else would you want to explore?	Reminder: Include comments from observers
	6. Conclusion	
56 – 60	• What next: complex systems	
	Close and depart	

A Toe in the Water, Or, Beware the Under-Toad: Assessing the Benefits and Pitfalls of TBL-Light

WENDY ASHALL

Outline

The team-based learning (TBL) literature makes wide-reaching claims regarding the benefits of adopting this pedagogical approach: improved learning, increased levels of engagement and participation, decreased social loafing, are promised alongside the ease of its applicability and suitability across disciplines (Espey, 2017, 2018; Lehmann-Willenbrock, 2017; Michaelsen, 2004; Michaelsen & Sweet, 2008, 2011; Stein et al., 2015; Sweet and Michaelsen, 2012; Travis et al., 2016; and Wilson, 2014). While the approach has been used extensively in schools, colleges and universities, both in the UK and the USA, a mixed picture emerges regarding whether TBL leads to improved student satisfaction (Travis et al., 2016). Nor does the literature address in sufficient detail the practicalities involved, nor does it assess the usefulness of the various ICT options available, the suitability of TBL for foundation year teaching, or its appropriateness for HE students with learning needs, disabilities or mental health issues such as anxiety. The TBL literature presents a somewhat rosy picture, stressing the benefits without going into much detail regarding any pitfalls encountered in implementing what, for some, may be a

radically different approach to learning and teaching within higher education (HE).

The aim of this chapter is not to address the need identified by Travis et al. (2016) for more rigorous and scientific studies to produce evidence of the benefits of TBL, nor to provide a detailed review of the TBL literature as this is provided elsewhere (see, for example, Espey, 2017, 2018; Stein et al., 2015), but rather to provide a concise but honest 'how to' guide for practitioners interested in trialling TBL combined with Poll Everywhere, and an exploration of how we might assess its suitability for foundation teaching, based on the data a practitioner will have to hand. With these aims in mind, I briefly summarise the process and principles involved in TBL, drawing on a limited section of the literature. Next, I provide an overview of the context within which I trialled TBL and the rationale for the approach taken, before proving an account of what worked well and what worked less well, and how we overcame problems encountered along the way. I finish by including my early thoughts on the difficulties involved in assessing the usefulness of TBL for social science foundation teaching, but also some of my concerns which are not covered in the literature.

What is Team-Based Learning?

Team approaches to learning and teaching have a long history, with some identifying direct descent from the work of John Dewey (1922) due to his focus on cooperation, with productivity resulting from dependence (Betta, 2015: 69). More recent approaches can trace their origins to the *Johns Hopkins Team Learning Project*, at John Hopkins University (Slavin, 1978), and the later influential work of Larry Michaelsen and Michael Sweet (Michaelsen, 2004; Michaelsen & Sweet, 2008, 2011; Sweet & Michaelsen, 2012).

Team-based learning (TBL) is a highly-structured method of teaching and learning, in which learners are divided into the same

small groups for the entire period of instruction and work together to deepen their understanding of the taught material by applying it to specially designed problem-solving activities (see Travis et al., 2016). Team approaches were initially used to teach basic skills (Slavin, 1978) but TBL has more recently been used to teach a wide range of topics across the disciplines, including (but not limited to) business studies, introductory psychology, medicine, criminology and the social sciences and humanities (Betta, 2015; Espey, 2018; Stein et al., 2015; Travis et al, 2016; and Wilson, 2014). TBL differs from other peer-focussed, active learning approaches in that it is more structured, but it shares features with the peer-led, evidence-based framework championed by Geoff Petty (2006) and John Hattie (2009), see Michaelsen and Sweet (2011). Most proponents of team-based learning (TBL) agree that five principles and processes are essential:

Stable Teams: Firstly, the teams should remain consistent across the semester (Travis et al., 2016). This is to enable trust and understanding to develop, such that the 'groups' are transformed into 'teams' over time (Lehmann-Willenbrock, 2017) as students come to trust each other and learn to negotiate to overcome differences (Espey, 2017).

Pre-Class Preparation: Secondly, students are required to complete pre-class preparation independently. This could include completing set readings, watching a video, or completing other preparatory activities. This reliance on individual pre-class preparation is shared with other 'flipped' approaches (Jakobsen and Knetemann, 2017) but is also consistent with the independent learning associated with HE.

In-Class Testing: Next, students first complete in-class quizzes, sometimes referred to as i-RAP or i-RAT (individual readiness assessment process or individual readiness assessment test). These are usually multiple-choice quizzes. The students then re-take the quiz, but this time in their teams. This stage is often referred to as the t-RAP or t-RAT (or team readiness assessment process or

test). The results of the i-RAP/ i-RAT provide students with a grade-based incentive to complete the pre-class preparation (Stein et al., 2015: 30), but the t-RAP/ t-RAT provide a social incentive: students who do not prepare adequately (those who do not complete the pre-class preparation) will not perform well in the i-RAT. Their performance will also impact negatively on their teams' performance in the t-RAT, thus promoting student-student accountability. Thus, TBL uses the desire to be accepted in the group as a motivation to learn (Stein et al., 2015). In this stage, students discuss the questions aiming to reach a consensus as to the correct answer. This has the benefit of encouraging students to both learn from and teach each other, in common with other peer-led approaches the students benefit from explaining their ideas to others, but also from having concepts explained to them in ways that differ from those used by their teachers (Stein et al., 2015: 28).

Application: In the next stage, the remaining class time is dedicated to application exercises designed to stimulate in-depth analysis, discussion and critical thinking (Travis et al., 2016). By providing the common goal of shared problems to solve, further incentivises cooperation (Stein et al., 2015) and this discussion is central to the success claimed of TBL, in that such discussion forces students to confront alternate points of view and the provision of peer feedback removes the need for additional tutor feedback (Espey, 2018).

Peer Evaluations: Finally, students are asked to grade the performance and contributions of their team-mates. The graded peer evaluations are used to 'differentiate grades across team members, based on the varied contributions of each student' (Stein et al., 2015: 28), which further incentivises each student to come to class fully prepared and rewards leadership (Stein et al., 2015: 31). TBL seeks to harness students desire to belong (Stein et al., 2015: 30), but also includes social sanctions against 'free-riding' via the desire to avoid social rejection and poor grades via the peer evaluation (Stein et al., 2015: 30). To do this, however, TBL requires the formation of stable groups (Stein et al., 2015: 30).

A wide range of benefits are claimed for TBL, including improved learning outcomes (Travis et al., 2016); increased levels of student engagement and participation (Stein et al., 2015; Wilson, 2014); the ability to learn and practice those skills required for employability, such as leadership (Betta, 2015); improved critical thinking skills (Espey, 2018); decreased 'social loafing' due to its active promotion of student accountability (Stein et al., 2015: 30); and improved group working skills, but also the development of student independence (Betta, 2015) whilst also overcoming the negative aspects of other group work approaches, such as personality clashes (Espey, 2017: 8). Despite the consistently positive assessment of TBL, its suitability has not yet been assessed for foundation teaching, or for those students with learning needs or those with disabilities or mental health issues such as anxiety. A mixed picture also emerges regarding whether TBL leads to improved student satisfaction (Travis et al., 2016).

What I did

Having reviewed the benefits claimed for TBL, I next provide an overview of the context within which I trialled TBL and the rationale for the approach taken. The module I convene is a core module on a social science foundation year course at a plate glass university. While foundation courses have a long history within the arts and medicine, in recent years they are increasingly offered as the 'year zero' of a four-year degree (UCAS, 2017). Foundation Year courses are now offered by 140 HEIs in England and Wales (UCAS, 2017). This course was established in 2015 and is now in its fourth year. Currently (2018/19) 208 students are enrolled. Students on the course take two core subject modules (one of which is my module) which span the social sciences, along with an additional academic skills module and an elective (one of the core modules from another foundation course: business, psychology or humanities). If students

pass all four modules, they are guaranteed progression to a selection of degree options.

Most of our foundation students have recently completed their A-Levels but did not meet the entry criteria to progress directly into undergraduate studies. In line with the sector, small but increasing numbers of our students have either diagnosed or undiagnosed learning needs, such as dyspraxia, dyslexia, ADHD and ASD (Department for Business, Innovation and Skills, 2017: 11), and a sizeable proportion report anxiety and other mental health concerns (see McIntosh and Shaw 2017; Neves and Hillman, 2017: 45-7; Unihealth, 2018). The course aims to support all of our students as they transition into HE, via the provision of the academic skills module, more contact hours (in comparison with our undergraduates) and additional pastoral support as for some this may be a critical period (see Gale and Parker, 2014): this transition might prove especially challenging for those who 'failed' to meet their entry grades and might, therefore, have a less well-developed sense of themselves as successful students (see Field and Morgan-Klein, 2010, 2012) or those whose previous educational experiences might not have adequately prepared them for independent study (VandeSteeg 2012). The year-long module I convene introduces students to the methods and theoretical perspectives of the four disciplines that constitute the wider academic school: anthropology, international relations, geography and international development. This year (2018/19), 266 foundation students are taking the module, either as a core or as an elective: the students possess varied degrees of knowledge of, or interest in, the subject area.

In designing the module, I utilise a standard HE teaching modality: a one-hour lecture, delivered by researchers from across the school, followed by a two-hour seminar and accompanied by essential readings. By developing this format, I aim to prepare the students for the learning and teaching they will encounter once they progress to undergraduate studies, but also make use of the longer seminar time to create a supportive learning environment, in

which learners can explore their identity as a university student and develop the sense of belonging associated with retention (McIntosh and Shaw 2017: 15; Thomas, 2012: 6-7) as well as benefit from the 'sensitive scaffolding' which make HE expectations explicit (Ridley, 2004 but see also Gale and Parker, 2014: 745). Teaching is delivered in fifteen seminar groups, each with between 20-22 students, by a three-person teaching team. I deliver three of the seminars, with the other twelve divided equally between two full-time Teaching Fellows. While I remain in place, to date the team has changed annually, with those employed having a range of teaching experience and qualification level. Seminars are designed using a student-led, active learning approach: we make extensive use of small group and peer-teaching activities to establish 'communities of practice' (Wenger, 2000) but also encourage students to draw on their prior experiences to build bridges between what they do and do not (yet) know (Ridley, 2004). The assessment modes used similarly aim to render HE expectations explicit: for example, in the autumn term students are required to complete a Reading Record in which they summarise, synthesise and evaluate the sets readings. This assessment aims to help them develop the habit of weekly reading, but also to develop those skills needed to prepare literature reviews.

In 2017 I commenced my doctoral research into the experiences of students on this course. Part of my motivation to do so was to rectify the lack of evidence regarding the 'value and utility' of foundation courses (UCAS, 2017). This four-year longitudinal multi-strategy case study follows the 2017/18 Social Sciences Foundation Year cohort until they complete their undergraduate studies. The discussion at the focus group (conducted in the spring of 2018) worried me: despite the extensive use of small group, peer-led teaching strategies, several participants stated that they had found it hard to make friends on the course. This was also an emergent theme in several of the one-to-one in-depth interviews I subsequently conducted with 21 of the cohort. It seemed that while students worked together well in the seminars, these relationships

were not necessarily developing into friendships. I needed to find an alternative approach which would enable students to develop the deeper social networks associated with retention (McIntosh and Shaw 2017; Thomas, 2012), and that could be delivered consistently across the seminar groups by a potentially inexperienced teaching team. TBLs promise to turn 'groups' into 'teams', along with its promised benefits for student outcomes even when delivered by inexperienced teaching teams (Travis et al., 2016), appeared a viable solution.

The Process: How I Set Up TBL Using Poll Everywhere

I decided to trial TBL towards the end of the academic 2017/18 year. At that stage, I was uncertain whether my current teaching team would be continuing, and I had no information regarding the profile of the new students. Supporting these new students to develop those social networks positively associated with retention was the main reason why I was keen to try TBL, rather than any promised improvements in learning, not least because those improvements claimed are often quite small (see Travis et al., 2016: 104). A secondary aim was the promised improvements in engagement. While seminar attendance and submission rates were good, we found the amount of reading completed by the students varied considerably. I wondered if using the TBL readiness assessment tests would encourage more students to complete the readings, and also allow tutors to identify and support those students who were struggling with that week's material.

Having decided that I wanted to trial TBL, the next thing was to decide how to do so. Given the lack of evidence regarding the suitability of this strategy for this specific cohort, and the mixed results regarding its impact on student satisfaction (Travis et al., 2016), I was not willing to adopt the approach wholesale not least

as attendance, rates of achievement and student feedback were good. Furthermore, re-writing the year-long module would entail a considerable amount of work and potentially involve my preparing extensive resources that I would not use again if the trial proved unsuccessful. The approach I subsequently devised might be best termed 'TBL-light', in that I sought to integrate aspects of TBL into the existing curriculum design.

I decided to dedicate the first thirty minutes of each session in the autumn semester to the individual and group tests, using Poll Everywhere. Poll Everywhere was selected as we were already successfully using this technology to stimulate discussions in lectures, and students were comfortable using the application. Another benefit was that we would not need to purchase the scratch cards sometimes used and that Poll Everywhere has already been used for TBL (see Sibley, 2018). For the remaining seminar time, we would continue to use the jigsaw, peer led teaching, and discussion activities that we previously used, thus emulating the application stage of TBL. By reusing pre-existing resources, we could dip a toe in the water of TBL without committing ourselves (or our students and their outcomes) completely. If the approach were successful, we would decide later whether to expand the trial.

After a great deal of consideration, I decided not to include the peer evaluation aspects of TBL. Cestone et al. (2008: 70) state that these peer evaluations provide the formative information needed to help individual students improve team performance over time and develop the interpersonal and team skills essential for their future success. They also find that peer evaluation scores provide summative data to the instructor that can be used to ensure fairness in grading. By incorporating an assessment of each member's contributions to the success of their teams and make judgments about it, students become assessors; they are required to show a more thoughtful understanding of the processes involved leading to both increased confidence and increased quality of the learning output (Cestone et al. 2008: 70). I had previously tried to use peer feedback on assessment planes with a previous year's cohort and

found it caused anxiety for many students. While admittedly this was when the cohort had been much smaller, I was reluctant to risk including this aspect of TBL even though this impression was not supported with substantial evidence. I reasoned that this could be integrated in a subsequent year, once the suitability of this approach for this cohort was more firmly established.

The first task was to write the questions for the individual and team quizzes. Writing the questions was incredibly time consuming and difficult. As a teacher, I am well-used to using questioning to test and push student understanding but I rarely script these, and I initially found the multiple-choice format challenging, and I am not used to preparing questions that require a 'correct' answer. On reflection, many of the resulting questions were quite basic, closed type questions. However, I was hopeful that the questions could be further improved for subsequent use. The next task was to embed the quizzes into the sessions plans, which necessitated some reflection on previous deliveries to identify which of the activities would be retained and which should be removed. Setting up the multiple-choice quizzes in Poll Everywhere was very straightforward, as was sharing these with the new team once they were in post. The team went through how to use the Poll Everywhere application, and we completed a couple of dummy-runs which were useful in clarifying the aims and process involved.

One problem that quickly emerged concerned that of keeping the students in the same groups throughout the semester. The composition of the groups has been examined by Espey (2017) who state that faculty should be more careful when designing teams to ensure members have complimentary skills. However, we had very little information about the students beforehand, and the initial allocation of teams was therefore random. Some students were not happy with their initial team allocation and contacted members of the teaching team, asking to be moved to another group: this was either due to their frustration that team members were not coming adequately prepared or due to having team members with poor attendance. Michaelsen and Sweet (2008) identify three specific

areas which develop student peer accountability in TBL: (1) individual pre-class preparation, in that students are more likely to complete pre-class preparation and perform better in the tests. Subsequently, students who come to class less well prepared are (2) better able to contribute positively to their team's performance. Students reward each other in the peer evaluation. Knowing that that are being evaluated by their peers provides further motivation to contribute. Such (3) high-quality team performance should be evident in peer evaluations. However, I had chosen not to include the peer evaluation stage due to the concerns I outlined above. It might be that this decision removed an important stimulus of peer accountability. Nonetheless, as 'faculty should be attuned to divisions or conflicts on teams and attempt to alleviate such problems to the extent possible, as well as encouraging contributions from all students with in teams' (Espey, 2017: 19) we let students switch from their initial teams. For some seminar groups, attendance was an issue: with all group members rarely fully present, we quickly found it necessary to change the groups each week, but this made it difficult to compare the performance of the groups or to measure the progress of each group week on week.

Another issue we encountered concerned feedback. As outlined above, a key feature of TBL is that students benefit from immediate feedback on their individual test answers (see Michaelsen & Sweet, 2011: 42). Often this is achieved via the use of Immediate Feedback Assessment answer sheets (IF-AT) in the form of scratch cards (Michaelsen & Sweet, 2011); as the students re-take the tests in groups, they can quickly see which answers they got correct on their first attempt. Poll Everywhere enabled us to identify the students (once fully registered) so that we could offer more support to students who had struggled in the rest of the class, but we could not share their answers with them without also sharing the scores of other students. To help with this, we went through the correct answers as a group, discussing the reasons why potential answers were either correct or incorrect. We found that these discussions proved to be useful spaces in which to provide more detailed

clarification regarding subject content. The quiz questions and answers were then shared weekly on the VLE site.

Assessing TBL: Suitability and Outcomes

It was not possible at this stage to conduct a substantial assessment (such as primary research) into whether TBL did positively contribute to students developing those friendships associated with retention (McIntosh and Shaw 2017; Thomas, 2012). As part of the small-scale, 'toe in the water' type approach outlined above, our decision as to whether TBL was an approach we wished to continue with was based on a range of readily at hand information: a comparison of seminar attendance, submission rates and grades along with the results of a midterm feedback surveys collected for the past three years (I only have access to data for those years when I served as module convenor; 2016/17 onwards). While it is right to acknowledge that it would be preferable to base pedagogic decisions on firmer evidence, I suspect that too often similar judgements are made on still shakier foundations, and I hoped the findings might provide some basis on which to decide the direction of travel.

Attendance

Student attendance rates were also taken as a proxy measure of student engagement as students who are motivated to complete preparatory work are more likely to be those students who attend seminars, and, hopefully, also benefit from improved opportunities to make friends. A register is taken at all seminars, however the way that this data was recorded varied year on year: 2016/17, 2017/18 and 2018/19 the cumulative percentage was recorded midway through

the autumn semester, in week 6 (fig. 1); in 2018/19 attendance was also recorded in week 12 (fig. 2).

	2016/17	2017/18	2018/19			
Seminar	Present	Present	Present	2018/19 +/-	Time and Day	Tutor
1	72.20%	91.20%	71.10%	-5.17%	Tues 10-12	1
2		79.00%	83.10%	6.83%	Tues 1-3	2
3	79.20%	82.50%	80.00%	3.73%	Tues 4-6	2
4	83.30%	83.30%	70.50%	-5.77%	Weds 9-11	1
5	86.50%	69.40%	85.60%	9.33%	Thurs 3-5	1
6	80.70%	79.00%	77.50%	1.63%	Thurs 9-11	2
7	72.20%	73.30%	62.40%	-13.97%	Thurs 11-1	2
8		76.80%	77.00%	0.73%	Thurs 2-4	3
9	81.20%	76.80%	80.00%	3.73%	Thurs 4-6	3
10		80.30%	76.80%	0.53%	Weds 9-11	3
11	67.60%	86.70%	80.00%	3.73%	Tues 5-7	3
12		75.40%	76.00%	-0.27%	Fri 9-11	3
13	74.30%	78.90%	78.90%	2.63%	Fri 11-1	3
14		77.80%	79.10%	2.83%	Fri 2-4	2
15	82.00%	86.00%	65.70%	-10.57%	Fri 4-6	2
Av.	**77.92%**	**80.03%**	**76.27%**			

Figure 1: Attendance Rates by Seminar (Week 5 Autumn Semester) 2016/17-2018/19

Comparing attendance rates by seminar group across the three years (fig.1) was problematic, as each was delivered by a different member of staff in a different teaching slot (time and day) so the teaching slot and tutor identified for analysis from Fig. 1 are for 2018/19 only. When looking solely at attendance in 2018/19, of the five groups with attendance below the mean average, two were delivered by me (groups 1 and 4) another two were delivered by the least experienced tutor (groups 7 and 15) and the final group but the most experienced tutor (group 12). Four of the groups with the lowest rates of attendance were in the morning, but one group was scheduled on Friday afternoons (fig.1).

	2016/17	2017/18	2018/19			
Seminar	Present	Present	Present	2018/19 +/-	Time and Day	
1	76.20%	80.40%	68.20%	1.62%	Tues 10-12	1
2		63.30%	69.90%	3.32%	Tues 1-3	2
3	77.50%	68.40%	74.30%	7.72%	Tues 4-6	2
4	83.20%	72.10%	56.50%	-10.08%	Weds 9-11	1
5	83.30%	60.40%	74.20%	7.62%	Thurs 3-5	1
6	78.30%	59.30%	64.10%	-2.48%	Thurs 9-11	2
7	67.20%	67.90%	49.30%	-17.28%	Thurs 11-1	2
8		70.80%	69.80%	3.22%	Thurs 2-4	3
9	81.40%	66.40%	72.70%	6.12%	Thurs 4-6	3
10		75.90%	65.30%	-1.28%	Weds 9-11	3
11	69.70%	67.00%	71.00%	4.42%	Tues 5-7	3
12		69.50%	63.10%	-2.48%	Fri 9-11	3
13	72.20%	67.00%	64.10%	-2.48%	Fri 11-1	3
14		60.10%	75.40%	8.82%	Fri 2-4	2
15	80.70%	70.70%	60.80%	-5.78%	Fri 4-6	2
Av.	**76.95%**	**67.95%**	**66.58%**			

Figure 2: Cumulative Attendance 2018/19 Week 12 Autumn Semester

Somewhat worryingly, in the second half of the term, attendance continued to decline as the semester progressed, so that by the end of the autumn semester the mean average attendance was 66.58%

(fig. 2): this is unusually low. Again, there appears to be no clear pattern, in that the groups with poor attendance were delivered by all three members of the teaching team and were scheduled on different days, and all (except for group 15) were delivered in the mornings.

I do wonder whether TBL itself had a negative impact on attendance: whereas in previous years students who had not completed the preparatory reading might attend the seminar anyway, perhaps the formally assessed aspect of TBL meant that they were less likely to attend? Another issue that might be a factor is student anxiety: there have been widespread reports of alarming increases in rates of anxiety in young people, challenging universities nationally. Might it be the case that TBL might exacerbate student anxiety? Stein et al. (2015) found that student shyness proved a barrier to participation for some students, which their team mates were willing to accommodate to some degree.

Submission Rates and Grades Achieved

I next compared submission rates and grades achieved for the Reading Record with those for the previous three years, as this was the assessment mode for the period in which we trialled TBL (the autumn semester). This is not an ideal measure, but by making this comparison I hoped to assess whether TBL had had a positive impact on student engagement with the module contents using the data available to me: if effective, TBL would motivate students to complete the preparatory tasks as well as enable tutors to more effectively identify which students would benefit from in class support. I hoped that students who have completed the reading and benefited from support targeted to those weeks or topics where they most struggled, would be better placed to submit the first assessment.

Year/ Cohort	Number Due	Number Submitted	%	+/-
2015/ 16	152	140	92.10%	-92.10%
2016/ 17	178	173	97.19%	97.19%
2017/ 18	276	261	94.56%	94.56%
2018/ 19	266	254	95.49%	95.49%
		Average	94.84%	

Figure 3: Reading Record Submission Rates 2016/17 – 2018/19

However, a quick look at submission rates (fig. 3) indicated no clear impact: submission rates peaked in 2016/ 17, and although submission rates were marginally different in 2018/19 in comparison with 2017/18, the numbers involved are small. Similarly, I had hoped that comparing grades achieved by the seminar groups would help me to assess whether TBL was delivered consistently across seminars (fig.4), though one must be careful not to imply simple causation between teacher expertise and student outcomes as so many other factors are involved.

Seminar Group	2016/17	2017/18	2018/19	2018/19 +/-	Time and Day	Tutor
1	56.10%	55.10%	53.20%	1.26%	Tues 10-12	1
2		51.50%	53.50%	1.56%	Tues 1-3	2
3	53.60%	55.90%	55.00%	3.06%	Tues 4-6	2
4	57.20%	63.90%	58.60%	6.66%	Weds 9-11	1
5	58.10%	49.30%	55.50%	3.56%	Thurs 3-5	1
6	53.60%	53.40%	54.70%	3.56%	Thurs 9-11	2
7	55.10%	53.20%	49.20%	2.76%	Thurs 11-1	2
8		54.90%	50.50%	-2.74%	Thurs 2-4	3
9	54.30%	54.30%	52.80%	-1.44%	Thurs 4-6	3
10		52.40%	52.40%	0.86%	Weds 9-11	3
11	51.50%	55.90%	51.60%	0.46%	Tues 5-7	3
12		55.70%	42.20%	-0.34%	Fri 9-11	3
13	54.90%	53.70%	48.20%	-9.74%	Fri 11-1	3
14		52.60%	52.90%	0.96%	Fri 2-4	2
15	58.30%	59.10%	48.80%	0.96%	Fri 4-6	2
Av.	**55.27%**	**54.73%**	**51.87%**			

Figure 4: Mean Average Grades by Seminar Groups 2016/16-2018/19

When looking solely at work submitted 2018/19, those four groups with mean average grades below the average for 2018/19 (groups 8, 9, 12 and 13) all had seminars delivered by seminar tutor 3, an experienced tutor (fig.4). However, no conclusions can be reached as groups 8 and 9 were marked by the tutor who delivered the seminars whereas groups 12 and 13 were marked by someone outside of the teaching team. Comparing the mean average grade, however, revealed that these have decreased since 2016/17, though the rate of decrease is small (fig.4). If TBL had negatively impacted

on attendance, the result might well be this decrease in mean average grades.

There also seemed to be no clear pattern regarding how grades were distributed: for example, the group with the lowest mean average grade (group 7) at 49.30% attendance in week 12 (fig. 3) also achieved a low mean average grade of 49.20 (fig. 4), but the lowest mean average grades were achieved by group 13 at 48.20 (fig. 4), even though this group had attended relatively well at 64.10% (fig.2). The group with the highest mean average grade, group 4 (fig. 4), had the second lowest rate of attendance (fig. 2).

Student Feedback

With no clear picture emerging regarding the impact of the TBL trial I turned to student feedback. Student feedback was collected via a paper survey midway through the autumn teaching term (week 5) just before reading week (appendix one). The one exception was seminar group 7, where low attendance in week 5 meant that the survey was not completed until week 7. When collecting data, we need to make two decisions: what to measure and how to measure it (Field, 2009: 7). This survey is routinely delivered at this point, as part of the quality control measure, to assess student perception of the usefulness of the three modes of delivery used on the course: lectures, reading and seminars. A further question was added to determine student perception of TBL. Thus, the survey sought to capture a snapshot of student's perceptions midway through the block of TBL teaching (Field, 2009: 12) for quality control purposes. The surveys were distributed and completed at the end of seminars, with the seminar tutor nominating one student to collect the completed sheets, placing them in a plain envelope and delivering them to the course administrative office. In this way, it was hoped that the students would feel free to record their honest responses.

There are several limitations associated with the approach taken

here. As the survey was completed in seminars, students with poor attendance were less likely to be included; this has implications as students may not attend due to negative feelings towards the course and the teaching methods (including TBL), skewing the data toward positive perceptions.

Lectures	2016/17	2017/18	2018/19
Total	128	187	197
+ve (quite/ very engaging)	83	80	89
%	65%	43%	45%

Figure 5: Positive Assessment (Engaging) of Lectures

Of the students who complete the survey and completed this question, the percentage who positively assessed the lectures for the degree of engagement varied but declining assessments did not coincide with the TBL trial (fig.5).

Seminars	2016/17	2017/18	2018/19
Total	128	192	194
+ve (quite/ very engaging)	118	169	176
%	92%	88%	91%

Figure 6: Positive Assessment (Engaging) of Seminars

The percentage of students surveyed who positively assessed the seminars dropped in 2017/18 but returned to previously levels in 2018/19 (fig.6). Trialling TBL did not appear to have had a negative impact on the student's assessment of seminars.

Reading	2016/17	2017/18	2018/19
Total	126	185	194
-ve (difficulty/ challenge)	43	82	79
%	34%	44%	41%

Figure 7: Negative Assessment (Challenge) of Reading

Slightly fewer students found the reading to be challenging 2018/19 than previously, which could be attributed to students benefiting from improved peer support but could just as well reflect the different readings assigned by lecturers (fig.7).

TBL	2018/19
Total	194
+ve (useful/ very)	153
%	79%

Figure 8: Positive Assessment (Usefulness) of TBL

The majority of surveyed students found TBL to be useful (fig. 9), combined with the lack of negative impact on student assessment of seminars indicates a positive assessment of TBL.

TBLUseful * ReadingsDifficulty Crosstabulation

Count

		ReadingsDifficulty						
		Very difficult	Challenging	A little of both	Quite easy	Very easy	Not sure	Total
TBLUseful	Not useful	0	1	3	3	0	0	7
	A bit useful	3	11	14	0	0	0	28
	A little of both	2	8	14	0	0	1	25
	Quite useful	4	36	43	4	0	1	88
	Very useful	2	15	24	2	1	0	44
	Not sure	1	1	0	0	0	0	2
Total		12	72	98	9	1	2	194

Figure 9: CrossTab TBL (useful): Readings (difficulty)

I had wondered if there would be a relationship of some sort between the student's assessment of the difficulty of the reading and the usefulness of TB (fig. 9). Would it be the case that those who found the readings most difficult most appreciate TBL and vice versa? The evidence was unclear: those students who found the reading to be difficult also found TBL to be useful. However, those few students who found the texts less challenging varied in their assessment of the usefulness of TBL.

Conclusion

A quick review of the TBL literature reveals the broad ranging claims made for this approach: improved learning outcomes; increased levels of student engagement and participation; improved critical thinking skills; and improved group working skills. Despite the consistently positive assessment of TBL across its suitability has not yet been assessed for foundation teaching, or for those students with learning needs or those with disabilities or mental health issues such as anxiety. A mixed picture also emerges regarding whether TBL leads to improved student satisfaction (Travis et al., 2016). However, initial finding from my doctoral research into the experiences of students on a foundation year module indicated that some students were finding it difficult to develop those relationships with peers that are associated with retention. In

looking for an alternative teaching strategy, TBL appealed due to the claims made regarding its ability to turn 'groups' into 'teams' (Travis et al., 2016). Having decided that I wanted to trial TBL, but with concerns that its suitability for this cohort was not yet established, the approach I subsequently devised might be best termed 'TBL-light' in that I sought to integrate aspects of TBL into the existing curriculum design. We would use the testing stage (individual and team) delivered via Poll Everywhere but that we would not use the peer evaluations at this stage, due to concerns regarding student anxiety.

Using the data that I had access to, it was difficult to assess either the effectiveness or the suitability of TBL for this cohort and the picture that emerged was contradictory and incomplete. The attendance data appeared to indicate that TBL was having a negative impact, as the mean average attendance was unusually low (66.58%), though caution here is wise given the lack of comparable data across the years. Could students (especially those who are anxious regarding their seminar performance) find the thought of being responsible for others performance too much to bear? Stein et al. (2015) found that student shyness proved a barrier to participation for some students, but also that their team mates were willing to accommodate shyness, but that assumes that students were able to be present. Examining rates of assignment submission and grades achieved was unhelpful: although there was a marginal difference in submission rates in 2018/19 in comparison with 2017/18, the numbers involved were small. There was also no clear pattern regarding the grades achieved, though worryingly the mean average grades were slightly down on previous years. Student feedback indicated that the majority (69%) found TBL to be useful, and there was no negative impact on their evaluation of the seminars. On the other hand, introducing elements of TBL did not help halt the declining appreciation of the lectures.

It might be the case the low attendance in some seminars, combined with individuals moving teams, undermined the development of the interpersonal trust and mutual respect which

contributes to the development of effective teams (Espey, 2017: 19), but the data that I had access to was not sufficient to fully assess the suitability of TBL for this cohort, leaving me unsure whether we should continue with the trial, especially given the negative impact identified on attendance and grades. Returning to the TBL literature, I found little discussion regarding what to do if TBL is less than effective or the delivery goes awry in any way. Indeed, there is little evidence of critical engagement with the approach. Lane (2008: 56) serves as a case in point: when discussing effective implementation, he is clear that this is dependent on the communication skills and techniques of the instructor:

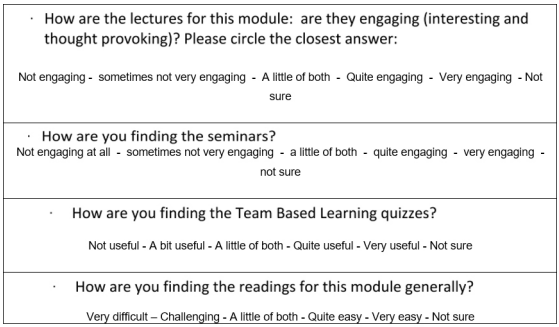
"For optimal results using TBL, instructors should be knowledgeable, flexible, spontaneous, and confident with the team-based learning process. They need not be flawless with the process, but there are some important instructor characteristics that are beneficial to the successful implementation of team-based learning" (Lane, 2008: 66).

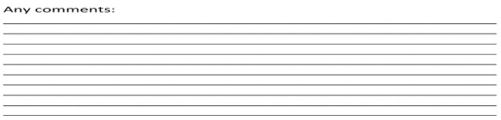
He also warns of the dangers of partial adoption: TBL must be adopted completely, or 'instructors' risk negative experiences for their students (Lane, 2008: 55). Given the concerns outlined above, a complete adoption of TBL without clear evidence of its benefits appears riskier still and locating any failings in the delivery of TBL with the personality of the 'instructor' is less than helpful. It would be more useful if other authors share more details regarding how and why they decided to adopt TBL, and on what evidence they based this decision.

As a team we have instead decided to again survey the students, specifically on their experience of seminars in the autumn semester as the evidence we have is not clear enough to guide our next steps. We are hoping that by doing so, we will gain a better understanding if the trial of TBL contributed to declining attendance and the slight drop in mean average grades. We will also compare the grades this year's cohort achieved in the autumn semester with their grades in the spring and against those for previous years. We will also look

closely at the level of challenge and degree of satisfaction data, collected centrally towards the end of the year, again comparing the results from this year with previous years, so try to see whether TBL has had any impact. In the meantime, we have identified what needs to be improved with our resources, if we do decide to trial TBL again next year: we need to revise and improve the quality of the questions used in the quiz; we need to find a way to provide immediate feedback to individual students, so that they can see for themselves how working as a team is beneficial. We also need to make the links between the quiz elements and the application activities much clearer, and we need to find a way to improve the stability of the teams as I suspect that I had underestimated how important this aspect of TBL is, probably as this is less important in the cooperative learning approaches with which I am more familiar (see Michaelsen and Sweet, 2011). In conclusion, team-based learning may have its advocates, but I remain, at this stage and without clearer evidence, somewhat sceptical regarding the claims made.

Appendix One: Mid-term student feedback survey questions
Global Issues Local Lives: Module Feedback





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Re-igniting the personal touch: Using video to improve feedback with Foundation Year students

WENDY GARNHAM AND HEATHER TAYLOR

Wendy Garnham and Heather Taylor

Outline

Feedback is the one factor that is paramount to student outcomes (Hattie, 2009). Yet in recent years, it has become clear that this same factor is consistently rated lower than others in National Student Surveys (HEFCE 2010, http://www.hefce.ac.uk/learning/nss/). The reasons for this lower rating appear to be multifactorial and include factors such as difficulty in understanding the meaning of written comments in relation to assignments, a lack of advice about how to feed-forward with improvements and a focus on spelling and grammar which Duncan (2007) refers to as the mechanical aspects of a task.

It is not just students that have raised dissatisfaction with feedback processes. As student numbers increase, so the opportunity for tutors to interact with and support individual students becomes limited. As Carless, Joughin and Liu (2006) identified, tutors often complain about the time-consuming nature of feedback. Such concerns could have implications for the timing of when feedback is released, the detail given in feedback and the

frequency of feedback, all of which are included in Gibbs and Simpson's (2004) outline of the six key drivers of positive and effective feedback.

These concerns have led to a focus on the use of alternative modes of feedback such as the use of audio feedback. Merry and Orsmond (2008) and Ice et al. (2007) both report positive benefits of using this, for example, Merry and Orsmond's participants reported that with audio feedback, the use of intonation was useful in helping them understand the content of the feedback better and Ice et al. found that audio feedback led to a feeling of increased involvement and greater retention of content than written feedback. Ice et al used auditory feedback to try and create a sense of community amongst online learners. Student satisfaction for audio feedback was reported to be "extremely high" with students perceiving it to be associated with the tutor caring more about the student. Ice et al suggest that the effect of using audio feedback was to increase both feelings of involvement and community interactions.

Ice et al's findings have been replicated elsewhere. For example. Gould and Day (2013) found audio feedback to be seen as more personalized and supportive than written feedback as well as more detailed. Even in terms of accessing the feedback, Lunt and Curran (2010) suggest that students are at least 10 times more likely to open audio files compared to collecting written feedback.

However, tutors often have mixed feelings about audio feedback as demonstrated by Cavanaugh and Song (2014) in their study of online learning for a composition course. Even though students were positive about the use of audio feedback, mentioning the ability to pick up cues from the tutor's voice, paying closer attention to the content and the increased level of detail used, tutors raised concerns about the level of clarity in their audio comments, technological challenges and the difficulty for students in locating specific areas referred to in the text.

On closer inspection, even student attitudes towards audio feedback are not completely positive. In Gould and Day's (2013) study, one third of their sample stated a preference not to have

audio feedback for any of their work. Similarly, McCarthy (2015) compared audio, written and video feedback in a digital media cohort and reported that only 12% of his sample stated a preference for audio feedback. Rodway-Dyer,Knight and Dunne (2011) used audio feedback with first year Geography students. Although the majority of students felt that audio feedback provided a useful experience and contained more detail than written feedback, focus group responses accentuated the negative aspects such as the feeling of being told off. Chiang (2009) similarly found that audio feedback was rated as the least favourite method of feedback. One of the reasons stated is that audio feedback lacks a visual component which can impact on the efficacy of the feedback. Mayer (2001) maintains that a combination of visual and auditory feedback is optimal. Mayer's dual coding hypothesis suggests that when words are presented auditorily alongside pictures, learners can integrate these more easily due to separate processing systems for auditory and visual information in working memory (Mayer & Moreno, 1998). Video feedback, particularly in the form of screen-casting addresses this issue and 66% of McCarthy's participants stated a preference for this.

The use of screen-casting as a means of giving feedback has since proliferated (E.g. Ali, 2016; Mayhew, 2016; Thomas, West & Borup, 2017; Harper, Green & Fernandez-Toro, 2018). Benefits reported include improved communication (Cranny, 2016), improvements in quality of writing (Moore & Filling, 2012) and improvements in learner engagement (Hynson, 2012). Bakler (2017) argues that screencast feedback allows teachers to get engaged in dialogue with students and this promotes comprehension and engagement. As with audio feedback, benefits claimed for the use of screen-casting feedback include an increase in student engagement (Mathisen, 2012), efficiency in marking (Brick and Homes, 2008) and detail (Bakler, 2017). Harper, Green and Fernandez-Toro (2018) used screencasting to give feedback to online language learners. The authors were particularly struck by the affective impact of giving feedback in this way with positive emotional consequences

reported for both tutor and student. Not only did screen-casting enable tutors to feel that they were engaged in meaningful dialogue with their students, but students also felt that the feedback was more personal and their work more valued. The importance of creating dialogue in feedback has been raised previously by Nicol (2010) and similarly Harper et al argue that the personal dimension is an essential underpinning of the effective use of feedback by students. Price et al (2010) argue that the relationship between tutor and student is entirely critical to the process.

One potential limitation with the majority of studies using screen-casting is that the video feedback given to students shows only the submitted assignment with accompanying audio. For example, in McCarthy's comparison of audio, video and written feedback, the screen-casting used for video feedback contained narrated, visual feedback but no image of the tutor themselves giving this in real-time. Similarly, Thompson and Lee (2012) used screen-capture to show the submitted assignment with audio narrative but no image of the tutor themselves. Harper, Green and Fernandez-Toro (2018) similarly displayed the text only with audio on the screencast.

Where an image of the tutor themselves has been shown, this has been received positively. For example, in Mayhew's (2016) study of video feedback, students were able to see their submitted assignment on the left of the screen and a video of their tutor giving feedback on this. Mayhew states this was to ensure that the feedback was both detailed and personal. 90% of participants preferred the video feedback to written feedback and 72% gave positive feedback regarding the inclusion of the tutor's face in the video. The majority of students (78%) also said that the video feedback prompted them to revisit the subject material more than they thought written feedback would have done. Thomas, West and Borup (2017) also used a webcam for tutors to give feedback. They reported a tendency for instructors to use more humour, to self-disclose more and to compliment students more in video feedback.

One of the limitations of this research is that there is little attempt to directly compare students' perceptions of traditional

written feedback, screen-cast feedback with audio and video feedback showing the tutor directly. The Feedback Project compares these three different modes of giving feedback: the traditional written feedback approach, the use of screencast feedback where the tutor is not shown (we will refer to this as the Script Video condition), and the use of screencast feedback where the student can see the tutor giving the feedback in real-time (which we refer to as the Tutor Video condition) . It was anticipated that the physical presence of the tutor in the feedback video would enhance the personalization of the feedback and lead to greater student satisfaction with the feedback.

The "How to" Guide

1. Open the student's script on your screen.
2. In a separate tab, sign in/register to zoom: http://.zoom.us
3. Select "Host a meeting" from the top left hand side of the screen.
4. You can select whether you want the video image of yourself to be shown or not using the "Video on" and "Video off" options.
5. You will then be asked to join the meeting and should see your picture on the screen.
6. To share the screen showing the student's work, click "Share screen" option at the bottom of the window and select which one you want to use.
7. You will then see a little box with your picture in it on the top right of the screen and the student's script on the main screen.
8. If you click the option at the top of the screen that says "More" you will see the record option there. When you are ready click this and it will record both the student's script and your video feedback.
9. If you want to annotate the script as you go, there is the option to do that also at the top of the screen. You can highlight or

mark the script as you go.

10. When you have finished, the recording will save as an MP4 file which you can then upload or forward to the student.

How we used this

87 participants from a cohort of 192 Foundation Year students, studying on an Occupational, Social and Applied Psychology module took part. Of the 87 participants who gave consent to take part, 19 were male and 68 were female. This was representative of the gender balance in the cohort. Participation in the Feedback Project was optional and did not carry any course credit.

Participants were expected to complete an independent piece of research as part of their coursework. All students were asked to submit three assignments during the course of the Spring Term relating to this, two of which were formative assignments and one of which was a summative assignment. For one of these assignments, traditional written feedback would be given, for a second, a screen-cast video showing the script being marked in real time with audio feedback was given and for a third, a video showing the script being marked in real-time as well as a video of the tutor themselves marking it, was given.

A free video technology resource called Zoom (http://zoom.com) was used to record both the Script Video and Tutor Video modes of feedback. Written feedback was provided using the standard Turnitin software traditionally used for marking electronically submitted assignments. An example of the survey used to collect student opinions can be found in Appendix 1.

Formative Assignment 1

The first formative assignment required students to complete a research question analysis. Students were asked to complete a template which required them to create a research question from a limited set of themes relevant to the module and to explain their thinking about how they might test this.

Formative Assignment 2

The second formative assignment required students to produce an annotated bibliography, showing evidence of wider reading as well as demonstrating their ability to reference correctly.

Summative Assignment

The summative assignment required students to submit a lab report using APA style conventions. The lab report should be an account of their own independent research, what they did, what they found and how it related to the existing literature in that area.

Students were informed in the first seminar of the Spring Term about the Feedback Project aims and were given the opportunity to participate in the project, giving them the full '360 degree' experience of research, playing both the role of participant in the project and as a researcher in their own independent research. Those who wished to take the opportunity to participate were asked to complete a consent form on Google Forms.

Before each assignment was due, the tutor provided an exemplar of the work required using the Feedback Project as the focus. Participants could then use this to guide their own production of a

similar piece of work using their own independent research as the focus.

In giving feedback on each assignment, the tutor either used Turnitin to give traditional written feedback (written condition), used Zoom to record audio feedback with a video of the script shown (script video condition) or used Zoom to record both audio feedback with a video of the script shown and a video of the tutor marking the script in real-time (tutor video condition).

One week after the feedback had been received, participants were asked to complete a survey on Google Forms to record their experience of the feedback. Ethical approval was granted by the University of Sussex Research Ethics Committee: Ref: ER/WAG23/2.

The Successes (what worked well)

The video feedback was seen as more personal than the written feedback.

Regardless of whether the tutor was part of the video or not, students reported that the video feedback was more personal than the traditional feedback as figure 1 illustrates. Traditional written feedback was seen as significantly less personal than either of the video types of feedback: $X2(2)=13.42$, $p<.001$.

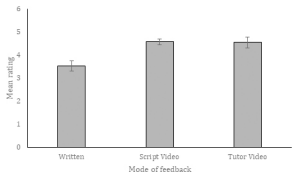

Figure 1: Mean ratings of how personal the feedback was perceived to be at Time-Point 1 (+/-1 SEM)

The majority of qualitative responses were also positive regarding the use of video feedback (both Script Video and Tutor Video) with participants highlighting how video feedback was more engaging than written feedback and forced them to actively listen rather than skim over the feedback. E.g.

"Easy to understand, more engaging than written feedback"

"It is very personal and it does help in paying attention and actually forces you to think about the feedback given."

Many students pointed to the personal, specific nature of the feedback given in the Tutor Video condition as a positive aspect:

"It's more personal as you hear the person's voice and it's like they are talking to you directly."

At time-point 2, written feedback was again perceived to be more personal than the video feedback (Written: M=3.6, SD=1.14, Script Video: M=4.33, SD=0.52, Tutor Video: M=4.50, SD=0.65). Although this suggests a similar trend to that seen at time-point 1, at time-point 2, this effect failed to reach significance: x2(2)=3.50, p>17. As shown in Figure 2, this could be due to the larger variation in ratings given by those who received the written feedback.

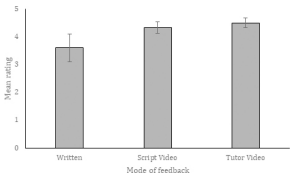

Figure 2: Mean ratings of how personal the feedback was perceived to be at Time-Point 2 (+/-1 SEM)

Video feedback was reported to be more inclusive than traditional written feedback

Video feedback with the tutor present was rated as the most liked (Written: M=3.52, SD=0.81, Script Video: M=3.86, SD=0.86, Tutor Video: M=4.18, SD=1.33), although the difference in ratings of liking

for each mode of feedback did not reach significance X2(2)=5.091, p>.078. Figure 3 illustrates this trend.

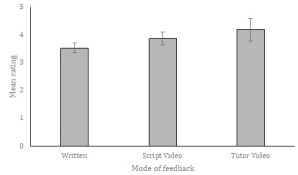

Figure 3: Mean ratings of liking for each mode of feedback at Time-Point 1(+/-1SEM)

This was also the case at Time Point 2, where there was a tendency for the Tutor Video feedback to be liked more than the Script Video or Written feedback (Written: M=6.0, SD=3.08, Script Video: M=6.50, SD=3.08, Tutor Video: M=6.93, SD=2.37). However, as at time point 1, these differences were minimal and did not reach significance: X2(2)=0.338, p>.844.

In the video conditions students reported that the nature of the feedback made them feel valued:

"It makes the students feel valued that you've taken the time to give a personal response than feels very similar to a 1:1."

This was particularly true for students who traditionally found it difficult to engage with written feedback:

"I think if you are a slow reader like I am, it helps to listen to things."

The video feedback did appear to increase participants' engagement with the material also. Many students pointed to the way it made it difficult for them to skim over the feedback and instead forced them to really think about what was being conveyed. Bakler (2017) and Mayhew (2016) both reported similar effects using video based feedback.

Students found feedback to be useful in all conditions.

In terms of usefulness, there was little difference in the ratings given in any condition (Kruskal-Wallis: x2(2)=3.34, p>.188. Students found the feedback to be similarly useful in all conditions.

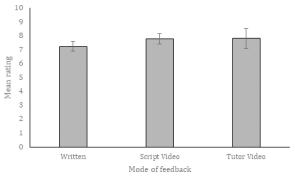

Figure 4: Mean ratings of usefulness for the three different modes of feedback at Time-Point 1 (+/-1SEM)

This was also replicated at time-point 2: (X2(2)=0.133, p>.94. There was a lot more variability in ratings at time-point 2 which could be due to the different nature of the assignment being marked at this point.

The finding that usefulness did not differ according to the feedback type is important as it suggests that video feedback is valued not because it is any more useful but because it adds something to the experience of students that is lacking with written feedback.

The Unexpected Difficulties

Making feedback more personal carries with it a risk!

Video feedback, whether it included just the script being marked in real-time or whether the tutor was included in the video, was rated as significantly more personal. However this was not always

experienced positively. One participant in particular, in their qualitative response, suggested that the feedback was experienced as being more direct in a negative way.

"…hearing someone tell you it's wrong feels worse than when you see it written down."

Perhaps more so with video feedback than with traditional feedback, it is important to emphasise the strengths of a student's work as much as the aspects that need to be improved.

Video feedback is reliant on technology

Where negative responses were given, these tended to focus on technological issues such as difficulty in hearing the commentary or not being able to print out the feedback. One of the issues with student's printing out feedback is that this, in some cases, constitutes the level of engagement with it and often little processing of the specific feedback message occurs. Some participants complained about having to re-watch the feedback a lot although as a tutor, this could be seen as a positive!

Survey participation is always a challenge

At the first time-point, 47 of the 87 (54%) participants who completed the consent form also completed the survey. This dropped to 26 of the 87 (30%) participants by time-point 2. The Feedback Project was always intended as an optional opportunity for students to get involved in to enable them to gain experience as both a participant and then later as researcher conducting their own research. As such it is disappointing but perhaps not surprising that only 54% of the cohort chose to participate in the project, with only 30% of these completed the survey at time-point 2. The

timing of the survey here coincided with the preparation week for the summative assignment so it is possible that this may explain the low return on the survey and it is something that will need to be considered in future developments of the project.

This works for shorter feedback assignments only

Time-point 3 corresponded to the summative assignment feedback. Unfortunately this time-point had to be abandoned due to technical issues. To make videos of feedback for the longer summative assignments would either lead to the creation of very large files which students would not be able to download easily or would lead to an increase in time spent marking for tutors who would have to mark the assignment, then prepare a script short enough to lend itself to video recording. Video feedback (of both types) was considerably less time-consuming that written feedback to prepare but this was only the case when the assignment to be marked was relatively brief. When the assignment was lengthy and involved commentary on a number of different component parts, the video feedback became more time-consuming and would have required a substantial extension of marking time for feedback scripts to be prepared and edited to enable short and easily accessible videos to be delivered to students. As this was counter to the aims of the Feedback Project, it was decided to focus on the analysis of time-point 1 and 2 only. It was unfortunate that technical issues prevented the delivery of video feedback at time-point 3 and this in itself raises an important issue about the use of video technology for this purpose. As Carless et al (2016) suggested, the time taken to provide feedback is a major concern that has implications for the detail in and frequency of feedback as well as the timely delivery of it.

Concluding Thoughts

The Feedback Project was an attempt to explore the effectiveness of feedback presented either in a written form, in a video showing the script with audio accompaniment or in a video showing both the script and a video of the tutor marking the script in real time. Video feedback was seen as significantly more personal than traditional written feedback but there did not appear to be any particular advantage gained from including a video of the tutor marking the script as part of that feedback. Simply having a video of the script being marked in real-time was sufficient for the feedback to be seen as more personal. This lends support to the findings of Harper et al (2018) who also found video feedback to be perceived as more personal. If this is indeed the essential underpinning of effective use of feedback as Harper and colleagues suggest, then it offers a useful insight into how to promote engagement with feedback in future assignments.

Acknowledgements

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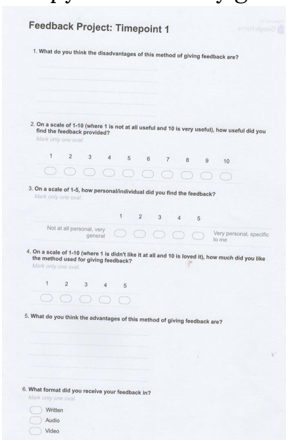
Appendix 1

A copy of the survey given to participants at Time-Point 1.



Feedback Project: Timepoint 1

1. What do you think the disadvantages of this method of giving feedback are?

2. On a scale of 1-10 (where 1 is not at all useful and 10 is very useful), how useful did you find the feedback provided?
Mark only one oval.

1 2 3 4 5 6 7 8 9 10

3. On a scale of 1-5, how personal/individual did you find the feedback?
Mark only one oval.

1 2 3 4 5

Not at all personal, very general — Very personal, specific to me

4. On a scale of 1-10 (where 1 is didn't like it at all and 10 is loved it), how much did you like the method used for giving feedback?
Mark only one oval.

1 2 3 4 5

5. What do you think the advantages of this method of giving feedback are?

6. What format did you receive your feedback in?
Mark only one oval.

Written
Audio
Video

Technology, Tools and Tips for Active Learning: Five Innovative Ideas for Integrating Technology with Your Teaching

TAB BETTS

Where should we begin with integrating technology into teaching? A perennially difficult question, because, particularly in the world of technology, the best starting position is constantly changing, as the landscape of the future forms and reforms in a kaleidoscope of possibilities. Sometimes, in order to understand the future, it can be surprisingly helpful to consult the past. According to the sagacious aphorisms of the Chinese philosopher Lao Tzu, it is *getting started* rather than how you start that matters, as "the journey of a thousand miles begins with a single step". This is also true when it comes to teaching with technology, but the first step can be daunting.

In this chapter, I will attempt to provide some guidance in doing this, by presenting 5 real examples of how technology can be applied innovatively to enhance teaching and learning practice. The examples are drawn from my collaborations not only with a variety of colleagues at the University of Sussex, but also collaborators from far beyond, spanning geographically from Brighton & Hove in the United Kingdom, to Abuja, Nigeria and Phnom Penh, Cambodia. To give a glimpse of what will be covered in the chapter, here is a list of the examples which will be explored in more detail below. If you are reading a version of this text with hyperlinks, then you can navigate directly to the relevant section by clicking on the link.

1. Community: Build your learner community using social media as a platform for out-of-class learning;
2. Self-direction: Encourage self-directed learning by using hyperlinks to create interactive presentations and resources;
3. Creativity: Task learners with time-pressured multimedia creation challenges – such as a Podblast, Booksprint or Videoblast;
4. Assessment: Take a structured approach to formative assessment using team-based learning and online quizzes;
5. Peer-observation: recording, sharing and evaluating experiences using mobile phone cameras and a Padlet wall.

1. Community: Build your learner community using social media as a platform for out-of-class learning.

Overview

How can you build a sense of community around a module or course you are teaching? How can this be maintained after the teaching has finished? One method is to use social media.

While it certainly has its limitations, social media is a fantastic tool for communication. Not only can we communicate instantly across huge distances, we also have the possibility of sharing almost any form of digital content or multimedia. This can be done on a one-to-one basis with individuals, but it becomes even more powerful when dealing with large groups of people. In this section, I will provide an example of how a social media app, such as WhatsApp, can be used to create a sense of community in the context of teaching and learning.

My colleagues and I recently implemented this approach when

delivering a series of professional development workshops for academics and parliamentary researchers in Nigeria and Cambodia. The first of these took place in September 2018, when a group of teaching staff from the University of Sussex went to facilitate a week of continuing professional development (CPD) and pedagogical exchange in collaboration with the National Universities Commission in Nigeria. The participants came from a number of universities across Nigeria to gather together in Abuja for the week. The second training took place in Phnom Penh, Cambodia, where parliamentary researchers from a number of countries across the Southeast Asia region came together at the former royal residence and senate compound of the Cambodian government to participate in a training programme offered in collaboration with the Parliamentary Institute of Cambodia.

As part of this training, we wanted to encourage sharing between colleagues from different universities and build a community of practice. Our original intention was to do this via the forums on the Canvas Learning Management System (LMS) website that we had created to serve as the virtual learning environment (VLE) for our professional development programme. However, our thinking changed when faced with the real situation. This is a good example of how, both with approaches to teaching and technology, things rarely go according to plan, so we need to be adaptable. For a variety of reasons, using the forums on our Canvas site wasn't the best solution. For one thing, participants were not familiar with Canvas and did not already have accounts set up. Some of them were having trouble accessing Canvas at all. Also, as Canvas was only going to be used for that training programme, it seemed unlikely that participants would continue to use it after the programme had finished. Having realised these challenges, I began discussing with my colleagues about what we should do. We came up with a few possible alternatives, but in the end we decided that the best thing to do would be to ask participants which platform they would be most likely to use themselves. In the case of Nigeria, it turned out that there was an obvious answer: almost everyone

used WhatsApp and were used to using this app both for work and personal contacts. However, when I have worked in China, for example, the best solution by far was WeChat. You will need to ask your learners which platform works best for them and also consider which platform you are comfortable using.

Figure 1: photo of academics who came from a variety of universities across Nigeria to participate in the professional development programme.

The "How to" Guide

For this particular use of technology, it may be helpful to use the ADDIE (Analyse, Design, Develop, Implement, Evaluate) model of instructional design to plan how you use social media to engender a sense of community. The steps are as follows.

1. Analyse: Find out what social media platforms your learners already use and how the features of these platforms are able to match their current learning needs.
2. Design: Do some light research. Ask colleagues, students and friends for advice about which platform to use and how to set it up. Conduct some online searches about which social media platforms are most popular with your learners and what each platform enables you to do. For example, LinkedIn has a more professional focus and may seem more appropriate than informal platforms such as Facebook, but the two have

different features which might be more useful in certain contexts. If you want something public, Twitter or Instagram might be good choices. When in Nigeria, we asked what most people used and it turned out that WhatsApp was the most popular, and it had the features we needed, so we went with that. The downside of WhatsApp is that you need to provide a phone number and this is visible to other users. There is no perfect system, but it is about finding one that works for the context in question. Perhaps the most important aspect is to think about your pedagogical use of the platform in advance. What am I trying to achieve by using this platform? Will it enable me to engage learners in the kinds of learning activities and discussions which will most benefit them?

3. Develop: To save extra work for yourself, ask for one or two volunteers to collect contact details from their peers and help set up the group. Follow up with these individuals to ensure that they find a way to get everyone added. To avoid mixing personal and professional, and in the interests of privacy, you may also want to set up a dedicated 'teaching' social media account for the purpose of interacting with your learners.
4. Implement: Once everyone has been added, make sure that you start using the group as soon as possible. One of the keys here is ensuring that learners are given a reason to contribute to the group, such as providing them with a specific task of something to post. It could be as simple as introducing themselves or commenting on a provided stimulus. However, it is not only important to start the ball rolling at the earliest opportunity, it is also critical that you keep that momentum going once it gets started. This means providing a schedule or regular tasks for what they should share to the group. Once things really pick up speed, you may find that this requires less direct management; however, at the early stages, online groups generally need careful managing if they are to maintain a healthy level of activity in the long term.
5. Evaluate: As the community develops, regularly observe how

effectively the online group is facilitating learning and a sense of community. Plan for regular checks and summarise key data so that you have an overview of how things are going. If certain types of tasks seem to work particularly well, then be prepared to be flexible and deviate from your original plan. Consult with learners, relevant research and colleagues to keep updating your understanding of how to improve upon what you are already doing.

Benefits:

- Online communities on social media can provide a platform for more democratic and learner-centred discussion
- Makes it easier to contact learners and share multimedia resources instantly
- Allows learning to extend beyond the classroom and for discussions to continue in online spaces
- If managed well, social media groups can contribute to continued application of learning after a course has finished
- Learners can create a support network for each other which may take some of the burden off the instructor

Challenges:

- Access: access to relevant technology and reliable sources of power are needed. In Nigeria, one of the challenges we faced was that every twenty minutes or so the electricity would suddenly go down. This meant no lights, no computer, no projector, no internet and no air-conditioning (in a room packed with people, when the temperature outside is a sweltering 40° Celsius). In a workshop where I was supposed to

be training people in how to use technology in their teaching, this presented a formidable challenge, but also a fortuitous opportunity, because it allowed me to demonstrate how to deal with problems when they come up. If learners do not have access to digital devices, a good strategy can be to ask them to work in pairs or groups with only one device per group. Alternatively, ask your institution to fund several devices which can be used by groups. If your institution lacks the funds, you may be able to find a company who might be willing to sponsor your endeavour by providing funds or free devices. For instances where there are frequent power outages, try asking students to complete tasks offline (e.g. using pen and paper) first. Mobile devices with battery can be used to capture the process or products of the activity using photos, video or audio. Then, when power allows, ask them to upload these to a website, cloud storage folder, student response system or Padlet wall to be shared with their peers as a whole group.

- Privacy: Another issue pertains to the management of privacy. As previously stated, it may be a good idea to create a dedicated social media account in order to keep interactions separate from your personal information. It is also important to take steps to protect the privacy of learners by setting some ground rules for interactions within the group, assigning responsibility for monitoring this to certain members of the group and following through by taking appropriate action if any of the rules are broken.

2 Self-direction: Encourage self-directed learning by using hyperlinks to create interactive presentations and resources

Overview

What if teaching didn't need to follow a prescribed path from A to B, but instead consisted of guiding learners to explore where their interest takes them?

The approach outlined below is one I have used extensively in my own teaching, but have also seen used effectively by numerous colleagues. It is inspired by the concept of heutagogy (self-directed learning) and guided discovery. Heutagogy is a branch of teaching and learning theory which focuses on promoting learner autonomy and allowing the learner to take ownership of both what they want to learn and how they want to learn it. Guided discovery is a related instructional approach in which the primary activity is for learners to explore and find their way through a non-linear scenario or set of problems.

One useful analogy for understanding this method is to compare a traditional book to a website. With the exception of reference books, most books are designed to be linear: the reader is supposed to begin on the first page and continue until the final page following the sequence set out by the author. Websites, on the other hand, tend to consist of a number of individual pages connected to one another via hyperlinks. They are designed so that the user can jump around to the page or section which is most relevant to them and skip any information they consider to be less relevant to their needs.

This has numerous benefits (e.g. economy, efficiency, flexibility, personalisation) and allows the learner to progress at their own pace and design their own path through the learning material, spending as much or as little time as is required for any given

activity. While most institutions have virtual learning environments (such as Canvas, Moodle or Blackboard), and there are some relatively easy tools for creating websites, such as WordPress or Wix, there is an even easier way to create a non-linear learning resource. The solution which I use myself and often recommend to others is to create a presentation with hyperlinks between different slides and a title slide, which provides the function of a homepage or navigation slide, with links to all of the different sections of the resource.

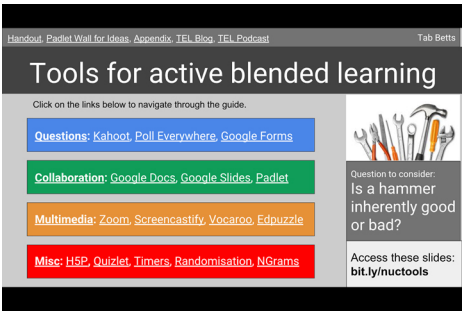


Figure 2: Screenshot of title slide for the self-directed Google Slides presentation I created, entitled 'Tools for Active Blended Learning'.

The "How to" Guide

I will explain the process using Google Slides, as that is what I used in my own teaching. However, you could easily achieve the same thing using PowerPoint, Sway or any other presentation software which allows you to insert hyperlinks.

Before the session:

1. 1. Create a free Google Account.
2. 2. Go to http://slides.google.com and create a new presentation.
3. 3. Decide on section titles and title slides for each of these sections (e.g. In a session on academic writing, sections might include structure, referencing, critical thinking, etc).
4. 4. On the first slide if your presentation, which will serve as the homepage or navigation slide, insert a link to each of the section title slides.
5. 5. Create slides in between the section title slides and populate these with the content for each section.
6. 6. Create a link to the first slide of your presentation on each of the section title slides. Time-saving tip: you can create one, then copy and paste it to all of the other slides.
7. 7. Create a shareable link to the slides and share this with learners. If needed, you can shorten the link by using a URL shortening service such as http://tinyurl.com or http://bitly.com.

During the session

1. 8. Introduce the session and the approach briefly. Explain that you will give an overview of the material and then it will be up to learners to choose their own path through it, focusing on what they think will be most useful to them.
2. 9. Quickly flick through the slides to give an overview of the full content contained within the resource. This will give them a feel of what their options are in terms of sections to visit later.
3. 10. The actual exploration section can either be carried out as a

whole class, with members of the class taking it in turns to come up to the front to guide the exploration, or it can be done in smaller groups, with each group being given access to the slides on a digital device. As they explore the material it is important that they are given a task, otherwise the activity can become unfocused. As an example, when I run a workshop which introduces new classroom technologies, one task is to plan an activity for a teaching session using one of the tools and demonstrate the tool in action for other members of the group. Feel free to be creative with the tasks that you set! Note that the key to the instructor's role in this part of the session is to allow the learners to take control, only offering questions or guidance when it seems like learners get stuck or learning might be compromised. To facilitate this dynamic, I generally seat myself in amongst the learners, at the back of the room or off to one side and nominate a couple of learners to take control at the front of the room. If you have a large touchscreen display, learners can press directly on the hyperlinks in the resource to navigate through it, which makes for a more intuitive experience.

Benefits

- Allows learners to choose the focus and pace of learning.
- Encourages higher levels of learner independence.
- Allows for more flexible learning experiences which respond to the changing needs of the learners and the learning context.

Challenges

- Requires careful setup and management in order to make it

work effectively.
- Hard to get the right balance of guiding learners in a useful but not intrusive way and allowing them to the freedom to explore without interruption.
- Instructors and learners may be unfamiliar with non-linear modes of delivery, so encouragement or training may be needed in order to give them confidence using the approach.

Concluding remarks

I have used this approach in a number of professional development workshops for teaching staff, as well as with students across a variety of age groups and contexts. I have found it to be both successful and well received by learners, as long as the resource is designed effectively (e.g. the links all work, the content is appropriate, the content is well presented, the quantity of material is suitable, etc) and the use of the resource us managed effectively (e.g. introduced and explained well, learners are given control of how they explore the resource, instructor provides guidance and answers questions, gently helping learners to make the best use of the resource without prescribing the pace or the method of learning).

If the approach seems daunting or unfamiliar, then try introducing it just for a single activity or small section of a session. Even experimenting by giving the students a website or Powerpoint with hyperlinks for a 10-20 minute section of a session would be a good way to test out whether the approach is suitable for your situation.

3 Creativity: Task learners with time-pressured multimedia creation challenges – such as a

Podblast, Booksprint or Videoblast

Figure 3: screenshot of a slide created by Pete Sparkes to provide a visual summary of what a Podblast is.

Overview

In 2017, staff in the Technology Enhanced Learning team at the University of Sussex invented the idea of a new type of workshop called a Podblast. The title derives from a portmanteau of the words 'Podcast', meaning an online radio show, and 'blast', implying that the session is fast-paced, involves an explosive bringing together of ideas but also, and most importantly, is great fun (yes, that's right… it's a blast!). In a nutshell, a Podblast involves bringing together a group of complete beginners to podcasting and getting them to create an entire podcast series within a single afternoon.

Figure 4: Photo of a discussion recorded with a mobile phone and dual headed lapel mics as part of the Great Sussex Podblast.

The "How to" Guide

The session lasts around 3.5 – 4 hours (depending on group size and prior podcasting experience), and is designed to take participants through the various stages of the process step by step.

We begin by introducing the concept of a Podblast and asking members of the group to introduce themselves to one another. After that, we move into the pre-production phase, by providing a theme and talking about how you might plan an episode around that theme. Participants are then divided into teams of 2-3 people and given time to plan their episode together. Following this, we share these ideas as a whole group, trying to decide in which order the episodes should come and adjusting episode plans slightly to ensure overall continuity for the podcast series. Once this is confirmed, it is time for the recording phase. At this point we introduce everyone to the recording equipment, which generally includes a selection of microphones and portable recording devices. I suggest that you prepare a range of equipment (if available), so that people can try different things and choose equipment which is well matched to their level of experience (e.g. a lapel microphone plugged into a mobile phone is generally easier to set up and manage than a laptop with a USB microphone or a portable recorder). If resources are very limited, you could manage to run the session using only mobile phones, as long as you have one phone which can record audio available to each group. Once the equipment has been introduced, groups then go off to find a quiet space in which to record their episode. Following the recording phase, we introduce participants to the basic features of audio editing software and give them time to make some basic improvements, such as trimming the beginning and end of the recording or cutting out any bits where the conversation broke down. Finally, we publish the episodes by uploading them to the internet and have a reflection and recap discussion to recognise what has been created and consolidate the learning process.

I have included the full session plan below to make it easier for you to replicate the process within your own context. Feel free to use or adapt this to suit your needs.

Session Plan – The Great Sussex Podblast

Description

Are you a veteran podcaster, are you just starting out or are you podcast curious? If you answered yes to any of these, then this event is for you. Join us as part of Digital Discovery Week as we embark on the first ever Great Sussex Podblast. During this event you will be given the tools and support to record, produce and create your very own podcast episode.

After an initial briefing, you'll be ready to start recording. You'll then be supported to edit your podcast. At the end of the session we will have a collection of individual podcasts that will be scheduled to form a series. That's right, a whole podcast series created in an afternoon.

Learning outcomes

By the end of the session, participants will be able to

- Work as a group to plan and produce a series of podcasts
- Plan, record, edit and publish an audio recording online.

Criteria

As a group, produce 3+ podcast episodes based on the theme of 'Digital Discovery'.

Each episode should be 5 to 10 minutes in length.

Session Outline

- Overview of the task
- Set the scene and provide context – What is a podcast, examples of the medium and what we're hoping to achieve with this.
- Go round and ask delegates for their name, their experience of podcasting, why did they come?
- Planning
- Demonstrate recording and equipment
- Recording
- Talk about editing, show off our premade podcast before and after edit
- Delegates edit their clips with support from us
- Brief overview of publishing
- Delegates publish their clip
- Reflection

Time	Activity	Resources	Notes
Introduction (25 mins) 1pm-1.25pm			
5 mins	Overview of the task	slides	
5 mins	Provide context	slides	What are podcasts? Why would you produce a podcast? Examples of themes and formats
10 mins	Icebreaker		Who are you? What's your experience? What do you hope to get out of today?
5mins	Organise groups	Google Doc	Groups of 3 / 4 Fill in google podcast template document.
Planning (20 mins) 1.25pm-1.45pm			
15 mins	Discuss ideas for themes and formats in groups	Paper, pens	In group think of 3 ideas for episode around theme of digital discovery. Then think about the format they would like to explore this in.
5 mins	Coordinate episode themes and formats	Google Doc	Fill in google podcast template document.
Recording (1hr) 1.45pm-2.45pm			
5 mins	Give overview of recording equipment and software.	4x USB Headphones w/ microphone 2x dual headed lapel mics 1x Snowball mic 1 x Samson mic	
5 mins	Advice on recording		Advice on how to record ie checking you can hear everyone, not worrying too much about silence or perfectionism, talking one at a time.
5 mins	Demonstration of recording	Audacity & usb mic	

30-45 mins	Groups record their podcast with support from us.		
Editing (1 hr) 2.45pm-3.45pm			
5 mins	Brief explanation and advice on editing		
5 mins	Demonstration on editing using Audacity		
30 -45 mins	Groups edit their podcast with support from us		
Publishing (20 mins) 3.45pm-4.05pm			
10 mins	Talk about publishing and marketing your podcast briefly.		
10 mins	We publish on Soundcloud and demonstrate how you do this	TEL Soundcloud account login details	
Reflection and wrap- up (25 mins)			
	Group discussion		1. What are your main takeaway points from today? 2. Have you got any ideas about how you could take this forward in the future? 3. Podcasting group?

Although the example here is a Podblast which focuses on audio recording and publishing, you could easily adapt this process to work with other kinds of multimedia, such as text in the form of a booksprint, where participants produce a book in a short space of time, or a videoblast, where participants create a series of videos in

a short space of time. It is likely that you will have many of your own ideas about how this could be best adapted for your own context.

Benefits:

- Very efficient and concentrated learning process, taking participants from no prior experience to being able to create something in a very short space of time
- Strong sense of achievement for learners, as they have demonstrable products – an Individual episode and collective series – to show as a demonstration of their learning during the session
- It can develop learners subject knowledge and digital skills, whilst also being a rapid way to create content which can be used for other purposes

Challenges:

- It takes some time to plan and set up an activity like this. Testing the equipment and learning the software in advance is extremely important.
- As there is a high level of challenge for learners, there is also a considerable demand for support from the instructor. As such, the approach might be difficult to implement with larger groups of learners.
- Although you by no means need to be an expert, it does require the instructor to learn and develop their own digital skills alongside the learners

4 Assessment: Take a structured approach to

formative assessment using team-based learning and online quizzes

Overview

One key way that technology can enhance learning is through facilitating the process of formative assessment. By formative assessment, we mean the use of assessment to support learning, rather than merely to evaluate it. One of the most systematic and easy-to-implement ways to integrate formative assessment into your teaching is to use a structured approach where students are regularly given opportunities for self- and peer-assessment, as well as receiving feedback from their tutor. Although it can help to motivate learners towards taking the task more seriously, it is not essential for these assessments to contribute to their final grades. The important thing is that opportunities for assessment are implemented in a structured way and occur regularly, drawing on the idea of just-in-time feedback, where feedback is considered to be more valuable if received as soon as possible after the activity which is being assessed.

So what pedagogical approach can help us to structure opportunities for formative assessment, while also allowing us to enhance the process using appropriate learning technologies? You are probably familiar with the idea of flipped learning, also referred to as the flipped classroom. The idea is basically that subject content can be presented *outside* of class time, prior to the session, through a range of media (articles, videos, audio, infographics, etc), accompanied by tasks or questions which test the learners' understanding of the material. In-class time, then, focuses on learner-centred tasks and interactions, with the instructor acting as a guide who can support or answer questions as necessary. Team Based Learning is an extension of this, which focuses on the idea of learners working in teams to solve problems. This approach lends

itself to using online quiz tools and peer assessment platforms to enhance the learning process.

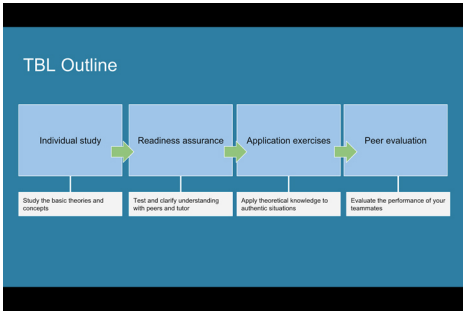


Figure 5: Outline of the stages of the Team Based Learning process.

The "How to" Guide

1. The process begins in a way that is similar to traditional flipped learning. Subject content is provided for learners in a way which can be studied prior to the session. This could be text, video, audio, infographics or any other kind of multimedia. Learners are told in advance that there will be a multiple-choice test on this material when they arrive for class.
2. In advance of the session, the instructor needs to create the multiple-choice test. This is generally the most time-consuming part of the process. Of course, you can do this using pen and paper; however, using an online quiz tool has the advantage that you can gather the data instantly and easily track progress over time. In terms of technology, you could use almost any online quizzing platform for this, and most virtual learning environments (e.g. Canvas, Moodle, Blackboard, etc) have this functionality built in. If you don't have access to a virtual learning environment or prefer to use something

different, Google Forms is a freely available tool which allows you to gather responses to a variety of question types, including multiple choice. I have used this for iRATS in the past and found it to be very effective for this purpose. In order to set up a quiz in Google Forms, you just need to have a free Google or Gmail account (which many people have already). You can then access Google Forms at http://forms.google.com.

3. Learners study the material before class, then, as soon as they arrive for the teaching session, the first activity is to individually complete a multiple-choice test (Individual Readiness Assurance Test or iRAT) based on the pre-session subject content they were asked to study. The answers of the test are not revealed at this stage, because learners need to take the test again with their teammates during the next phase.
4. Once the individual multiple-choice test is completed, learners then work in their teams (which are fixed groups of 5-7 learners) to complete the same multiple-choice quiz, but as a team (Team Readiness Assurance Test or tRAT). The key here is that learners must discuss and negotiate to arrive at a common answer. Some people use proprietary scratchcards during the process, so that each time the team guesses an answer, they scratch that answer off on the scratchcard and it will reveal whether or not the answer was correct. If they guess correctly the first time, they get full marks. If they guess right second time, they still get points, but these points are slightly reduced compared to a first-time guess. With each incorrect guess, the score reduces, so there is an incentive to get it right first time, but – in contrast to most multiple-choice testing – there is also an incentive to keep figuring the answer out even if you get it wrong the first time. To create a similar (but not identical) effect using technology, you could use a prioritisation question type, where learners need to reorder the answers in their order of correctness, such as the prioritisation question type in Poll Everywhere. Teams could

them respond from their smartphones and the data could be used for formative assessment purposes. The scores for each team's answer could be based on where they placed the correct answer in their prioritised list of possible answers.

5. Following this team multiple choice quiz, the instructor reviews the answers to the questions and offers the opportunity for teams to pose written appeals to challenge the content of the quiz or any answers which they feel were unfairly graded. Crucially, the appeal must consist of a clear statement of argument and evidence from the pre-session preparation materials to support this argument. It is also important that these appeals are *not* read or discussed during the session. The instructor collects them up and reviews them after the session to help inform future iterations of the quiz. Again, these appeals could be gathered digitally using a tool such as Google Forms or Poll Everywhere.
6. Once the written appeals have been collected, there is generally a short clarifying lecture. Rather than being a pre-prepared set of slides, this is an opportunity to address any gaps in knowledge revealed by the results of the quiz. Once these issues have been addressed, the instructor could once again use a student response system, such as Poll Everywhere, to check that understanding has improved since the quiz.
7. By this stage, we have used various formative assessment strategies and supporting technologies to ensure that there is a relatively secure knowledge of the subject content. Now it is time for teams to work on Application Exercises, in which they apply the the subject knowledge to making a collective decision in relation to a problem. Team Based Learning uses the 4S model to describe the design of application tasks: they should pose a Significant problem; the problem should require a Specific choice among clear alternatives; all teams should be working on the Same problem; solutions to the problem must be reported Simultaneously. An analogue method achieving this is to ask teams to hold up their answers on mini

whiteboards or a piece of paper. However, perhaps more effective is to ask teams to enter their responses using a tool such as Poll Everywhere or Padlet. The advantage of this is that all answers can be instantly collated in one place and revealed simultaneously to the whole class. It could also present the opportunity to discuss answers without knowing which team they were contributed by.

8. The final stage is peer assessment, where learners anonymously assess the other members of their team in terms of one thing they appreciate about that team member and one thing they request of them. Ideally, this peer assessment should also contribute to learners' final grade. In terms of peer assessment of projects, tools such as Peergrade can be useful to automatically handling the matching and distribution of information between learners within a group. However, many of these require a high fee to use. In terms of free tools, Teammates (http://teammatesv4.appspot.com/) is an useful tool which handles this matching and distribution, but also integrates features of Google Forms, which it is based on.

Benefits:

- Team-Based Learning provides a very structured way of integrating formative assessment into the teaching process.
- The approach is relatively easy to implement, as it offers a very prescriptive 'recipe' or framework for how to organise each teaching session.
- It develops cooperation and negotiation skills, as well as peer evaluation and critical thinking.
- Learners are more likely to complete the out of class work, because they know they will be tested when they arrive in the classroom.

Challenges:

- Preparation time is increased, as you need to prepare regular multiple-choice tests and think carefully about how you assign the teams.
- The structure could become repetitive, particularly if the content is not engaging, and because teams are supposed to stay the same throughout, learners may be deprived of getting to know and working with a wider variety of peers.
- The Team Based Learning community can seem a little bit evangelical and prescriptive about how Team Based Learning should be used, but my view is that you should feel free to adapt any approach to suit the needs of your context

5 Peer-observation: recording, sharing and evaluating experiences using mobile phone cameras and a Padlet wall

Overview

How can the recording and sharing capabilities of mobile phones be used to support learning?

One of the most effective ways for technology to support learning is through recording and sharing activities that are already occurring as part of the learning process. For example, Joan Williams, a Teaching Fellow in the School of Education and Social Work at the University of Sussex came up with a creative way to teach practical skills within a teaching session. During a class for trainee primary science teachers, she asked trainees to work in groups to complete experiments. Her idea was to have students carrying out custard-related experiments on different tables (the

original teaching activity), but to ask students to record the process of each experiment with their mobile phones and share it to a Padlet wall so that every group was able to see the results and process of every other group.

The "How to" Guide

1. After you have designed your learning activity, the first step is to create a place to share the recordings. In Joan's case, she wanted to use text, photos and video to record each experiment, so she decided to use Padlet, as this allows you to create an online multimedia noticeboard where learners can collaborate and upload multimedia in real-time. You start by signing up for a free account or requesting access to a paid licence if your institution has a license for the paid licence (contact your technology enhanced learning team or equivalent for details). One you have Padlet account, you create a new padlet wall (the free account limits you to three Padlet walls at any one time, but you can backup old ones then replace them with a new one when needed). You can either copy the URL directly from the address bar in your browser or click on 'Share' and copy the link or embed code from there.
2. You now need a method of sharing this link with your learners. You can do this by either pasting the link onto your institution's virtual learning environment or send it to them via email or social media. Alternatively, you could use a URL shortener, such as www.tinyurl.com or www.bitly.com, to shorten the URL, then display this in your PowerPoint (or other) presentation. You can ask learners to type the shortened URL directly into the address bar of their web browser on whatever device they have access to. It is important to allow time and support to ensure that everyone who needs access is able to access the Padlet wall. Unless your specific activity

requires access for every single user, in the case of face-to-face sessions, one device accessing the wall per group is generally sufficient.

3. Once every group as access to the wall, take learners through a demonstration of how to post text, photos and other kinds of multimedia to the wall. Ask each group to post something to check that they have understood; this is also an opportunity to tackle any technical issues before the group activities begin.
4. Now that each group knows how to post to Padlet, you can send each group off to start their experiments. You may want to assign roles within the group, to ensure that each learner has specific responsibilities that they are accountable for, but at very least 1-2 learners should be given the task of recording the experiment or activity in different ways (e.g. text, photos, video, audio, etc). As learners complete the experiment or activity at each station, they post their record of it to the Padlet wall, before moving onto the next station and repeating the process. It's worth noting that Padlet has a feature where you can change the format of a wall. You access this by clicking on the ellipsis '...' icon in the top right corner of any padlet wall that you have created and then choosing the option 'Change format'. I would suggest using the 'Shelf' format, as this allows you to add columns, so that you can group information and media under a heading for each of the activities or experiments (see Figure 4 below). This makes it easier to compare results between different groups and keep track of large quantities of information.

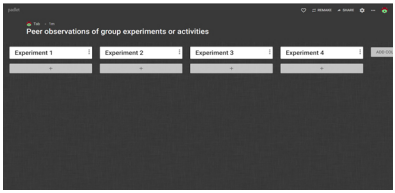


Figure 6: Padlet wall displaying an example of how you can

use the 'Shelf' format to organise your information into columns for each experiment.

5. Once each of the groups has moved around to each of the stations and completed the relevant experiment or activity, the Padlet wall should be populated with data from each group. You can then review and compare these results either in groups or as a whole class, using the Padlet wall on the projector or on learner devices to view the content produced by each of the groups.
6. As an optional extra, in the settings for your Padlet wall, you have the option to enable comments and responses (e.g. likes, star ratings, scores out of 100, upvote/downvote). This could be a useful way to incorporate an element of peer assessment and feedback into the process.
7. Finally, the products of this entire process (e.g. text, photos, video, audio, etc) can become a useful revision resource which can be repurposed for future sessions.

Benefits:

- Learners appreciate being able to see what happens in the other groups' experiments. This enables them to compare how different processes lead to different results, and thus gain a deeper understanding of the key aspects of the experiment.
- What would be a very short-lived experience for a small group can become a learning resource which is accessible in the long term for everyone – even people who did not attend the original session!
- Creates an excellent opportunity and potential resource for peer evaluation.

Challenges:

- It's important that you get the preparation steps right in order to ensure that the process goes smoothly. For example, in order to avoid the difficulty of learners typing the address into their browser, it is a good idea to send the link to students before the session begins. You could send Iit via email or post the link on a website or your institution's virtual learning environment. To pre-empt technical issues, try testing it with another person before using it with learners. This will allow you to familiarise yourself with the process and ensure that you can tackle any potential problems in a risk-free environment.
- Because groups are working simultaneously on different experiments and using technology to record the process, it might be challenging to support learners with any problems which they come up against.
- As audio and video recordings require large file sizes, it will be important to have a good internet connection in order to upload them. However, if necessary, learners can record offline, then upload when a stable internet connection becomes available to them.

Conclusion

In this chapter, I have presented five approaches for integrating technology into your teaching. By providing a variety of options, it is hoped that every reader will find at least one or two approaches which can be adapted for use with their learners. When it comes to applying the tools and strategies in this chapter, my advice would be to put things into practice as soon as possible – preferably immediately. Try something, or even a part of something, in your

next teaching session. After all, it is much easier to keep momentum going than it is to get the ball rolling in the first place.

It is also worth mentioning that any book chapter concerning technology is likely to become out of date by the time it is published, as will be the case with some of the information I have provided about learning technologies in this chapter. The key thing to take away is the approach and general principle of what is described here. My approach is to keep developing my understanding of teaching and learning technology by consulting with colleagues, learners and online sources of information such as blogs and social media accounts. When I don't know, I just ask. However, perhaps the most useful of all is to get in the habit of searching for what you need. For example, if you need an online quizzing tool, do a search for 'Top 10 free online quiz tools', briefly compare 2-3 lists, then try whichever tool appears in a high position on all of the lists you have checked. I often use this approach and have found some great tools this way.

Finally, don't underestimate the power of sharing ideas. Be prepared to listen to colleagues, learners and other sources of information, but also be prepared to tell them about your own successes and challenges in relation to pedagogy and learning technology. Keep pushing yourself outside your comfort zone and keep trying new things. If we expect this of our learners, then it is only reasonable to expect this of ourselves too. When you try something new, share your story with those in your local community or with the Active Learning Network to help encourage pedagogical exploration and experimentation, but also to learn from each other about how we can overcome obstacles and setbacks.

Although the landscape of the future presents a plethora of protean and unknowable possibilities, there is no need to 'keep up' with it: as long we keep walking forward, with our head up and our active learning mindset engaged, then we can make use of the opportunities which are available to us. Whether this is your first step, or simply a step forward, may the ideas in this chapter provide

some inspiration and make your journey of a thousand miles feel a little shorter, more enjoyable and more achievable.

Designing and developing a Foundation Year module

JILL KIRBY

Outline

The University of Sussex introduced the Arts and Humanities Foundation Year (FY) programme in autumn 2015, with mandatory core modules that included the *Making History* module. Despite the name, the module was also intended to include some history of art, philosophy, and American studies content. This chapter offers a reflection on the development and evolution of the module, focusing on curriculum design but also the consideration given to practical techniques for building student confidence. It provides a case study and step by step process for developing and continually evolving a module to match the needs of a diverse FY student body. Whilst it was developed specifically for this cohort of students, most of the steps would apply equally to the development of modules for undergraduates.

Sussex's FY programme welcomes students:

> with a broad range of backgrounds and experiences including: those who aren't sure which subject they'd like to specialise in; those who don't have the right combination of subjects for direct entry into Year 1; those who don't meet the expected requirements for direct entry into Year 1; and those who are returning to education after some time away. (University of Sussex, 2018 *Arts and Humanities (with a foundation year)* BA Accessed 7 July 2018)

These different routes into the programme are often reflected in student motivation and engagement during the year, particularly

among those who do not achieve their direct entry offers and may sometimes feel they have 'failed' or that the FY is an annoying delay in reaching their desired degree programme. Additionally, the FY supports widening participation by enabling students from non-traditional Higher Education (HE) backgrounds to enter the programme on slightly lower grades and encourages applications from adult learners. Overall, these different routes make for a diverse array of backgrounds and abilities among students. Because the module was compulsory for the arts and humanities programme, and optional for the social science and business programmes, this meant that the potential student cohort might include those who had not studied history beyond Year 9, those who wished to pursue a degree in the subject, and those taking it as an option whose other modules were within a different disciplinary framework.

Approaching curriculum design

Consideration of these issues was an important factor in the development of the curriculum and teaching practice for the module as were concerns about student social and cultural capital, self-beliefs and confidence. According to Crozier and Reay success at University is predicated on having the right cultural and social capital and this plays a significant role in being able and ready to participate as a learner but also to gain more widely from available opportunities (Crozier and Reay, 2011, p. 46). During the first year of the module, it became apparent that many FY students had misconceptions about what was expected of them, such as buying all the books from which the essential texts were drawn, not realising that digital copies were provided. Such a case exemplifies a lack of broader understanding of HE culture and is highly indicative of the problems encountered by first-generation students with little cultural capital relating to HE (Crozier and Reay, 2011, p. 148).

Lack of knowledge about what it is to be a HE learner is often reflected in issues of confidence for students. While feeling under-confident is not unique to FY students, the combination of limited cultural and social capital, lack of understanding of HE and often self-limiting beliefs about ability, can combine to cause considerable difficulty for some students (Dweck, 2000, p. 3). In some cases, this is exacerbated by, and/or contributes to, problems with anxiety and other mental health issues which are increasingly common across student cohorts, but perhaps more predominant in FY students and often the reason that they have not achieved the grades for direct entry to degrees (Thorley, 2017). While the deficit model approach is not necessarily a helpful one, it was important to bear these issues in mind when developing the *Making History* module and ultimately they have underpinned much of the continued development of the curriculum and teaching for the module.

Curriculum design is clearly more than just a syllabus or 'unit outline', although it can sometimes be misconceived as such (Fraser and Bosanquet, 2006, p. 270). In the case of a FY module, despite the ongoing debates about the impact of greater and more diverse student numbers on standards in HE over the last twenty years, creating the curriculum was also not simply a case of 'dumbing down' first-year undergraduate courses (Haggis, 2006, p. 522). This was an opportunity to focus on the student as a learner and to engage them with the subject area, but also with their own experiences of learning. The aim was to provide much the same level of intellectual challenge as a first-year undergraduate module, but with slightly more focused and targeted reading and more time for discussion and exploration of ideas, as well as an emphasis on building up academic skills through practice.

This approach was consistent with research suggesting that mediated materials and learning guides, as well as the inclusion of topics and issues relevant to a variety of student socio-cultural experiences, are useful for curriculum design for widening participation (Warren, 2002, p. 93). According to Warren, explicitly encouraging students to relate new concepts and new material to

what they already know, rather than dismissing it as inappropriate to HE approaches, helps new knowledge to be remembered and understood. Once the new ideas have been absorbed they can be revisited to develop them further and embed them within a more sophisticated HE framework (Warren, 2002, p. 35; Gravestock and Grace, 2009, p. 35). Such an approach allows varying experience, backgrounds and levels of understanding to be valued, encouraging students not only to learn from each other but to feel confident in contributing to the learning process. By relating the topics of study to their own experience and general knowledge students feel more confident contributing in class and this underpins the development of the student's own 'voice' as they understand their own knowledge, practice and selves in comparison with peers (Barnett and Coate, 2005, p. 126). This approach builds confidence as students recognise the variety of experience and views in the group, and realise that there is no single 'correct' answer and as a result, become more comfortable in sharing their own views. Additionally, by taking this approach, it is possible to make explicit the process of learning so that students become aware of themselves as learners so that small group learning in seminars functions both as a means of studying the seminar material but also the occasion itself and the relationship between the two (Warren, 2002, p. 95).

Considering student self-beliefs

Also implicit in the approach to curriculum design was an intention to build and support the confidence and self-belief of FY students, informed by Barnett and Coate's concept of 'knowing, acting and being' which they describe as 'nothing other than the making of the student self' (Barnett and Coate, 2005, p. 4 and 149). Traditionally, courses that have offered a 'second chance' to students who have underperformed at school and who are often self-doubting, have focused on building student self-belief and this was a fundamental

aim in developing the *Making History* module (Yorke and Knight, 2004, pp. 31–32). Self-theories are the beliefs that learners have about the extent to which certain attributes, such as intelligence, are mutable (Yorke and Knight, 2004, p. 25). They can be linked to concepts such as self-efficacy, ie the belief in 'one's capabilities to organise and execute the course of action required to manage prospective situations' (Bandura, 1995, p. 2). Student beliefs about self-efficacy influence their motivation and commitment as well as willingness to take on challenging tasks (Holker, 2012, pp. 112–113). According to Yorke and Knight, the concept is one of the four broad student attainments inherent to the notion of student employability, and thus highly pertinent to contemporary discourse on student outcomes in HE. They point to both 'efficacy beliefs and other personal qualities' and 'metacognition' (understood as 'reflection') as abilities that are particularly important as they are closely aligned and relate directly to engagement and how much students develop over the course of their studies (Yorke and Knight, 2007, p. 158).

Additionally, greater awareness of self-efficacy has been shown to be more important for students from lower social classes (which often also include more ethnic minority students) because they tend to have lower aspirations and are more likely to 'settle for less' (Holker, 2012, p. 114). Very often, the same students also lack a 'growth mindset', having a fixed view of intelligence, rather than a belief in their ability to develop. Beliefs about intelligence are 'associated with economic disadvantage' and moderate its 'effects on achievement' (Claro et al., 2016, p. 8664). In practice what this means is that students with a fixed view of intelligence tend to approach challenges with a preconceived view of whether it is something they can do successfully or not (usually taking the negative view), and this limiting view of their own abilities can lead to 'learned helplessness' (Yorke and Knight, 2004, p. 27). This makes it critical for tutors to help students become aware of these ideas and to 'show students of a fixed disposition that they might achieve more than they perhaps imagined if they were to attend to

the development of their own attributes, dispositions and abilities' (Yorke and Knight, 2004, p. 31). Awareness of these issues influenced not only the design of the curriculum but its ongoing evolution and the teaching practice of those delivering it.

The remainder of this chapter will outline a ten-step approach to designing a module based on the approach to curriculum design outlined above that also foregrounds student self-beliefs around learning and confidence.

The "How to" Guide

1. Identify the desired learning outcomes for the module
2. Develop potential topics
3. Develop ways to structure content logically (around themes/ skills etc)
4. Develop ways to structure teaching and learning
5. Liaise with colleagues to confirm lectures and collate relevant learning materials
6. Decide how to assess learning outcomes
7. Write module handbook, incorporating relevant policies (eg on academic misconduct)
8. Identify texts and other materials
9. Build module pages on Virtual Learning Environment (VLE)
10. Evaluate the module

Identify the desired learning outcomes for the module

The convenor for the *Making History* module was appointed less than two months before the FY Arts and Humanities programme was to go live. Therefore, some aspects of the module had already

been decided by School senior management. This included the learning outcomes, which were loosely based on the existing undergraduate History BA learning outcomes, and were quite general, ie at the end of the module students were expected to be able to 'use a range of strategies for managing their studies effectively' and 'identify their strengths and development needs by making use of feedback on their academic work.' Such broadly-framed outcomes are consistent with arguments that learning outcomes should be flexible enough to allow for 'innovations and diversions' although subsequent revisions have made them a little more specific (Hussey and Smith, 2008, p. 112).

The only subject specific outcome required students to be able to 'offer their own interpretation of and arguments about historical and philosophical questions clearly and accurately on the basis of in-depth analysis of evidence.' Although the learning outcomes were already set, it was helpful to compare them with the learning outcomes for similar modules in the same FY stream, such as *Reading Literature*, in order to understand similarities and differences and ensure consistency and coherence.

Develop potential topics

For *Making History* the only requirement was to ensure the inclusion of some history of art, philosophy and American studies in the module to reflect the range of subject areas within its home School, although it was recognised that the majority of the module would be history-focused. It was built around a variety of topics that students from a range of socio-cultural backgrounds could relate to and structured to model key historical and academic skills that built and/or enhanced student learning so that students would enter their degree programmes often in a stronger position than direct entrants, thus mediating some of the missing cultural and social capital of non-traditional HE students. For example, topics

such as the 1980s enabled students to relate their family history to historical events and discussions around the philosophy of feminism could be related to their own life experience.

The module was predicated on a teaching model of weekly guest lectures and seminars taught by dedicated tutors. Therefore, one factor in identifying content for the module was consideration of the teaching and research specialisms of faculty members and their popularity as lecturers. The intention was that they would be able to 're-purpose' existing teaching materials, rather than create new lectures from scratch. Practically, this also meant that the content was partly driven by who would be available to teach in each academic year. A list of possible topics, concepts, methodologies and skills was identified based on conversations with individuals as well as research among the School's undergraduate curriculum and online staff research pages. From this a variety of themes emerged which could then be read against other modules such as *Reading Literature*, to identify ways in which the *Making History* module might provide historical context for some of the English literature material. While this was possible in a few instances, it would have been too restrictive for both modules to structure them specifically to this end, not least because the *Reading Literature* module was chronological and *Making History* deliberately was not.

The selection of content was also based on the ways in which different teaching and learning activities lent themselves to certain topics and materials, and thus to ensuring variety and engagement for students as well as playing to the strengths of faculty and the teaching team. For example, faculty involvement in the development of several freely-available online databases and collections, such as the Proceedings of the Old Bailey online (https://www.oldbaileyonline.org/) and the Observing the 1980s collection (http://blogs.sussex.ac.uk/observingthe80s/), meant they could provide an insightful lecture on a related topic and then seminars could focus on students getting involved in working with the online sources, practising search skills, analysing primary sources and presenting their findings.

Develop ways to structure content logically (around themes/skills etc)

A list of topics was developed into an initial curriculum that offered a framework to enable students to analyse a range of different sources, as well as helping them to develop their skills in building and challenging arguments. To engage students and provide an insight into the many different types of history, history of art, philosophy and American studies that they might go on to study, it was based around a set of broad themes, such as War, Slavery and Empire, introducing different topics, periods and methodologies and above all providing lots of practical opportunities for working with primary evidence.

With this in mind, the very first iteration of the curriculum focused on methodology in the early weeks of the module, so that students (especially those who had limited experience of studying history) would gain the skills to work with a range of historical evidence. However, it very quickly became apparent that this was not sufficiently engaging and changes were made for subsequent years. A deliberate choice was made not to study any one topic in great depth over several weeks (leaving that for those who wished to progress to degrees in history/history of art/philosophy/American Studies). Instead, the aim was to cluster topics within themes so that if students found themselves disinterested in a particular subject, they would not become disengaged as the topic focus would shift the next week, although the theme might be studied for several weeks.

Develop ways to structure teaching and learning

The teaching structure had already been put in place based on a weekly lecture by a member of School faculty followed by a one-

hour weekly seminar taught by a member of the teaching team, during the subsequent week. The seminar was extended to two hours after the first year as an hour proved insufficient. Although there has been much criticism of lectures for being 'boring, passive, ineffective and antiquated', researchers have also highlighted their role in helping students to see themselves as part of a community of learning, while others have stressed the ways in which a lecturer's personality and charisma can 'bring a subject to life' (French and Kennedy, 2017, p. 639; Mulryan-Kyne, 2010, p. 176; Revell and Wainwright, 2009, p. 217). From a pragmatic perspective, lectures remain a key teaching method, particularly where large cohorts are involved (Mulryan-Kyne, 2010, p. 176). Seminars were supported by one or two essential readings and other optional resources such as videos, websites and primary sources. Some of these latter were suggested by faculty, but most were identified by the convenor to offer additional material to give background or further detail on particular topics. Clearly, the quality of lectures depends a lot on the lecturer, but exposure to different styles and methods of lecturing also gives students the chance to reflect on approaches and styles of pedagogy. This is important in helping them adjust to the HE environment and to thinking about themselves as learners. For most of the first semester, time was allowed in seminars for students to reflect on their responses to the lectures and how they could learn from them. This enabled discussions of alternative note-taking methods, use of lecture capture for reviewing notes and for students to examine the benefits and limitations of lectures (eg their usefulness in providing context and structure and the student's own responsibility for engagement) (French and Kennedy, 2017, p. 646). This was also useful in gathering constructive criticisms and suggestions from students to incorporate into future lectures, such as a request for greater signposting of key points.

Liaise with colleagues to confirm lectures and collate

relevant learning materials

Liaising with more than twenty faculty colleagues to agree lectures, timings and to request suggested readings to support the lecture's subject area, was somewhat time-consuming. Faculty were asked to suggest an essential reading and one or two additional readings and/or primary source materials and questions that could underpin the seminar activities for that particular topic. The convenor drew on the provided material and additional research to create seminar plans to be used by the teaching team. Although the individual lecturers suggested essential readings in their subjects, the convenor sometimes asked for alternatives, particularly when their suggested readings were either too long or overly jargon-laden. This focus on language is important because the diversity of our student cohorts means that we cannot assume a uniform level of familiarity with academic language, conventions and procedures. For some students who enter the FY straight from school, some elements may be familiar, but for others (eg mature students or those for whom English is not their first language), the academic environment and its terminology can seem very alien (Gravestock and Grace, 2009, p. 15). It was important that essential readings were reasonably accessible, and that the level of challenge they offered evolved over the course of the first semester. It should be noted that each year content planning needs to take place in sufficient time for faculty lectures to be included in workload allocations and in timetables, so that any changes to the module have to be identified at least by early in the Spring semester in order to be incorporated into planning for the following academic year.

Decide how to assess learning outcomes

The curriculum was designed to assess students on core historical

skills around analysing evidence including visual culture, as well as more generic academic skills (essay writing, presenting arguments). Students were asked to produce a formative essay early in the first semester in order for tutors to gauge their levels of skill and to offer practical forward-looking feedback as well as to scaffold skills development in seminars. Although the timing and broad modes of assessment had already been set and were compliant with University assessment regulations, they were sufficiently broad to allow some flexibility. The assessment at the end of semester one was a primary source analysis exercise, while the Spring mid-semester assignment was a paired presentation and the final end of year assignment an essay. The timings were predicated partly on the need to stagger assessments across all FY modules in order to avoid overloading students at particular times, such as the end of the autumn semester and partly to enable marking time particularly for modules with very large cohorts.

Write module handbook, incorporating relevant policies (eg on academic misconduct)

The module handbook needed to set out the module learning outcomes, how the module was taught and assessed, and by whom, its syllabus, essential readings, contact information for tutors and core information about academic integrity and marking criteria. It identified any books that the students needed to buy and confirmed which would be provided digitally. It gave the syllabus on a week by week basis, listing the topic and essential reading. It was made available to download from the VLE, and most of the information was also duplicated in various sections of the module's VLE site.

Identify texts and other materials

Essential readings were mostly identified by faculty, with a few exceptions where the topic related to the convenor's own research expertise. For the most part, any additional readings were either provided by faculty or identified by the convenor. Similarly, some primary sources and materials for seminar use were identified by faculty, with the convenor researching the rest. Any copying of handout materials was also done by the convenor.

Build module pages on VLE

Once the content for each week and the identities of lecturers had been confirmed, it was possible to start building the module online. The VLE provided students with a page for each week including the link to the digitised essential reading, a list of suggested further readings (not digitised) and other further resources (such as video material, images, collections, music, news reporting etc that would enable students to find out more about the topic). Each weekly page gave a brief summary of the week's topic and one or two prompt questions to give students some guidance on what to consider when reading the essential text.

Evaluate the module

In the first year that it ran the module was evaluated in several ways. Firstly, the teaching team had regular informal meetings about what was working in seminars, including student responses to lectures, readings and seminar activities. These enabled the convenor to make changes and adjustments to seminar plans as the module progressed and to note changes to make for the following

academic year. Additionally, informal student feedback was sought halfway through each semester. This was a very simple anonymous paper survey that students completed in class, that asked them to identify three positive things about the module and three things that they'd like to change. This was extremely useful in confirming some of the teaching team's perceptions about things that weren't working, but also in endorsing the overall module design. More formal research was also carried out amongst all FY students by the FY administrators, and this provided information about whether the module was providing sufficient challenge to students. Other evaluations were based on the pass rate and the number of students who successfully progressed onto undergraduate degrees at Sussex.

As a result of the various evaluation activities, and the changes in faculty availability each year, the module has been amended annually to greater or lesser degrees. This has included tightening up the thematic approach and signposting it more clearly; replacing some topics that proved too challenging; adjusting reading requirements by adding or replacing essential texts; and altering one of the assessments.

The successes (what worked well)

1. The broad nature of the learning outcomes proved to be helpful in allowing sufficient flexibility to incorporate a huge range of content, skills and personal development within the design of the module and its future evolution. This was important as year on year the module content, structure and assessments have all been adapted in response to evaluation and student feedback and if the learning outcomes had been too specific, this would have been much more difficult and time-consuming to achieve.
2. The research carried out each semester with students confirmed that they found the variety of topics covered

engaging, for example, 'I'm really enjoying the topics in History. I find them really interesting and I like the fact that they cover different time periods and also different subjects.' There were some concerns about the pace of changing topics and one or two regretted not being able to study a particular topic in more depth. In subsequent years some of the module themes were extended and more emphasis placed on the connections between topics to address some of these concerns.

3. Engaging students with historical/philosophical topics that they could discuss and debate because they could relate them to their own experience, rather than to a large body of existing historical knowledge, has been a key factor in the development of the curriculum since the module began. For example, starting the module by studying Britain in the 1980s was enhanced by setting students pre-arrival work that included a short oral history interview with a friend or relative about their life in the 1980s. This topic enabled them to relate the study of history to a range of pertinent issues such as immigration, identity politics and activism. This task was carried out by the majority of students and meant that most of them had some relevant content to talk about in the first few seminars that did not draw on academic skills or knowledge. This enabled them to build their confidence in seminar discussions, but also illustrated the value of widely differing social, cultural and ethnic backgrounds and contributed to students learning from each other. Having this activity occur so early in the module effectively modelled classroom interaction and set the tone for student behaviour in seminars for the rest of the year. Similarly, studying the development of the philosophy of feminism allowed them to think critically about the role of gender in their own lives (and in current debates).
4. In the first year of the module, one of the assessments was a paired presentation to be given during the spring semester. This created a lot of student anxiety resulting in repeat timetabling of presentations which proved impractical. With

assessed presentations already included in the other mandatory modules, the assessment was amended to an annotated bibliography. This still focused on their ability to research among secondary sources and critically assess arguments, but also linked more directly to their final assessed essay. The annotated bibliography assessment ensured that students engaged with their final essay topic much earlier in the semester, allowing time for discussion and feedback with tutors. This alteration of assessment also enabled better scaffolding and modelling of the process of writing an essay in seminars, so that students received in-class informal feedback on research and planning activities, and then constructive written and face to face feedback on the annotated bibliographies in sufficient time to incorporate it into their final essay. The results of this change were much-improved essays in the second year the module ran.

5. Another simple practice to encourage students and tutors to get to know each other and to build a relaxed atmosphere was the introduction of coloured card nameplates. Students were invited to write their chosen name on the name card and these were gathered in each week and used to help tutors learn student names (by giving them out the following week) but also so that students knew each other's names and could use them in class discussions. In subsequent years students were also invited to use the nameplates to indicate preferred pronouns too. Using only three or four different card colours also served as a method of creating random small groups for some group activities. It should be noted that one or two students expressed dislike for the nameplates.

Unexpected difficulties

1. The design of the module in its first year began with a focus on

methodology and skills. However, it became obvious very quickly from student responses, comments and questions that this approach was simply not engaging enough and that the essential reading was too long and rather confusing, all of which was reflected in the student research halfway through the semester. As a result, the following year the methodology was integrated into the individual themes and the module began with a subject area that students were more easily able to relate to – Britain in the 1980s.

2. Because the module was set up at very short notice during the summer, there were quite a few logistical issues in tracking down and contacting colleagues who were on research leave or holiday. This meant that the deadline set by the digitisation team in the Library who manage the huge task of digitising under licence, the readings to be shared on the virtual learning environment, simply could not be met. In some cases, the digitisations were still being done only a few weeks before the topic would be covered, which was not ideal. Because the content of the module changes to a greater or lesser extent each year, reliance on faculty to provide set readings continues to require persistence in following up missing readings, and the digitisation team in the Library only receive a partial list, with the convenor then liaising on an ad hoc basis to ensure all the necessary materials are digitised in time.
3. There were one or two seminar groups in the first year of the module that did not seem to work well together, for example, students were unwilling to share their opinions, reluctant to work in groups, often had not prepared or read the essential text etc. While it is not uncommon to sometimes experience dysfunctional group dynamics, these one or two groups were much more challenging to teach. Subsequent conversations with some students after the year had ended, revealed that many of them had also found it an uncomfortable experience as they had wanted to participate but had felt unable to. To address this for subsequent years, the use of ice breaker

exercises at the beginning of every seminar was introduced. While most tutors use ice-breakers are the beginning of the year to encourage conversation and help students to relax, this activity was carried out every week, with the intention of creating a light-hearted warm-up exercise at the start of each seminar that ensured that every student spoke in class. This encouraged a relaxed group atmosphere but also helped the less confident speak out about something that was unchallenging and within everyone's capabilities. Identifying sufficient pertinent ice-breakers was somewhat tricky, but the technique did seem to engage students at the beginning of seminars and get them focused on listening to each other and sharing their views. Informal feedback from students on the use of ice-breakers suggests that they enjoyed the exercise and felt it helped them to get to know each other more quickly, helping them to feel confident working in small groups and in whole class discussions. One student commented, 'I feel comfortable within the discussion and don't feel judged for making a point even if it's not correct.' While for the most part, student responses to these tactics have been positive, I think it is important to recognise that some students did not like the ice-breakers. An informal student survey at the end of the year included one comment that the activity was 'childish.' However, the benefits for the shy and quiet outweighed the criticisms and a more recent survey showed overwhelmingly that students enjoyed the ice-breakers and most reported feeling confident about speaking in class.

Concluding thoughts

The process of developing the *Making History* module, whilst specific to a certain set of circumstances, identifies some of the basic steps for designing a curriculum and considering some of the

basic elements of teaching, especially for FY or first-year students. The most significant learning point and most important factor in convening any module is that it needs to evolve constantly: in response to student feedback and observed practice; to changes in subject knowledge, literature and academic and pedagogic practice. The module has now run for four years and in its current iteration, is undoubtedly a much more coherent, focused and engaging offering than the original. However, as faculty availability changes each year, so the content is amended. New teaching and learning practices are experimented with, adopted or discarded, and different student cohorts respond differently to each iteration. Undoubtedly, there are other ways, many of them superior, in which this module might have been developed. This case study is offered as no more than a useful template and some lessons learned to assist others in setting up or amending comparable modules and avoiding similar pitfalls.

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