

Forum

Learning and Teaching Committee



UNIVERSITY
of York

ISSUE 46 | AUTUMN 2019

Creating learning partnerships



Co-creation
Communities
Authenticity

Contents

- 3** The benefits of hindsight: Lessons learnt from leading my first cross-department student-staff partnership project
- 7** Counting all backgrounds: How could accounting students navigate an interdisciplinary module?
- 8** Photo diary: Learning and Teaching Conference
- 10** Introduction of Peer Assisted Learning (PAL) for Life Sciences
- 15** Treading in the footsteps of giants
- 16** Learning Together: Building a community of learners within and beyond prison bars
- 18** Partners in education: building an education community through authentic problem solving
- 20** A blended-learning design for data skills modules in Biology
- 23** Building the University of the Future in partnership with our students
- 24** Piloting students as consultants
- 26** Students as partners in the design of module materials: An experience in using Google Docs in seminars
- 28** Support, development and recognition for Learning and Teaching

For a large print, black and white text version, please contact learning-and-teaching-forum@york.ac.uk

Editorial

Dear Reader

Welcome to the 46th edition of *Forum* magazine, and my first as editor. The articles in this edition respond to the theme of this year's Annual Learning and Teaching Conference, 'Creating valuable learning partnerships in the contemporary university'. The Conference was held on 21st June and featured a keynote from National Teaching Fellow Dr Ruth Healey of the University of Chester on 'Developing learning communities through staff-student partnerships'. Dr Healey contributes an article to this edition of *Forum* on a student-staff partnership project to redesign the second-year geography curriculum at the University of Chester. Reading the article, I was particularly struck by the insight that members of a partnership need to take time to reflect on what equality means, and found the distinctions between 'equal', 'equitable', 'equivalent' and 'same' really useful tools to think with. Dr Healey's view of partnership as being about 'breaking down the barriers so that ideas from everyone are given due consideration' connects with other articles in this edition, such as the pilot project 'Students as Consultants' which took place in the Department of English and Related Literature and which encouraged critical reflections on race and diversity in teaching practice. Students were also made partners in designing module materials in Marina N. Cantarutti's project using Google Docs in seminars.



Learning partnerships are shown to facilitate unexpected and significant new developments. Set Chong's account of a Peer Assisted Learning scheme in Biology notes that students often asked unrelated questions of their PAL Leaders, 'regarding module choices, studying for a masters, revising techniques, etc.' This was seen as one of the scheme's benefits: that PAL Leaders 'got to know, and befriend peers they had never spoken to prior to the scheme'. Similarly, Rachel Vipond's article on a module launched in conjunction with Buckley Hall, a category 3 male prison, notes the creation of 'improbable friendships' as students from both Buckley Hall and the University of York worked together, 'grappling with some of society's biggest problems'.

Elsewhere in this edition, partnerships help to establish expectations and aspirations for new students and to build a learning community, as shown in the article 'Partners in education: Building an education community through authentic problem solving', and in the Department of Sociology's 'University of the Future' programme. Jane Neal-Smith and Philip Linsley's plans for an interdisciplinary approach to an 'Accounting and Risk' module, involving 'a seminar buddy system whereby students actively utilise their existing, prior knowledge', can also be seen in this light. Partnerships are also shown to provide space for staff activities that it is difficult to make time for – as in the case of a writing retreat for Teaching and Scholarship staff – and to address student perceptions and fears, as in Emma Rand's article on the challenges of teaching data analysis and programming in Biology.

The idea of breaking down barriers between staff and students is not a new one; indeed, it was very much in the air in the early years of the University in the 1960s. However, I hope that you will find these articles to be sources of ideas and inspiration for what learning partnerships are and can be today. They showcase innovative thinking and practice across the University and beyond.

With my best wishes for academic year 2019/20,

Ben Poore (Theatre, Film, Television and Interactive Media)
Editor

Forum is published biannually by the Learning and Teaching Forum at the University of York

Editor Ben Poore benjamin.poore@york.ac.uk

Sub-editor Phil Robinson-Self phil.robinson-self@york.ac.uk

Editorial Committee Ben Poore, Phil Robinson-Self, Glenn Hurst, Mark Egan

Design and print Design and Print Solutions york.ac.uk/design-print-solutions

Front Cover image Paul Shields

The benefits of hindsight:

Lessons learnt from leading my first cross-department student-staff partnership project

Ruth L Healey, University of Chester

Student-staff partnerships have been shown to offer significant potential for enhancing learning and teaching in higher education; however, they are not without their challenges. This paper reflects on my experience of leading a team in our first cross-department student-staff partnership project, identifying five key lessons that were learnt from the experience.

Beginning partnership

Just after graduating from my undergraduate degree in 2004 I had the opportunity to manage the first International Network for Learning and Teaching Geography in HE (INLT) Writing Group Symposium in Glasgow. I sat in on the group working on 'teaching for social transformations'. Unexpectedly, the members of the group valued my perspective as a student. This was my introduction to what has since become known as an example of 'students as partners' (SaP). I went on to co-author the resulting article, my first ever publication (Wellens *et al.*, 2006). Since then, I have been inspired to take opportunities to work in partnership, first as a student and then as a member of staff, whenever they have arisen. Hence upon embarking on leading my first cross-department student-staff partnership project in 2015-16 I was already convinced of the benefits of this process. I had taken to heart the Cook-Sather *et*

al. (2014: 6-7) definition of student-staff partnership as "a collaborative, reciprocal process through which all participants have the opportunity to contribute equally, although not necessarily in the same ways, to curricular or pedagogical conceptualisation, decision making, implementation, investigation, or analysis." My colleagues and I were clear in our minds that student-staff partnership went beyond asking students what they thought of their experiences – which was the most common way in which my department engaged with students at that time – and involved, wherever possible, engaging them in working with staff to identify and deliver change. As Dunne (2011: 4) comments, "there is a subtle, but extremely important, difference between an institution that 'listens' to students and responds accordingly, and an institution that gives students the opportunity to explore areas that they believe to be significant, to recommend solutions and to bring about the required changes."

Contexts: the curriculum redesign project

With two like-minded colleagues, I applied for funding to embark on a relatively ambitious project leading eight academics and four students to re-design the second-year undergraduate geography curriculum at the University of Chester. We were positive and enthusiastic, seeing

students as partners as a way of working to enhance teaching and learning as a 'no-brainer'; it seemed clear to me that this was a way forward in enhancing learning and teaching. This entailed splitting two 40-credit existing modules (one in human geography and one in physical geography) into four new modules with more specific themes. This was the first project of its kind within the department, in an institution that did not have centralised support for working in partnership. Departmental staff were invited to be involved in the project but, whilst it was by invitation, the supportive culture of the department and general interest in teaching innovations may have meant that some staff felt they should get involved despite not necessarily feeling they had the time to commit. The staff had no prior experience of working in partnership with students to design courses, although several of them worked with students in partnership in learning and teaching and in research and inquiry. Four undergraduate students with no prior experience of working in partnership were employed to work for 50 hours each over six months in one of two teams (one focusing on the two human geography courses, the other on the two physical geography courses). Two staff members were involved in the human geography courses, and six in the physical geography courses.

The research team designed a light-touch approach to establishing and



supporting the developing partnerships. Through a one-hour workshop all participants were introduced to some definitions of student-staff partnership (Cook-Sather *et al.* 2014; Dunne & Zandstra, 2011; Healey *et al.*, 2014; Williamson, 2013), the relationship between partnership and other types of participation (Bovill & Bulley, 2011), and to the HEA (2015) principles of partnership. We also discussed examples of partnership in other learning and teaching contexts.

The four modules were designed and delivered to positive reviews from students, staff and external examiners. However, leading a group new to working together in this way was challenging and perhaps over ambitious. We have reflected on the experience of this in detail through our recent publication in the *International Journal of Students as Partners* (Healey *et al.* 2019). This, and my subsequent more extensive experience of partnership in a range of different contexts, has led me to reflect on some of the lessons we learnt about partnership through this project. I have grouped these under five themes which I would take on board if I was starting such a project again and which others may find useful if considering a similar project.

1. The balance between the process and the output of partnership needs to be considered

Both the partnership process and the targeted output are important. However, both require time for consideration, which means that in time-limited contexts where participants are engaged for a variety of different reasons, it may not be possible to focus on both to the same extent. Depending on the purpose of the partnership the members of that partnership may make the choice, consciously or otherwise, to focus more on the process or on the output. Many projects are primarily focused on outputs. Working in partnership is a means to produce these outputs and not always something that is explicitly considered or discussed, unless the purpose of a

project is to research the practice of partnership itself.

My own rationale for my prior student-staff partnership work had been that I wanted to work with students to enhance my teaching practice. In this project we wanted to involve other colleagues. The decision to re-design the curriculum provided an opportunity to do this. However, that did not negate the need to produce the required output. The other project participants were involved for a variety of reasons, but everyone was clear on the need to ensure that the new modules were designed within the necessary regulatory timeframe. Whilst everyone participated in the initial workshop introducing partnership principles and practice, the reality of the day-to-day demands on both students and staff meant that the focus quickly moved towards the work that needed to be done rather than how that work was done.

Figure 1 illustrates the different ways in which students might be engaged in enhancing the student experience. At different points in the project we were working at varying points along this continuum. Examples of the different types of the participation were:

- Inform – staff participants explained the requirements and structures of university module descriptors to student participants
- Consult – students were consulted on the staff plans for the ordering of content
- Involve – students were involved in designing specific learning activities
- Partner – student-staff team conducted a fieldwork reconnaissance visit
- Control – student participants designed teaching resources independently (reviewed by staff)

The nature of the student participation was therefore variable and not necessarily achieving the fully immersive partnership relationships achieved in some other contexts explored in the literature (eg Ntem & Cook-Sather 2018). This situation emerged partly due to the need to focus on the output and not having time to focus on the partnership relationships and process to the extent that is necessary to achieve

full partnership. Given the number of people and time constraints involved, it was perhaps naïve to expect otherwise.

2. Take time to reflect as a partnership team on what equality means in student-staff partnerships

One of the most common comments I have had in discussions with people about student-staff partnerships has related to the notion of 'equality'. Sometimes people dismiss the practice with the rebuff that: "It's not possible for students and staff to be equal". So what does equality mean in this context? There are important differences between the adjectives equal, equitable, equivalent, and same:

- 'Equal' = having the same status, rights, or opportunities
- 'Equitable' = Fair and impartial
- 'Equivalent' = equal in value, amount, function, meaning
- 'Same' = identical; not different

When some people say partnership between students and staff is not possible because they are not 'equal', they may mean to say that they are not the 'same'. This is, of course, true: students and staff have different roles, opportunities, responsibilities, relative power etc within situations. Students and staff cannot be the 'same' in a partnership. Indeed, the reason for developing partnerships to work on issues in this context is precisely because we want people to address the topic from different perspectives. A principle of partnership is to recognise that everyone brings something to the table and to value these differences: eg students bring experience of being students, while staff bring subject and teaching expertise. Depending on the nature of the project it might not be possible for students and staff to have equal responsibility for the outcome; however, they can have the same status, rights or opportunities within the process. Partnership between students and staff in different ways offers opportunities to be equal, equitable and equivalent, but not the same.

3. Work together to establish and build the relationship between partners

Partnership is messy – how partners build a relationship will vary every time depending on who is involved and how they are engaged in the partnership. Beyond exploring different partnership models and principles we did not know what to expect in terms of how the partnerships themselves would work.

“Partnership between students and staff in different ways offers opportunities to be equal, equitable and equivalent, but not the same.”

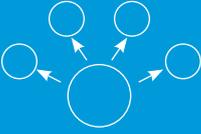
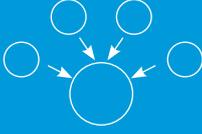
	Inform 	Consult 	Involve 	Partner 	Control 
Goal	To provide students with balanced and objective information to assist them in understanding the problem, alternatives and solutions.	To obtain student feedback on analysis, alternatives and/or decisions.	To work directly with students throughout the process to ensure that their concerns and aspirations are consistently understood.	To partner with students in each aspect of the initiative from identification to solution.	Students design and lead initiatives that matter to them and are in control of final decision-making.
Style	"Here's what's happening"	"Here are some options. What do you think?"	"Here's a problem, what ideas do you have?"	"Let's identify the issues and work together to develop a plan and implement a solution."	"You care about this issue and are leading the initiative, how can we support?"

Figure 1: Types of participation (after Student Voice Australia 2019, adapted from the International Association for Public Participation (IAP2) Spectrum of Public Participation model)

Indeed, one of the aims of our research into partnership was to investigate how different partnerships operated. We therefore encouraged the different participants to find their own way in how they chose to work together. This raised various different challenges, often based around differing expectations between different partners that were not articulated or explored leading to tensions both during the project and at its end. This may be illustrated by differences in a) how participants perceived partnership working; and b) how partners communicated with each other.

Despite the initial workshop on partnership, the participants brought different perspectives on the nature of partnership to the project. In one case the student participants perceived partnership to only be occurring if the staff and student partners were working together synchronously on an element of the module design, whereas the relevant staff participant perceived partnership to be occurring if different members of the team took responsibility for different elements of the module design, working on these in their own time and then bringing them back to the team for discussion and further development. Communication was another issue for some teams in which staff sent students emails about meetings and work, while student members did not tend to use email as their primary form of communication and therefore often

took several days to respond (though some staff members were also guilty of long email response times). On one occasion this meant that the team missed an opportunity to undertake a fieldwork reconnaissance trip together.

Both of these issues might have been mitigated to some degree if the teams had discussed their expectations around these key elements of working together. One approach to this might be to work together at the beginning of the partnership to co-create guidelines by which the members will work. This might be called a 'partnership agreement' in which key elements of working together are identified and the team decide together, for example, how they define partnership, what that looks like in terms of work practices, and the best mechanisms for communicating within the team. In subsequent projects, we have co-constructed such agreements in an editable format and always had them with us at project meetings for the team to be able to reflect on and edit if necessary.

4. Consider how to approach partnership in your context

Elsewhere I have written about the importance of the context when discussing students as partners (Healey & Healey 2018). This includes how 'partnership' is interpreted, the emotions, motivations, attitudes, behaviour and values of the participants, and the aim, scale and timeframe of the project.

Context provides the basis for and the parameters of what is possible in terms of a specific partnership project, and establishes the motivation for participants to want to try working together in this way. Working in partnership is an experience which can render both student and staff participants vulnerable. It takes us outside of our comfort zones. It requires staff to relinquish significant control and power to students, and requires students to accept this. Accepting this control and power may be intimidating and requires courage from students as well as staff. Both elements of the partnership need to work together to develop trust in one another, be open to new ideas, and learn together to be comfortable in the uncertainty that working in their partnership brings. Some people may be hesitant here as they consider this to mean that a student-staff partnership team would have to go along with ideas from the students. Rather, partnership is about breaking down the barriers so that ideas from everyone are given due consideration no matter whether they are from a staff member or a student. Staff bring their expertise on the project in the same way as students do – it is this different expertise coming together which allows enhancement. So the challenge is to stop thinking of each other by our roles and consider ideas in relation to their potential for the project.

5. Focus on what worked and what



you learnt, as well as what didn't appear to go to plan

The majority of the literature I had read up to the start of the project instilled the virtues and benefits of working in partnership, elaborating on wonderful success stories of how such practice had significantly enhanced the student and staff experience in a wide variety of ways, but with limited discussion of the challenges of working in this way. This reflected the field being relatively new at the time. There are many more varied examples emerging in the literature now (eg Mercer-Mapstone 2017; Ntem & Cook-Sather 2018). However, it meant that when this project had not gone in the way that we had expected it to, I was disappointed. It took some time and analysis to reflect on the experience and recognise that we had learnt much about different ways of approaching partnership by going through a project which had experienced challenges. A project may not always go smoothly; indeed, if you find yourself writing a reflective piece about the process a few years later, there is much more to talk about if it did not!

Concluding reflections

It is not uncommon for new innovations in learning and teaching to experience significant challenges the first time round. Whilst the process of these partnerships might not have been what we originally envisaged, this did not lessen the impact of the project in terms of the production of four successful modules, and also in terms of the significant learning that staff and students across the department experienced in partnership working. We learnt the need to have realistic expectations as to what it is possible to focus on within the context of competing pressures and limited time and that in order to develop the partnership relationship it is important that all partners agree to reflect on the process of partnership as the relationship progresses,

as well as on the outcomes/output of that partnership. Undertaking partnership is messy with no single approach that will be effective in all cases. The willingness to work in an uncertain context may be welcomed by some but is uncomfortable for others. Whilst this first experience of leading a cross-department student-staff partnership project did not turn out as anticipated it has had a positive longer term impact on perceptions of partnership in the department. The experience of being involved in the re-design of modules led to reduced resistance and emerging partnership practices throughout the department. Students as partners continues to grow and has become the expected norm in relation to running open days for potential applicants, and enhancing student employability, and it is becoming more and more common for students and staff to adopt partnership approaches towards teaching and learning.

References

- Bovill, C. (2017). A framework to explore roles within student-staff partnerships in higher education: which students are partners, when, and in what ways? *International Journal for Students as Partners* 1(1): 1-5. <https://doi.org/10.15173/ijsap.v1i1.3062>
- Bovill, C., & Bulley, C. J. (2011). A model of active student participation in curriculum design: exploring desirability and possibility. In C. Rust (Ed.). *Global theories and local practices: institutional, disciplinary and cultural variations* (pp. 176-188). Oxford: Oxford Brookes University, Oxford Centre for Staff and Learning Development.
- Cook-Sather, A., Bovill, C., & Felten, P. (2014). *Engaging students as partners in teaching & learning: A guide for faculty*. San Francisco, CA, USA: Jossey-Bass.
- Dunne, E. (2011). Foreword, in Dunne, E. & Zandstra, R. (2011) *Students as change agents - new ways of engaging with learning and teaching in higher education*. (pp. 4-5). Bristol: A joint University of Exeter/ESCalate/Higher Education Academy Publication. http://escalate.ac.uk/8064_
- Healey, M., Flint, A., & Harrington, K. (2014). *Engagement through partnership: Students as partners in learning and teaching in higher education*. York, UK: Higher Education Academy. Retrieved from <https://www.heacademy.ac.uk/knowledge-hub/engagement-through-partnership->

students-partners-learning-and-teaching-higher

[accessed 17th June 2019].

Healey, M. & Healey, R.L. (2018). 'It depends': Exploring the context-dependent nature of students as partners practices and policies, *International Journal for Students as Partners*, 2(1). <https://doi.org/10.15173/ijsap.v2i1.3472>

Healey, R. L., Lerczak, A., Welsh, K. & France, D. (2019). By any other name? The impacts of differing assumptions, expectations and misconceptions about student-staff 'partnerships'. *International Journal for Students as Partners* 3(1): 106-122. <https://doi.org/10.15173/ijsap.v3i1.3550>

Higher Education Academy (HEA) (2015). *Framework for Student Engagement through Partnership* (HEA: York). www.heacademy.ac.uk/sites/default/files/downloads/student-engagement-through-partnership-new.pdf [accessed 31st May 2019].

Ntem, A., & Cook-Sather, A. (2018). Resistances and resiliencies in pedagogical partnership: Student partners' perspectives. *International Journal for Students as Partners*, 2(1): 82-96. <https://doi.org/10.15173/ijsap.v2i1.3372>

Mercer-Mapstone, L., Dvorakova, S. L., Matthews, K., Abbot, S., Cheng, B., Felten, P., Knorr, K., Marquis, E., Shammass, R., & Swaim, K. (2017). A systematic literature review of students as partners in higher education. *International Journal for Students As Partners*, 1(1). <https://doi.org/10.15173/ijsap.v1i1.3119>

Wellens, J., Bernardi, A., Chalkley, B., Chambers, B., Healey, R.L., Monk, J., and Vender, J. (2006) Teaching geography for social transformation, *Journal of Geography in Higher Education* 30(1): 117-131.

Williamson, M. (2013). *Guidance on the development and implementation of a student partnership agreement in universities*. Edinburgh: Student Participation in Quality Scotland. Retrieved from www.sparqs.ac.uk/institute.php?page=128 [accessed 17th June 2019].



Ruth L. Healey is an Associate Professor in Pedagogy in Higher Education at the University of Chester, UK. In 2016, she also joined Healey HE Consultants. She is a Senior Fellow of the HEA, a National Teaching Fellow and an inaugural Fellow of the International Society for the Scholarship of Teaching and Learning. Email: r.healey@chester.ac.uk

Counting all backgrounds: How could accounting students navigate an interdisciplinary module?

Jane Neal-Smith and **Philip Linsley**, from *The York Management School*, discuss the idea of incorporating an interdisciplinary approach into a postgraduate 'Accounting & Risk' module.

The Management School is moving towards embedding the idea of interdisciplinary teaching across its programmes, and this has provided the impetus for us to question both what interdisciplinary teaching means and how we might operationalise this for students who choose the Accounting & Risk module option. This reflective account of the feedback we received explores options and considers ideas about how we plan to draw on students' a priori knowledge of other disciplines and how that will enhance their learning.

The 'Accounting & Risk' module is an option module on the MSc Accounting and Financial Management degree delivered to c.130 students. The module focuses on examining how different theories of risk can provide alternative understandings of accounting and accounting issues such as audit failures, the management of risk, and communicating financial risk in annual reports. The theories of risk are drawn from psychology, anthropology and sociology. Therefore, the module could possibly be understood as an exemplar of interdisciplinary teaching; however, whilst the students enjoy the module and give it good feedback, our experience in delivering the module suggests they may see it in more linear terms of being about accounting and risk. So whilst staff

might wish to embrace the opportunity to deliver interdisciplinary teaching, it is unclear whether the students would feel similarly. The majority of the students come from a traditional accounting/finance/economics background so are less likely to have encountered subjects like anthropology in an academic context, although they may have had some prior exposure to psychology or sociology. This makes it challenging for students to really 'get to grips' with theories that derive from a wide range of disciplines within one term's worth of module delivery.

At the conference

Presenting this module at the learning and teaching conference, we raised a number of issues: what does interdisciplinary mean? How many disciplines count? Who should judge which theories should be deemed significant enough to warrant inclusion in the module? Does drawing on what is deemed alternative perspectives dilute a traditional discipline and does this enhance or detract from the subject matter? At what point do the learning outcomes and module aims separate from the core subject and from a quality standpoint, when does accounting cease to be about accounting? It is apparent that we need a divergence of thought and yet also to continue to uphold the rigorous standards necessary within a module. Moreover, we are aware that adopting a blinkered perspective restricts the creation of knowledge and the possibility of encouraging students as producers or partners.

Two ideas stemmed from the feedback received at the conference. The first, which is a simple fix, is to change the assessment. Currently the module is assessed through a 3,000 word assignment examining and critiquing

alternative perspectives (theories) of risk and focusing on a case study. The second is to radically change the operation of the seminars to utilise the students a priori knowledge regarding other disciplines. This could be enhanced through the adoption of carefully selected pre-module reading of a range social sciences literature. Students can find reading literature from other disciplines akin to having to learn a new language and this second approach might help in a learning process which also demystifies disciplines new to students.

We propose to fully immerse ourselves in the ideology of interdisciplinarity and celebrate this through the formation of a seminar buddy system whereby students actively utilise their existing, prior knowledge to enhance their seminar experience. Students will be asked to form groups where there is a varied prior experience – either academic or cultural – of different disciplines and to draw on this collectively to facilitate a deeper understanding of the module. It will be in students' best interests to form groups with a wide range of backgrounds. We argue that this will allow groups to draw on one another's knowledge and to explore different perspectives in the safe environment of a seminar. This will enrich the learning experience and encourage traditional accountancy students to move outside their academic comfort zone and embrace interdisciplinarity.



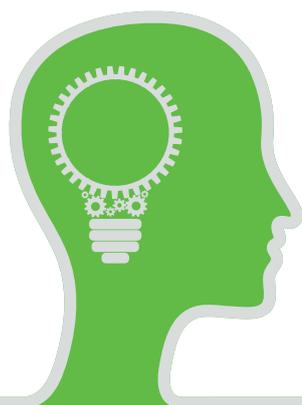
Jane Neal-Smith is a lecturer in the York Management School. Her PhD is in industrial psychology examining organisational life for women airline pilots.

She teaches in the areas of organisational behaviour, risk management and research methods. She has experience in running action learning sets for students and senior management in high risk industries.

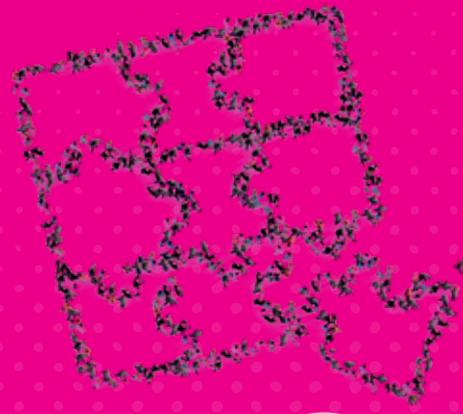


Philip Linsley is Professor of Accounting & Risk and Deputy Dean in the York Management School. Philip teaches in the areas of accounting, finance and risk. His research interests

are risk-related and include investigating risk disclosure in annual reports, risk and culture, and risk management. He is particularly interested in applying the ideas of Mary Douglas to the accounting and finance field.



LEARNING AND TEACHING CONFERENCE



Many of the articles in the present edition of *Forum* magazine emerge from the University of York's annual Learning and Teaching Conference, which took place in the summer of 2019.

With hundreds of delegates from across the University and a good number of externals, the stage was set for rich, engaging dialogue across a real range of fascinating sessions – as the materials throughout this issue amply testify. Recordings of all of the conference workshop sessions, along with slides and other materials, are made available to University of York staff via the Learning and Teaching Forum blog: <https://yorkforum.org/the-annual-lt-conference/2019-conference/>. If you weren't able to join us for the conference but your interest has been piqued by this issue of *Forum* magazine, do visit the blog to find out more.

One highlight of the day was the many posters on show, with those presenting doing a great and tireless job of talking through their projects with conference attendees. Many congratulations to the winners of the conference poster competition, pictured: Pen Holland, for 'Catastrophic, a card game supporting systems thinking in Biology' (left), and Fabien Pecot, for 'Performance in Live Case Studies: the role of uncertainty' (right).

Keep a lookout for more information on the next Learning and Teaching Conference, which will take place on 13 March 2020.





Introduction of Peer Assisted Learning (PAL) for Life Sciences

Set Chong and her co-authors discuss the development of a PAL scheme in Biology



Introduction

Peer learning is an intrinsic form of learning that mostly occurs naturally and informally. It is particularly effective when incorporated into the curriculum with planned relevant activities (Saunders 1992) that provide students with the opportunity to learn from each other in and beyond the classroom. There are several models of peer learning but the most common model describes the use of more experienced students facilitating the learning of more junior students. This form of peer interaction has been shown to benefit both groups (Boud, Cohen, and Sampson 2001) and provide better integration into the learning community (Keenan 2014). There are other, more pragmatic, motivations for introducing peer learning including as a response and adaptation to increasing student numbers and higher staff workloads as a result of changes to the HE sector. The introduction of peer learning enhances the overall experience of students (Keenan 2014) from across different cohorts, complements the staff-led support that students receive and can improve staff-student ratio (Worthington *et al.* 1997).

Background and Approach

In the 2018-19 academic year, we introduced peer learning to our Stage



1 Molecular Biology and Biochemistry (MBB) module (BIO00004C), joining the second phase of a university-wide pilot scheme which introduced peer learning to the University of York. The scheme is led by Tamlyn Ryan and colleagues in the Academic Support Office (ASO) and was started in 2017-18. At York the scheme is referred to as Peer Assisted Learning (PAL); other names for peer learning include PASS (Peer Assisted Study Sessions) (Miller, Oldfield, and Bulmer 2012) (Fostier and Carey 2007).

The MBB module is a challenging module that is compulsory for the entire first year cohort in the Biology Department. Admissions criteria vary

between the programmes offered within the Department, creating a disparate student cohort with varying academic backgrounds. Increasingly a significant minority of students have insufficient chemistry knowledge to cope with the content of this module, which relies heavily on a good understanding of chemistry. In addition, student interest and level of confidence in chemistry varies. Student feedback indicates that the lack of prior chemistry training makes this module particularly challenging: "As I did not take A-level chem [sic] I really struggled throughout the whole module, there was basic chemistry which I didn't understand which made the lectures very difficult to follow,"

and “*I found the module rather challenging, especially as I hadn’t done A level chemistry.*” Over the years, we have introduced several methods to support student learning for this module including staff-led Support Chemistry sessions (led by Dr Amanda Barnes) and more recently creation of an online Life Sciences Skills Hub where more basic chemistry material is provided. The PAL sessions introduced this year were designed to complement other support provided for the MBB module.

Research suggests that for PAL to be successful it should not be perceived as remedial (Keenan 2014). Therefore, PAL was made available to all students and integrated into the curriculum with one-hour, weekly sessions timetabled for lunchtime when most students across all year groups are available; however, attendance was optional. These sessions were coordinated and attended by a PAL Coordinator (Sarah Tindall, a PhD student in the Department) and several PAL Leaders (students from Stages 2-3 who had already taken the MBB module), but were not attended by the Academic Module Lead to reinforce the student-led aspect of this approach. Stage 1 students were divided into groups of 6-10 and each group was assigned two PAL Leaders who led discussions. As these sessions are not compulsory, attendance varied from between 11 to 63 students/week (out of 312 students registered on the module).

Preparation and organisation of PAL sessions

PAL COORDINATOR

The role of PAL Coordinator is a challenging yet rewarding task and an excellent way to increase confidence in both teaching and communicating with others. In particular, it provides the opportunity to learn how to explain difficult concepts through different activities and provides teaching experience through the planning of questions and other activities to help first year students expand their knowledge. The Coordinator additionally benefits from getting to know the students, PAL Leaders and staff involved in the module, which integrates the PAL Coordinator into the local learning community.

The Biology PAL Coordinator supported the general organisation of PAL sessions and debrief meetings. Initially this involved helping to recruit PAL Leaders, scheduling PAL Leader rota, and organising the first term of PAL sessions. In subsequent terms the sessions were predominantly led by PAL Leaders, but organised by PAL coordinator.

During PAL sessions the Coordinator

helped to answer any particularly challenging questions – making it clear that there is often more than one correct answer and not all answers are known. Each PAL session was followed by a timetabled hour-long debrief attended by the Module Lead, PAL Coordinator, PAL Leaders and a member of the ASO team. The feedback discussed in the debriefs was consolidated and summarised by the Coordinator who also ensured that the planned activities for subsequent sessions were implemented, and addressed any feedback from students and PAL Leaders regarding the session. Attendance and a summary of the debrief meeting were passed to the ASO by the PAL Coordinator.

In addition, the Coordinator attended termly meetings with the ASO team and PAL Coordinators from other departments to discuss successes and problems arising in PAL sessions. These meetings were useful for sharing knowledge but also for meeting those on other courses.

PAL LEADERS

Over 45 stage 2 and 3 students from the Department of Biology and a further 21 from the Department of Chemistry initially volunteered to become PAL Leaders following an email to all latter year students outlining the requirements of the scheme. PAL Leaders were asked to participate in a minimum of 2 sessions. PAL Leaders were trained centrally by the ASO team, as well as in the Department by the Module Lead and the PAL Coordinator, prior to the start of the first session in Week 2 (Autumn 2018). The first few PAL sessions were planned by the PAL Coordinator and Module Lead in the summer of 2018. An initial meeting with the PAL Leaders at the start of the Autumn term 2018 focused on reviewing these plans, discussing strategies for engaging their peers and increasing their confidence. The format for the MBB PAL differed from the other University pilot projects, where a smaller number of students were expected to participate and mentoring was on a more one-to-one basis. By the time the scheme started,

approximately 40 PAL Leaders remained engaged in the scheme. This reduction in numbers was mainly due to lack of time particularly for Stage 3 students. Of these, 27 participated in 4 or more sessions and 5 attended more than 10 PAL sessions. The number of PAL Leaders attending each session varied between 9 and 27. Due to timetabling restrictions many of the Chemistry volunteers were unable to participate in the scheme with only 1 chemistry PAL Leader attending several PAL sessions.

The debrief meetings were vital for evaluating the previous session and included feedback from both Stage 1 students and PAL Leaders. In addition, the debriefs were used to plan the following sessions and the PAL Leaders were instrumental in drawing on their own experiences to plan and steer the direction of the MBB PAL. For the later sessions, PAL Leaders were provided with the relevant lecture slides in advance and developed activities based on this content (eg Building DNA models, Nobel Prize timeline, match the amino acid flashcards). During the PAL sessions, direct links were made to the learning outcomes of MBB lectures.

As the PAL Leaders confidence grew, they took a much more active role as partners in the development of teaching resources, writing workshop-style questions, developing activities and games to make biochemistry more fun, planning and even leading sessions. Feedback from our PAL Leaders suggests that they found the experience invaluable and highly rewarding, changing their own perspective and making them feel more integrated within the Department.

REFLECTION BY PAL LEADERS

By participating in PAL, as a PAL Leader, students experienced MBB for a second time. This was invaluable to their own learning and allowed them to develop other skills at the same time:

Knowledge Consolidation and Resource Planning: the PAL Coordinator and groups of PAL Leaders would often actively combine their knowledge and



As the PAL Leaders confidence grew, they took a much more active role as partners in the development of teaching resources



brainstorm an answer to a student's question, which made not having the answer to each question no problem at all. Discussions provided the opportunity to further Leaders' problem solving skills when presented with difficult, yet insightful, questions from students as well as allowing PAL Leaders to develop their strengths in working in teams. Development of activities allowed for greater consolidation of PAL Leaders' knowledge as they realised that fully understanding a topic is key for developing resources to help others. Students often asked unrelated questions regarding module choices, studying for a masters, revising techniques, etc. The Leaders and Coordinator provided different years of expertise (Stage 2 to PhD), variable disciplines (Biology, Biochemistry, Biomedical sciences) and multiple strands (BSc, MSc, BSc with industry, etc) which allowed PAL sessions to provide a plethora of experiences that would otherwise be rare to find in one place.

Improved Confidence: Not knowing what to expect made the first session challenging to plan and it did not run smoothly; however, the sessions quickly improved as knowledge and resources were accumulated. Initial concerns included time commitment (eg planning each session) and being caught out with questions Leaders were unable to answer. As the weeks passed, the PAL Leaders grew in confidence. Some PAL Leaders appreciated the degree of socialisation participants and Leaders achieved. PAL helped Leaders to feel more part of the department and build a larger network than they would have otherwise. One PAL Leader found this interaction useful in collecting enough signatures to successfully run for Departmental Student Representative. Being trusted by staff to deliver PAL sessions was a massive confidence boost. Leaders got to know, and befriend peers they had never spoken to prior to the scheme. Leading sessions in pairs for a similar group each week allowed PAL Leaders to familiarise themselves with each other and allowed the students to become comfortable asking and answering questions, without the aid of notes or encouragement. PAL Leaders who participated regularly and Stage 1 students developed an atmosphere of familiarity which was key in making PAL successful. With this closeness, PAL produced a relaxed learning experience in which both Leaders and participants could thrive. Both Leaders and students asking and receiving advice is one of unique aspects

of PAL. The divide between student and "teacher" was very narrow, but enough to provide a welcoming yet rewarding learning experience.

Motivation: Each week Leaders perceived that they were genuinely aiding students, which provided the motivation to return in subsequent weeks. Leaders felt that it was not often that students have the chance to make contributions to a department. The knowledge that the resources they contributed will be used and built on year after year made the experience even more rewarding.

Teaching Experience: Throughout the year, the PAL Leaders developed their ability to deliver material in a creative, yet informative, manner. For example, one Leader noted that when comparing eukaryotes and archaea, it was more productive to take a visual approach and have students draw structures to help identify differences, rather than trying to trigger students' memories with related facts, which was well received. The planning process provided excellent practice and insight into the development of educational resources; this is invaluable experience, especially for PAL Leaders hoping to teach in future.

Overall PAL experience was important in recognizing skills that PAL Leaders already had and garnering more along the way. PAL is a unique experience for both Leaders and students with seemingly only an hour at lunchtime to lose and a lot more to gain.

Evaluation

POST-IT NOTE FEEDBACK

At the end of every PAL session, students were provided with post-it notes to provide feedback on what they felt went well, and what could be improved. These were reviewed in the debrief and provided real-time student feedback that was instrumental in shaping planning and strategy for the following sessions.

The majority of the feedback was positive and highlighted that the PAL scheme was useful for enhancing module-specific knowledge; the PAL Leaders were "enthusiastic" and "approachable"; and the small group setting made students feel comfortable to contribute and ask questions. In addition, this feedback emphasised other benefits of PAL for example, "good to talk to others on course" and "for advice on future module choices".

A number of improvements were suggested, as the feedback was reviewed after each session, we were able to adapt teaching based on this instant feedback. For example, initially discussion-style questions were displayed on the main screen; however,

students commented that they would prefer "more questions to test knowledge" or "a worksheet to go through". Therefore, we introduced practise questions into some PAL sessions. Students much preferred this approach and commented that "the use of questions has improved".

EXAMPLES OF STUDENT COMMENTS ON THE POST-IT NOTES

"more worksheet questions to work through"

"provide more questions to help go over and test understanding."

"[useful] helping me understand the lectures and giving context to equations [covered in the lectures]"

"[PAL was] good because it brought up questions I had not thought of"

STUDENTS LIKED THE GAMES THAT PAL LEADERS DEVELOPED

"...[it was] good making an active session with a game"

" was useful to recap and fun playing games whilst learning"

[Halloween] sweets were an important addition to this learning and useful as model for Michaelis-Menten [kinetics]."

END OF TERM STUDENT FEEDBACK

We did not include a specific question in the end of term departmental student evaluation surveys for the MBB module concerning PAL; however, students highlighted this scheme several times in their replies with many positive comments as exemplified below:

EXAMPLES OF STUDENT COMMENTS IN THE END OF TERM STUDENT EVALUATION SURVEYS (2018-19)

"...the PAL sessions were amazing and helped so much!"

"The Pal sessions for this module were very helpful and provided good opportunities to talk to second-year students and get their advice on other aspects such as exams."

REFLECTION BY ISY MARTIN STAGE 1 BIOLOGY STUDENT

PAL sessions were an essential part of my learning of the MBB module content.

PAL leaders provided us with questions based on the lecture content learnt in MBB that week, everyone contributed the information they could remember then came up with a consensus answer which a PAL leader was then able to fill the gaps in, correct or confirm.

For example having covered some metabolism content in lectures one of the synoptic questions we were asked to answer by PAL leaders was: 'how are glycolysis and the TCA cycle compartmentalised in a eukaryotic cell?'

It was a fun, painless and easy way to revise content, as you acquired the bits of knowledge that the others in your group contributed, and you have the opportunity to test the knowledge you've already learnt.

In the sessions the questions which were provided and answered covered all the most essential parts of the lectures, meaning you understood the most fundamental principles of the lecture content.

It was also a great opportunity to ask experienced 2nd and 3rd year PAL leaders questions about content that you did not understand in the lectures and get that content nailed. In my experience, access to these second and third years also made me feel more a part of the department, which was supplemented by the fact that the sessions were a fantastic method of meeting other first years doing the same module (on the same or other courses within the department), especially as the sessions were based on group work.

Some sessions were more useful than others as it depended on the PAL leader assigned to your group, but the leaders tended to change from week to week so continuing to attend paid off.

To those who have not attended a PAL session before my greatest piece of advice in order to get the most out of it is don't be shy to put forward information that you think you remember from lectures but are not entirely certain of, because often you actually absorbed more of the content than you think from lectures, also if no one puts forward potential ideas of how to answer the question then you can never reach a group consensus!

students who are already motivated and engaged with their course and not just those struggling with course content.

Final Perspective

PAL provides managed learning opportunities for both Stage 1 students and Stage 2 and 3 PAL Leaders that enhance subject understanding but also improve other transferrable skills. The various feedback methods used in this process point to PAL being an effective way of establishing a learning community where deeper learning and understanding is fostered especially for PAL Leaders (above). Engaging students who are not naturally motivated remains a challenge. However, the introduction of PAL as a support mechanism for MBB is a useful way of alleviating some of the anxiety associated with this module and overall provides a positive experience for all those involved. For this interaction to be effective, PAL Leaders need to attend PAL sessions regularly. Implementation of a successful PAL scheme is time consuming, and requires organisation, planning sessions in advance, and coordination of PAL Leaders as well as extra contact with Stage 2 and Stage 3 students. However, the PAL Coordinator's role significantly alleviated the extra burden from the Module Leader, and the extra interaction with Stage 2 and 3 students in an informal setting proved to be a highly enjoyable and valuable experience for all those involved.

References

- Boud, David, Ruth Cohen, and Jane Sampson. (2001). *Peer Learning in Higher Education: Learning from & with Each Other*. Psychology Press.
- Fostier, M., and W. Carey. (2007). Exploration, Experience and Evaluation: Peer Assisted Study Scheme (PASS), Sharing the Experience of The University of Manchester: 480 1st Year Bioscience Students. *Science, Learning and Teaching Conference*, 19–20.
- Keenan, Chris. (2014). Mapping Student-Led Peer Learning in the UK. York: Higher Education Academy. https://www.heacademy.ac.uk/system/files/resources/peer_led_learning_keenan_nov_14-final.pdf.
- Miller, Valda, Elwyn Oldfield, and Michael Bulmer. (2012). Peer Assisted Study Sessions (PASS) in First Year Chemistry and Statistics Courses: Insights and Evaluations. *Proceedings of The Australian Conference on Science and Mathematics Education (formerly UniServe Science Conference)* 10 (0). <https://openjournals.library.sydney.edu.au/index.php/IISME/article/view/6493>.
- Saunders, Danny. (1992). Peer Tutoring in Higher Education. *Studies in Higher Education* 17 (2): 211–18.
- Worthington, Andrew C., Jens Hansen, John Nightingale, and Ken Vine. (1997). Supplemental Instruction in Introductory Economics: An Evaluation of the University of New England's Peer Assisted Study Scheme (PASS). *Australian Economic Papers*, 69–80.

Further Evaluation of PAL

Other means of assessing the effectiveness of PAL include reflective and exit surveys. The results of the Autumn term exit survey showed that few students used PAL for improving their revision techniques (Figure 1, bar 8) or time management (bar 9), but the majority of respondents found PAL useful for improving module knowledge (bar 11), their own understanding (bar 15) and understanding course material (bar 5).

Our Spring/Summer exit survey had low participation (n=8) possibly due to the timing of the survey which clashed with the Summer Term assessment period. However, 85% of those who responded agreed/strongly agreed that PAL increased their opportunity to be part of a learning community, 75%

agreed/strongly agreed that by discussing concepts or explaining them to others, they improved their own understanding of the subject and that PAL helped build their confidence in the subject, and 100% agreed/strongly agreed that PAL provides a place to improve their understanding of course material.

Exam Performance

Analysis of total mean exam mark (%) of students attending 3 or more PAL sessions showed that this group significantly outperformed (64.6%) those not attending PAL (56.4%) (*Two-sample t-test; P<0.0014*). Students attending PAL outperformed their counterparts who did not attend PAL in other modules which were not supported by PAL (though this result was not statistically significant). This indicates that PAL is attracting

AUTUMN STUDENT EXIT SURVEY

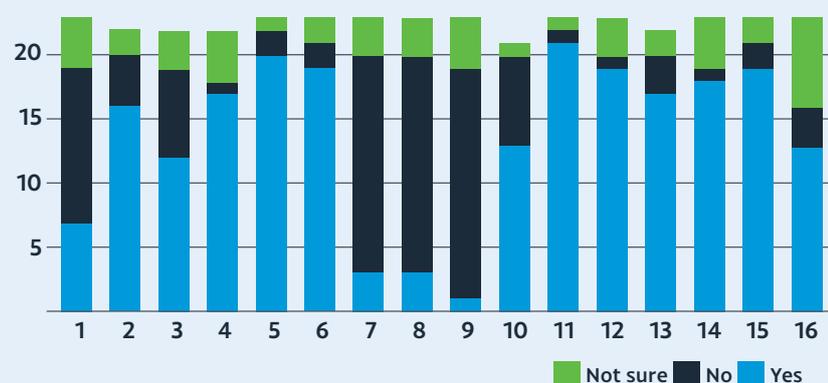


Figure 1 The number of students responding yes, no, or not sure to 16 questions in the exit survey. Key for Autumn Student Survey graph is shown in Table 1.

Table 1. Key for graph of Autumn term survey

1. Helped with transition to university
2. I found information about the course
3. I got to understand better what is expected of me
4. I became less nervous because I knew there was support if I had any problems
5. It's a place to test/improve my understanding of course material
6. It's a place to evaluate how I am doing by listening to others' problems/questions
7. Finding information (which books to use and how; library tour)
8. It helped me improve my time management and organisation skills
9. It helped me improve my approach academic problem/questions
10. It helped me improve my knowledge of MBB
11. I feel comfortable asking questions
12. The Leaders were helpful
13. The Leaders were approachable
14. By discussing concepts of explaining them to others, I improved my own understanding
15. I found out more useful information from the leaders about my course that I could have done on my own

PAL FRAMEWORK

Peer-Assisted Learning (PAL) is an excellent opportunity to nurture a closer departmental learning community. To support the development of peer-assisted learning groups in your departments, the PAL Project (Learning Enhancement team) can provide:

- Presentations and information about PAL for staff and students;
- Consultations about the logistics of establishing a robust PAL scheme;
- Training for PAL Leaders;
- Initial close support until your PAL scheme is established;
- Support with the evaluation of the PAL scheme.

If you would like more information, please email pal-enquiries@york.ac.uk



Setareh Chong is a Lecturer in Biochemistry in the Department of Biology and the Biochemistry Programme Lead. She has been working on improving student experience and facilitating student learning through e-learning and peer interaction. She is the Module Lead for the Molecular Biology and Biochemistry module. setareh.chong@york.ac.uk



Sarah Tindall is a second year PhD student in the Department of Biology and the PAL coordinator for the Biology department PAL scheme.



Emmah Younis was a Stage 2 PAL Leader and has started Stage 3 BSc in Biochemistry in the 2019/2020 academic year.



Harriet Bywater was a Stage 2 PAL Leader and has started Stage 3 Biomedical Sciences in the 2019/20 academic year. She is also the incoming Biology Department Rep.



Mik Santos was a Stage 3 PAL Leader and is now a fourth year Biochemistry Integrated Masters student in the Department of Biology.



John Parry was a Stage 2 PAL Leader and has started Stage 3 BSc in Biology in the 2019/2020 academic year.



Isy Martin was a part of the MBB PAL scheme as a Stage 1 Molecular Cell Biology student.



Tamlyn Ryan is Academic Skills Adviser (WP, Access and PAL) with the Academic Support Office and is the Project Lead for Peer Assisted Learning. She is interested in supporting students, staff and departments build effective learning communities. Tamlyn also works on several Widening Participation initiatives, including Next Step York, Pathways to Medicine and a project aimed at improving the mature student experience. tamlyn.ryan@york.ac.uk

Treading in the footsteps of giants

Jane Neal-Smith and Gillian Bishop, of the York Management School, discuss the creation of communities of practice for teaching and scholarship academics.

Teaching and scholarship staff (T&S) are encouraged to write for publication but are generally not 'REFable'. Rather than pedagogical papers being seen as 'the other' and defined by what they are not, we wanted to celebrate our scholarship and encourage our teaching and scholarship colleagues to be inspired by their research active colleagues through publishing as well as practicing their scholarship. As part of our citizenship we organised a one day writing retreat for T&S staff as per Murray and Newton's (2009) model.

This paper explores the journey of an academic writing retreat from its beginnings couched in a shed analogy through its delivery in Ampleforth Abbey to the inception of action learning groups to support T&S colleagues. The choice of venue was of particular importance: during our recorded dialogue the idea of spirituality, peace and tranquillity arose. We needed to go somewhere away from work and home which could act as an inspiration for writing. The nostalgic image of times long ago, ideas of a monastic community walking their solitary paths, striving for goodness and crafting great works, held a spiritual appeal.

The day was facilitated by an experienced 'retreater' and followed Murray and Newton's model of pursuing initially free writing and then chunks of time set aside for writing. The aim of the session was to achieve a piece of written work but also to create and develop the idea of a community of practice within T&S colleagues.

Our conversations started quite generally in an informal setting to develop clarity in the planning and implementation process. Our idea came to us in the analogy of a 'shed' to explain how it sometimes felt to be an academic with a strong interest in pedagogy. At times we find that we have ideas about developing our research in teaching, learning and scholarship but that finding time and space to take this any further never quite happens – just like having a shed where we dump items that

may have a use one day but never quite finding that use or finding that day.

When reflecting on our own practice and in a sense taking the position of students as we learn (to write), we developed the idea of using inspirational places as the venue for writing retreats. Emphasising the importance of blocks of silent writing space and the necessity of initial free writing to stimulate the process, we proposed to expand the model by amalgamating Lave and Wenger's (1991) communities of practice through action learning sets (Revans, 1983) to include how the learning environment is influential to the process of academic writing, exploring the significance of spiritual places for helping T&S staff develop scholarly activity.

Both of us have previously worked in action learning sets and this idea of engendering communities of practice using dialogue (Bohm, 1980) in a supportive environment really appealed. We wanted to make some additions to the original model, using a spiritual retreat to clear out our heads and to acknowledge the importance of that spiritual environment in turning the contents into good research and scholarly outputs. Through a shared understanding of the purpose of a retreat which followed a model of best practice, and with participants being mostly successful in achieving their objectives, a community was born. Mirroring a self-help group, staff supported one another and worked in solitude soaking in the peace and quiet afforded by the views at Ampleforth. The lack of distractions and the hallowed atmosphere created at the Ampleforth retreat provided the perfect setting to indulge in focused periods of creativity.

Our proposal to front and rear load the academic writing retreat gave it a clear purpose for T&S colleagues developing their pedagogic writing. The addition of an action learning set enabled staff to gain support from one another in a safe and confidential setting. In conclusion, then, the process we followed began in a dialogue about crowded sheds, evolved into seeking solitude and inspiration, and flowered in

the creation of communities of practice through reflection on our own learning which could lead to publishing in a pedagogical sphere. Our heads were full of stuff that we either didn't use, need or even know if we wanted anymore but now feel cleansed by having taken part in a spiritual writing retreat.

References

- Bohm, D. (1980). *Wholeness and the Implicate Order*, London: Routledge & Kegan Paul
- Cunliffe, A. L. (2002). Reflexive dialogical practice in management learning. *Management Learning*, 33(1), 35-61. doi:10.1177/1350507602331002
- Cunliffe, A. L. (2004). On becoming a critically reflexive practitioner. *Journal of Management Education*, 28(4), 407-426.
- Lave, J. and Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: Cambridge University Press
- Murray, R., & Newton, M., (2009). Writing retreat as structured intervention: margin or mainstream?. *Higher Education Research & Development*, 28:5, 541-553, DOI: 10.1080/07294360903154126
- Raelin, J. A. (2002). "I don't have time to think!" versus the art of reflective practice. *Reflections* (Cambridge, Mass.), 4(1), 66; 66-79; 79.
- Revans, R. W. (1983). Action learning: Its terms and character. *Management Decision*, 21(1), 39-50. doi:10.1108/eb001310



Gillian Bishop is a Lecturer in TYMS, her PhD is in pedagogy for international students learning to reflect and her research interests are in critical pedagogy, specifically action learning, developing dialogue and storytelling. Gillian found that attending writing retreats in peaceful and atmospheric locations played a key part in developing her academic voice and completing her PhD.



Jane Neal-Smith is a lecturer in the York Management School. Her PhD is in industrial psychology examining organisational life for women airline pilots. She teaches in the areas of organisational behaviour, risk management and research methods. She has experience in running action learning sets for students and senior management in high risk industries.

LEARNING TOGETHER: Building a community of learners within and beyond prison bars



Rachel Vipond discusses how a learning community between students inside and outside prison has been created.



This year, the Department of Social Policy and Social Work launched the module Social Policy, Crime and Criminal Justice, in conjunction with HMP Buckley Hall. This module brought together third year undergraduate students studying a range of degree programmes at the University of York, including Social Policy and Criminology, to learn alongside prison-based students about key aspects of social policy and how governmental decisions affect all our lives.

The module provides students who are both 'inside' (those in custody) and 'outside' (those at university) with a unique experience that involves high levels of reflection not only on the course materials but also on the process and meaning of learning. The distinctive element of the module is its ability to break down barriers created by social division, giving all students involved an insight into the lived experience of their peers. Through

collaboration with Lindsay Coomer, from the People and Organisational Development Team, we were able to create a module and a learning experience which brought people together who would normally not interact.

Two worlds apart?

Despite seeming as if they are worlds apart, universities and prisons are both institutions which strive to be individually and socially transformative. Both institutions aim to invest in people and encourage individual growth. Educational connections between universities and prisons are not new: in the USA the Inside/Out Prison Exchange Programme has been running in a number of states since 1997 (see Davis and Roswell, 2013). The model of bringing students from local universities into prisons to jointly learn a subject in a shared learning experience has expanded in recent years, with Durham University

being the first in the UK and Europe to provide such an opportunity for their Criminology students. Such a successful partnership between Durham University and HMP Frankland inspired a number of other partnerships to form, with various models being created including the ever-expanding Learning Together model established by the University of Cambridge. It is all of these partnerships, each with differing modes of delivery, which inspired the creation of our own partnership with HMP Buckley Hall. Our partner prison is a category C male institution, which has a regime focused on training. It is located on the outskirts of Rochdale and served as the site for our pilot Social Policy focused module.

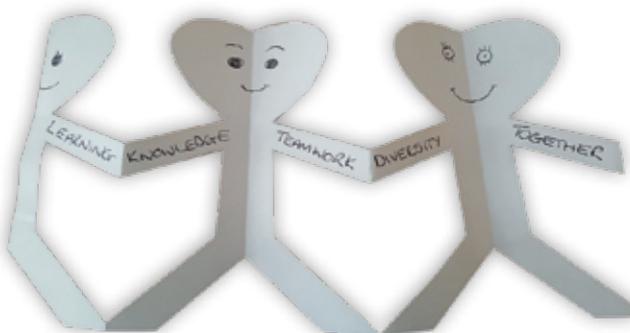
Student Recruitment

Students from both institutions were recruited to the module identically through an application and interview process. The

module design from the outset was to provide as much parity between the two sets of students as possible; this meant that we tried to make the process of recruitment, despite institutional barriers, the same. Parity was important, as we did not want to further disadvantage individuals who were already disadvantaged by the nature of being in prison. We were not looking for the best academic students nor the 'model prisoner'; priority was given to students who could demonstrate a dedication to personal development and had values akin to those of the module (openness, willingness to listen and recognition of potential). We wanted a mix of students from different backgrounds, ages and other social demographics so that we had a range of opinions and experiences in the classroom.

Underpinning pedagogy

The module and the learning experience are embedded within a transformative learning pedagogy, which seeks to create a learning space where the focus is upon dialogical and experiential engagement between the students and staff from both institutions. Through prioritising shorter, summative lectures lasting no more than twenty minutes, the majority of the two and a half hour session is spent engaging the students in sharing their experiences, thoughts and opinions on a range of different topics and issues. The learning community formed between the 15 students who participated in the module prioritised the sharing of students' knowledge and life experience through facilitator-led activities. The role of the facilitator (Lindsay Coomer) was integral to the success of the module in that through utilising his unique skillset a series of 'improbable friendships' (Armstrong and Ludlow, 2019) were created whereby students from both institutions worked together, grappling with some of society's biggest problems: discrimination in education policy, challenges to accessing healthcare, the changing nature of employment and Brexit. The key to such mature and informed debates was the time spent preparing students for what the learning experience entailed. Through the use of ice breakers, skills training and behaviour icebergs, which were delivered both separately and jointly, a cohesive and connected group of students was formed which allowed for such tricky and sometimes divisive subjects to be debated. One such exercise was to explore a behaviour iceberg where students were separately asked to look at how various elements such as their attitudes and assumptions, values and beliefs, skills and



knowledge alongside their experiences and environment all shaped their behaviour. After students had completed the exercise separately, they were introduced to each other's responses, which showed, to their surprise, a thread of commonality between them in relation to a desire to be open with one another and non-judgemental. This formed a strong platform for us to build upon as the module progressed.

Assessing the learning

The module concluded with five excellent group presentations being delivered by the students in a bid to win £50,000,000 from the inaugural Secretary of State for Social Justice for a new policy focused on one area discussed across the course. Proposals included the creation of a Mental Health Network, the use of abandoned buildings to provide emergency accommodation for homeless people, installation of solar panels onto the houses of elderly people to tackle fuel poverty and the conception of a basic income loan to help fund start-up businesses. Whilst all five presentations were excellent in terms of their innovation and delivery, team Education's policy and pitch won the (albeit fictitious) money! Their proposal to place a mental health worker in each of the most deprived schools in the country was well considered and passionately put forward. The end of the module demonstrated how much progress each of the students had individually and collectively made. This was further reflected in the other two module assignments students had to complete, a reflective learning log and an individual essay. Student feedback on the module has been overwhelmingly positive, with comments such as:

'It has been the happiest and most enjoyable time at uni. I relaxed, and learnt so much more!' (York student);

'I have enjoyed this course, it opened my eyes into a lot of areas that need to be improved in our country, the lecturers have all been brilliant! One of the best things I have participated in ever!' (Buckley Hall student).

Celebrating Success

The module was a success in many ways, some of which we celebrated at our own graduation ceremony hosted at the prison. It was incredibly important to celebrate each student's success and to mark the conclusion of the students' time together. The module demonstrated the power of connection and showed how students, despite institutional barriers, can move beyond them and realise that transformation and growth can come in many guises. The students on the inside are currently exploring further education opportunities and considering university courses- something they say that they would not have done before this experience. The students on the outside have graduated and moved onto employment, or are planning for postgraduate study- one of our students is even getting ready to start training as a prison officer, something she had not even considered before this experience.

After a successful inaugural year, the module has now recruited its next cohort of students and we are devising plans to expand within Buckley Hall and beyond. We will continue to provide an equity of hope and opportunity for all learners regardless of their starting point or where they currently reside; that is where higher education can truly be transformative.

References

- Armstrong, R and Ludlow, A. (2019). Opening Address, Learning Together Network Conference, HMP Brixton, 27 June 2019.
- Davis, S. W., & Roswell, B. S. (Eds.). (2013). *Turning Teaching Inside Out: A Pedagogy of Transformation for Community-Based Education*. New York, NY: Palgrave Macmillan.



Rachel Vipond has been a lecturer in the Department of Social Policy and Social work for the past 5 years and has built up a 3-year relationship with Buckley Hall Prison. Rachel is

passionate about higher education within the prison system. She is a firm believer in the provision of opportunity through education for all no matter of background or academic ability all delivered via an evidenced-based pedagogical approach.

Partners in education: *building an education community through authentic problem solving*

*Lynda Dunlop, Clementine Beauvais, Caroline Crang and Mary Collins,
Department of Education, discuss the evolution of the STEP 1 project*

STEP 1 is a compulsory component of all undergraduate programmes in the Department of Education, involving partnership with educational charities, businesses and NGOs. It was designed to help build a sense of community amongst students in the Department of Education whilst at the same time offering something of meaning and value to the wider education community.

As soon as students arrive at York, they are placed in groups to respond to an educational challenge pitched by an external client (see boxes 1 and 2). The project takes place in the first term of first year of Education programmes, culminating in a presentation to the client in week 7 during which groups make research-informed recommendations to the client. The projects demand teamwork, communication, research and presentation skills, building in graduate employability skills from the start of the programme, building a sense of belonging and community, and providing students with experience of authentic educational problem solving.

How STEP 1 works

The students, in groups of 4 to 10, work with a project facilitator from Stage 2 or 3 to research and produce presentations in response to the question or challenge set by the external client. Groups meet weekly,

supported by the trained facilitators, until week 7 when groups present to a not-at-all intimidating audience of their peers, lecturers, facilitators and the external client, from whom they receive feedback. In the two years the project has been running, we have had a creative range of presentations including videos, poetry and animations, and learned about a broad range of educational approaches from different national and international contexts. The project is compulsory, but not attached to a module and not summatively assessed, meaning it is an opportunity for students to get used to the challenges of university life and to take risks in how they approach and present academic work.

What we think the project has achieved

As a result of STEP 1, all first year students are able to talk about their ability to work in a team, their synthetic skills, organisation, research and presentation skills, professionalism, and engagement with external clients. The project has also built relationships within the cohort and between students in different year groups, with students in second and third year able to induct the first years into university level work, both in relation to the project and more broadly. Education programmes have several summative assessments requiring group work; STEP1 provides a gentle introduction to working as a group – and reflecting on how best to manage the challenges associated with working with others.

The second and third year facilitators gained training and support in managing group work and were able to provide orientation and research support to the first year students, very rarely needing to call on staff.

“I found working as a facilitator gave me confidence in my own knowledge and made me aware of all I have learnt over the course of my degree, as I felt I could make a useful contribution to the students learning. Further, it was very interesting to work with



THE CURRICULUM FOUNDATION IN SEARCH OF A WORLD-CLASS CURRICULUM

Vikki Pendry from the Curriculum Foundation set students the challenge of finding schemes, practices, programmes or policies all around the world, which could help meet the requirements of Target 4.7 of the Sustainable Development Goals for a world-class curriculum. The students' role was to research approaches that have been used with teachers or students in other contexts (nationally and internationally) to present the most promising programmes, strategies or interventions they have found to meet the sustainable development goal – and the evidence used to justify their decision.





“

It is a rather daunting prospect having to embark on a group project as one of the first things you do at University, but having a facilitator who has a lot of experience in university-level projects makes it a lot less intimidating as they are there to guide you.

A student's perspective

”

PATHFINDER TEACHING SCHOOLS BUILDING 21ST CENTURY SKILLS

Pathfinder (a multi-academy trust) and Pathfinder Teaching School are both faced with the challenge of developing 21st century skills in children and young people. Kate Sowter, deputy head of the teaching school, set students the challenge to identify approaches to education that support school pupils to develop greater flexibility and adaptability, initiative and self-direction, leadership and responsibility, and resilience and problem solving capabilities. Students were asked to consider solutions that would have a long-lasting impact and could be reused by the school to enable the budget to stretch further.

the first years and get their perspectives and ideas, and I really enjoyed getting to know the new students which I would not have had the opportunity to do otherwise.”

“It's always awkward to be put in a senior position, especially when those who you are working with are only separated by a year of university experience. This is why it was important to realise that 'facilitating' is by no means mentoring – it's so easy to want to take over and give them what you know will sit properly in the project, but because it's their work you have to take one step back and trust that they know what they're doing. Luckily they did! What is good about the project starting so early on in the year is that it gives the students a quick latch on to

group work dynamics and research basics before they have to do it quite literally for themselves during their course – and with Pathfinder, our external link, backing it the students took it seriously enough to put together thoughtful, professional work.”

Concluding remarks

Our experience of STEP 1 has been overwhelmingly positive, with a range of creative and academic responses to real-life educational challenges providing inspiration to ourselves and our external partners – and partnerships extending beyond the project. Students have been able to present practical, research-informed solutions to problems set by clients, gain experience working in

a team and presenting to a large audience, and to foster a sense of community within their programmes. This year, our external client is The Philosophy Man, who is interested in using stories from different cultures to stimulate philosophical inquiry with children.



Lynda Dunlop is Lecturer in Science Education in the University of York Science Education Group (UYSEG). She focuses on the teaching of philosophy and science to children and young people, and is interested in how young people learn through opportunities to ask and investigate their own questions about science, for example through independent research projects or philosophical dialogue. lynda.dunlop@york.ac.uk



Clementine Beauvais is Senior Lecturer in English in Education. Her research revolves around literary and cultural aspects of childhood and education, especially children's literature, creative writing, literary translation in education, and the history and cultural sociology of childhood. She is also a writer for children and young adults in French, and a literary translator from English to French. clementine.beauvais@york.ac.uk

Caroline Crang is a final year student on the BA Education programme, and **Mary Collins** is a graduate of the BA Education programme.

A blended-learning design for data skills modules in Biology

Emma Rand, Lecturer in Biology, overcomes the challenges of teaching data analysis and programming to early career and sometimes wary biologists.

The analysis and presentation of data are core learning outcomes of Biology-led undergraduate programmes and a requirement for conducting biological research. However, the combination of a stage one biology student's perception of their subject and their previous learning experiences can lead them to be wary of data analysis and coding. Furthermore, the cognitive processes required to learn these skills are towards the apex of Bloom's taxonomy and this is in contrast to those often required to perform well in pre-university and stage 1 assessments. This article discusses some challenges in teaching data skills to students for whom it is taught as a skill to do the research in their chosen field, and describes a blended learning approach to meet some of those challenges.

Data Skills as a core part of the Biologist's training

Underlying all biological discoveries are data! The ability to generate reliable measures of biological phenomena then analyse them and communicate the results, is essential for a biologist. This has long been the case (see, for example: Royal Statistical Society 1947; Finney 1968), but more recently an explosion of large-scale and complex biological data has made the acquisition of data skills even more crucial (National Research Council and others 2003). This is reflected in the Programme Learning Outcomes for Biology-led programmes (Table 1.1).

Opportunities to develop and apply these skills are embedded across entire programmes but we also include modules with a specific focus on data analytics. One of these is a stage one module called "Laboratory and Professional Skills for the Bioscientist" in which a term, carrying 10 credits, is devoted to Data Analysis in R. There are 25 hours of contact time (nine one-hour lectures and eight two-hour workshops) and 75 hours of independent study and assessment. The module is taken by 250 – 280 stage 1 students.

Provide thorough explanations that demonstrate a deep understanding of the principles, concepts and theories on the origin, evolution, structure, function, development, and distribution of living organisms, through critical evaluations of the primary scientific literature in Biology
Formulate hypotheses, design and execute experiments for the collection, analysis and modelling of biological data, that tests biological systems to produce figures, graphs and tables that are explained in comprehensive laboratory report
Thoroughly evaluate experimental, analytical and quantitative techniques and methodologies, and first-hand practical experience and training in laboratories or the field, to demonstrate an awareness and appreciation of the application of these approaches in tackling the major global challenges in Biology of the 21st century
Work effectively as an individual, in teams and laboratory groups to solve biological problems by applying logical reasoning and lateral thinking to develop safe, ethical and socially responsible solutions that may benefit humankind
Communicate and interpret complex information with clarity and precision through critical reviews in written, oral and other explanations, questioning dogma and demonstrating impact at the forefront of research in Biology to real-world and global issues for expert, professional, business, industrial and lay audiences
Demonstrate independence, originality, and a deep understanding of cutting-edge practice and technology in Biology, apply numerical, quantitative, and computer-based transferable skills to a range of working environments including laboratories, fieldwork, education, industry, business, health services, policy, government, and media

Table 1.1: BSc Biology Programme Learning Outcomes.

How do the challenges arise?

A stage 1 biology student may expect to spend the most of their time in the laboratory or the field and our Admissions pages, for example, feature students working in these environments (Figure 1.1).

The importance placed on data handling and analysis in a biology degree can therefore come as surprise and not a welcome one! These subjects are recognised as among the more difficult to teach (eg, Boulay 1986), require more and harder work from the student and may be relatively unpopular (eg, Uttl and Smibert 2017). At the start of the first lecture of Data Analysis in R, many students do not expect to enjoy it with 70% disagreeing with the statement "I will enjoy data analysis", in 2018 (Figure 1.2).

The education to which they have primarily been exposed is towards the foundational levels of the revised Bloom's taxonomy of learning (Anderson and Bloom 2001) whereas the acquisition of data analytic skills occurs at the levels of "applying", "analysing" and "evaluating". Memorising does little to help a student

analyse and represent their data. Every situation is new and they must analyse it, recognise how to apply complex skills and evaluate the results.

Associated with increasing levels of Bloom's taxonomy is an increase in the number of mistakes made. Research is characterised by repeated rounds of 'trial and error' with successes being infrequent. This is in contrast to the one-time correction of one's factual knowledge, and tends to be more uncomfortable. One way to characterise Bloom's taxonomy is that it is a process of becoming more comfortable with failure as a learning opportunity.

What's required to meet the challenges?

Learning to programme requires a lot of practice. Novice programmers see many aspects of programming syntax such as the use of brackets, quotes, commas and spaces, as arbitrary and need substantial practice and exposure to start to see code as experienced practitioners do (Sorva 2018). This activity is well-suited to directed independent learning but it can



Figure 1.1: Image taken from *Biology Undergraduate Admissions pages*

be difficult to motivate students to do sufficient amounts (A'Brook and Weyers 1996; Carey and Papin 2018). Using contact time to partially achieve this can increase engagement but does not maximise the value of that contact time which is better spent engaging with students to develop their conceptual understanding and strengthen the staff-student partnership.

Blended learning solutions

Flipped-learning is employed throughout Data Analysis in R to help students meet the challenge of acquiring data skills. The module has a repeated weekly structure comprising periods of guided independent study interleaved with active and problem-based learning placed within contact time. These are followed up with formative work (Figure 1.4).

Independent study issued before the first contact point gives an overview of the statistical concepts covered during that week. The exercises are designed to take an hour or less and vary in format. They include videos, accessible articles and material from online data analysis books. The lecture provides a deeper coverage

of the topic concepts and an introduction to code that will be used in the workshop. An audience response system is used to facilitate active learning which has been shown to increase student performance in STEM subjects (Freeman et al. 2014). Between contact points, the independent study is focused on code 'mechanics' using an online tool, which gamifies code practice (<https://www.datacamp.com/home>) and allows students to practice the R language syntax without having to simultaneously consider statistical concepts. The second period of weekly contact consists of a two-hour workshop of structured data analysis problems which require students to apply their understanding of statistical concepts using R to generate analyses of biological data in forms suitable for a report. The problems are broken down into the steps required to take the problem scenario and data through to conclusion and reporting. This activity is well supported with graduate demonstrators. Independent study exercises provided following the workshop give scenarios with data for which students design an appropriate analysis workflow.

In 2019, I introduced a discrete unit of independent study designed to be carried out before the start of the module. This was specifically designed to train students in R language syntax. The aim was to make less steep the learning curve involved in acquiring data analytic skills by including activity that did not require the simultaneous assimilation of both statistical and coding concepts. This one, relatively short piece of work, significantly reduced the level of fear expressed about learning R (Figure 1.3). Whilst students' expectations of data analysis in 2019 were unchanged from those in 2018, the percentage of students terrified of, or worried about, R dropped from 67% to 26% and that of students unconcerned or excited about R rose from 23% to 49%. Since fear of a subject can influence an individual's capacity to initiate and complete tasks (Onwuegbuzie 2004) we might predict an increase in learning achieved. This will be the subject of a future analysis of attainment.

In summary, module teaching comprises online, independent and face-to-face learning activities in which the

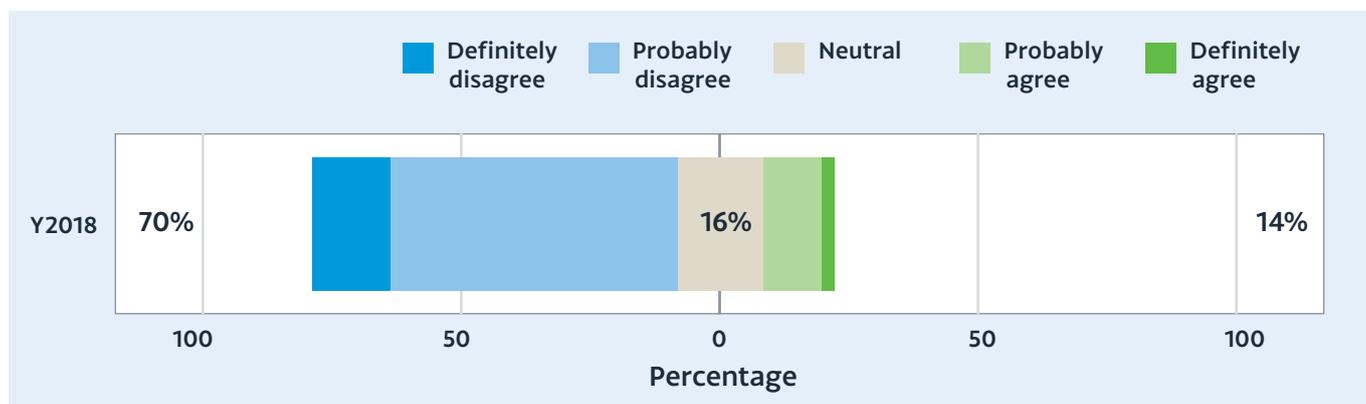


Figure 1.2: Expectations of Stage 1 Biologists about Data Analysis in 2018: Responses to the question 'I will enjoy data analysis.' given as the first slide of contact time slot.

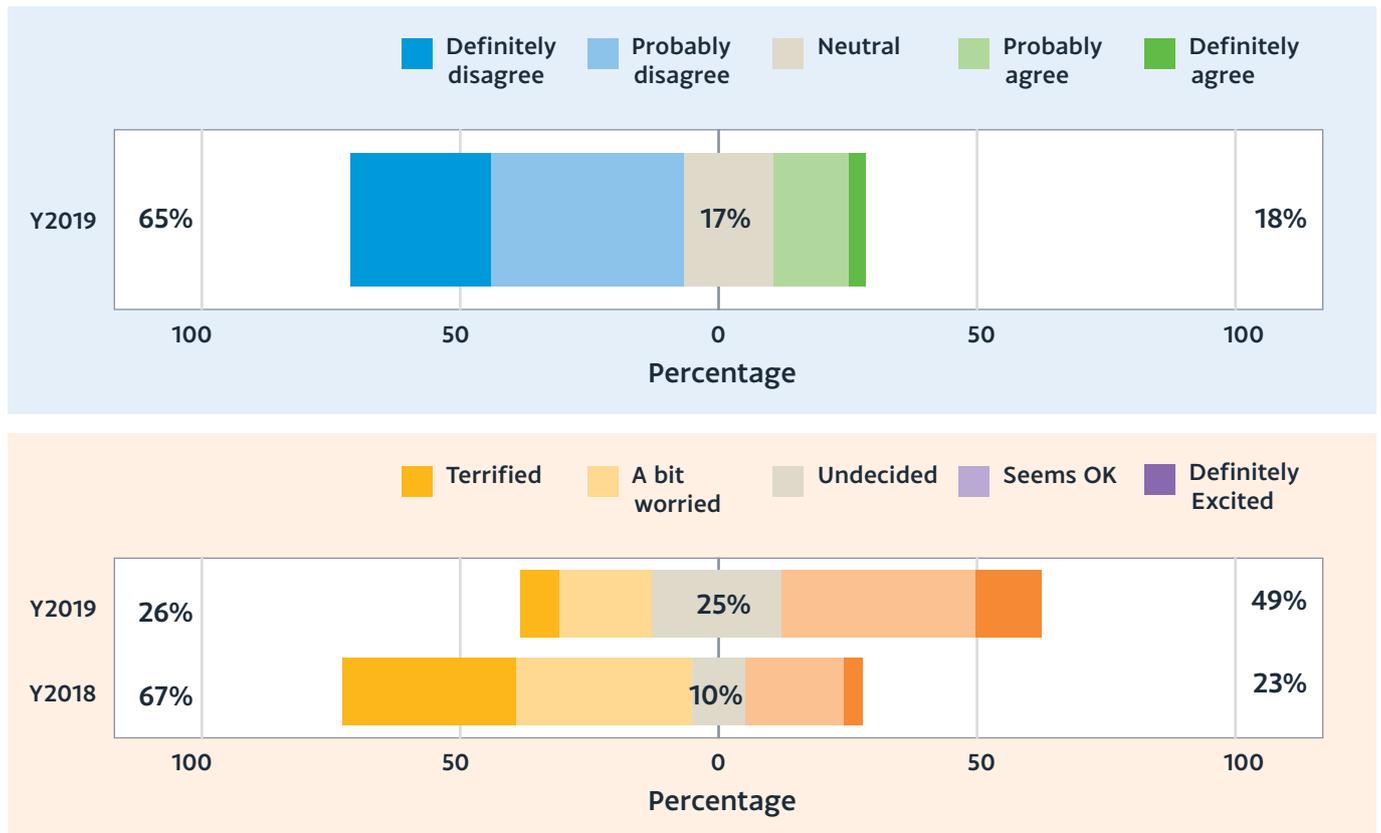


Figure 1.3: Expectations of Stage 1 Biologists about of Data Analysis in 2019. Responses to the question 'I will enjoy data analysis' follow the same pattern as in 2018 (upper panel). However, when asked 'How do you feel about R?' anxiety was significantly reduced following the introduction of an independent study activity prior to any contact time (lower panel).

independent study is guided and fully integrated by interleaving it with contact time.

References

A'Brook, Richard, and Jonathan DB Weyers. (1996). Teaching of Statistics to UK Undergraduate Biology Students in 1995. 30 (4): 281-88.
 Anderson, Lorin W. (2001). . New York: Longman.
 Boulay, Benedict Du. (1986). Some Difficulties

of Learning to Program. 2 (1): 57-73. <https://doi.org/10.2190/3LFX-9RRF-67T8-UVK9>.
 Carey, Maureen A., and Jason A. Papin. (2018). Ten Simple Rules for Biologists Learning to Program. 14 (1): 1-11. <https://doi.org/10.1371/journal.pcbi.1005871>.
 Finney, D. J. (1968). Teaching Biometry in the University. 24 (1): 1-12. <http://www.jstor.org/stable/2528456>.
 Freeman, Scott, Sarah L. Eddy, Miles McDonough, Michelle K. Smith, Nnadozie Okoroafor, Hannah Jordt, and Mary Pat Wenderoth. (2014). Active

Learning Increases Student Performance in Science, Engineering, and Mathematics. 111 (23): 8410-5. <https://doi.org/10.1073/pnas.1319030111>.
 National Research Council and others. (2003). . Washington, DC: National Academies Press.
 Onwuegbuzie, Anthony J. (2004). Academic Procrastination and Statistics Anxiety. 29 (1): 3-19. <https://doi.org/10.1080/0260293042000160384>.
 Royal Statistical Society. (1947). Report on the Teaching of Statistics in Universities and University Colleges. 110 (1): 51-57. <http://www.jstor.org/stable/2981262>.
 Sorva, Juha. (2018). Misconceptions and the Beginner Programmer. , 171.
 Uttl, Bob, and Dylan Smibert. (2017). Student Evaluations of Teaching: Teaching Quantitative Courses Can Be Hazardous to One's Career. 5 (May): e3299. <https://doi.org/10.7717/peerj.3299>

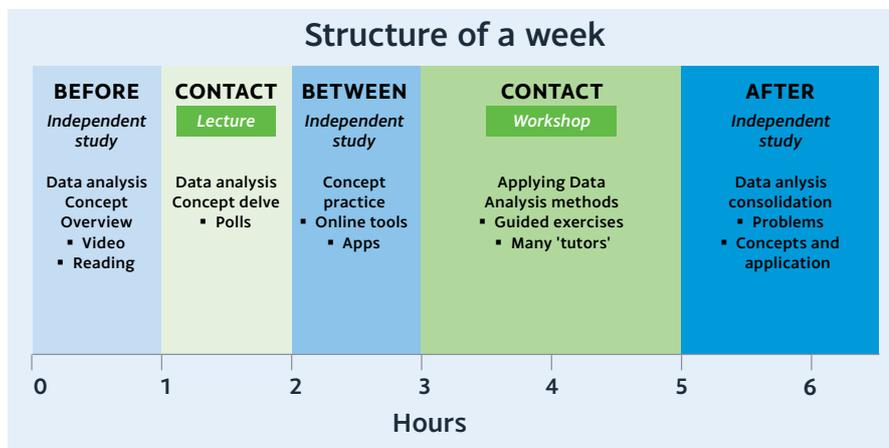


Figure 1.4: The structure of a 'Data Analysis in R' week. There are two periods of contact: a lecture covering statistical concepts and a workshop putting those concepts in to practice in R. The contact periods are interleaved with guided independent study which focusses on the conceptual overview, code practice and the independent application of both to complex problems.



Emma Rand is a Teaching & Scholarship lecturer in the department of Biology, the University of York. She specialises in experimental design and reproducible data science from pre-processing and exploration to statistical analysis and visualisation. She was an invited tutor at user! 2019, the International R Conference, and a trainer for the Royal Society of Biology and The Biochemical Society. She is twice the winner of YUSU's Teacher of the Year Excellence Award. emma.rand@york.ac.uk

Building the University of the Future in partnership with our students

The Department of Sociology worked with a student intern to create a four-day programme of skills and careers activities at the beginning of Spring Term. Sam Bayley, Sociology's Department Manager, oversaw the project and reported back to the Learning and Teaching Forum.

What is University of the Future?

University of the Future was a four-day long programme of events, open to all Sociology undergraduates, which asked our students to work in teams to create a new university for the city of York. The programme interwove various skills and careers sessions alongside sociological content, to allow students to apply this learning to a scenario. Everything was pulled together by an undergraduate student intern, Sarah Luty, who developed an information pack and secured a range of fantastic speakers and facilitators from both inside and outside the University.

Why run University of the Future?

The programme came into being to address a number of frustrations for the Department:

- We were not seeing students in the first week of term and this felt like a lost opportunity;
- Our careers events were typically an hour long which left little room to develop ideas or ask students to apply them in depth (and nobody turned up);
- Student feedback suggested a lack of community feel around the Department, with no opportunity to mix with students from other year groups.

We had the idea to try and corral together a number of the careers-based events and over time this developed into a more coherent "programme" with a core

theme. Students benefited from learning vocational skills that might not explicitly link to a Sociology programme (such as financial planning) and from practising skills (such as presenting) in a safe, non-assessed environment. There was also the opportunity to meet with potential employers, including KPMG and PwC.

Participation and outcomes

Around 65 students joined us for the first day of University of the Future, with over 50 completing the four-day programme. 82% of students expressed satisfaction with the event, with nobody expressing dissatisfaction in our feedback survey.

Teams presented their university proposals to an expert panel with prizes available for a range of criteria. The panel was chaired by the Registrar of London Metropolitan University, who remarked on the outstanding presentations and student empathy for how universities operate.

We also learnt a thing or two about what students want and expect from their universities and hopefully inspired some of them to consider working in the sector in the future!

Why partner with a student intern?

We're convinced that this event would not have been as successful without the input of our fantastic intern. Her fresh eyes on the Department's offer provided a new perspective and allowed students to tell us what they want to learn. As Sarah knew that she would have to deliver a programme, her

ideas were honed to become practical and deliverable – not just an unachievable or conflicting wish-list!

Students are often more honest and direct with each other than they might feel comfortable being with members of staff; using an intern as an honest broker for feedback was therefore invaluable. Students' informal networks are also much more effective at getting messages across than emails and VLE announcements – essential when it comes to getting engagement with non-mandatory activities.

Most of our students haven't taught, and very few will ever have been shown "the right way" to teach: this means they are working within a different paradigm, which encourages creativity both for the students and for staff working with them.

What do interns learn from partnering with us?

Although the skills which students most value from a project of this nature will vary a little by discipline, the process of planning, delivering, and reflecting on the internship is likely to be useful for many students. The interns we have worked with through various projects have all reported a confidence boost from working in a professional environment; they have learnt to work on their feet; and they can manage projects and their own time more effectively.

One thing that our interns told us was useful to them was the process of debriefing with staff members who understood the work they had been doing and who could help with drawing out examples, which could be "translated" into attributes to talk about on job applications. Although academic supervisors often do this with their students, there was a real benefit in having somebody involved who has seen the individual working first-hand.



Sam Bayley is the Department Manager in the Department of Environment & Geography. In his previous role as Department Manager in Sociology, he implemented a number of initiatives aimed at improving the sense of departmental community and helping students develop key transferable skills to complement their academic studies. An alumnus of York, Sam is a member of University Council and Trustee of the Association of University Administrators.

Piloting students as consultants

in the Department of English and Related Literature

Introduction

Developing learning communities through student-staff partnerships requires us to problematise what Freire called the banking model of education (as cited in Cook-Sather, 2010), where teachers deposit knowledge in students and where teaching is for teachers and learning for students. This shift to seeing students as agents in teaching and learning has the potential to develop reciprocal relationships, where students participate as co-learners, co-evaluators, co-developers and co-creators within learning communities.

Over the last year, YUSU has been working with a small number of departments to pilot a range of student-staff partnership approaches. YUSU was keen to provide opportunities to students and staff that were educationally purposeful and resistant to neoliberal approaches to 'the student voice', which often position students as data sources rather than equal partners.

One such pilot was the 'Students as Consultants' project in the Department of English and Related Literature. Inspired by the longstanding 'Students as Learners and Teachers' (SaLT) program at Bryn Mawr College, Pennsylvania, as well as a similar project at the University of Sheffield, YUSU and the English Department developed a teaching observation pilot, with students observing staff teaching in order to develop teaching and the curriculum. The Department's priority was to encourage critical reflections on race and diversity in teaching practice, benefiting from students' unique perspectives (Cook-Sather, 2008).

The key aims were:

- To facilitate open dialogue and increase empathy between students and staff;
- To provide practical insights to inform and enhance inclusive teaching practices;
- To provide opportunities for both partners to develop personally and professionally.

The 'Students as Consultants' pilot

In late 2018, YUSU approached the Department to explore piloting a 'students as partners' project in the Spring Term of academic year 2018-2019. Based on the Department's commitment to critically reflecting on coloniality and race, we decided the most effective approach would be to bring students and staff together around a common commitment to fostering racially critical, inclusive and diverse classrooms (Cook-Sather 2019).

We agreed a 'Students as Consultants (SaC)' approach had the most potential in terms of supporting academic staff to see their teaching from students' diverse angles of vision. While academics are disciplinary experts, students are experts in their learning, their experiences in the classroom and their engagement with concepts.

To establish these ideas from the outset, YUSU delivered near identical training workshops for the seven academic staff members and nine students who volunteered to participate. The workshops included:

- Where the project came from and its key aims;
- The intellectual basis of 'Students as Consultants', namely, the idea of teacher-student with student-teacher (Freire, 1968) and the benefits of challenging traditional classroom power imbalances through partnership approaches that value student and staff perspectives on learning and teaching, equally;
- Models of teaching observation and reflection;
- Discussions about race in HE, the BAME attainment gap and 'hidden curricula';
- A timeline for the project, including suggested dates for the teaching observations and expectations in terms of reporting.

Participants were self-selecting, but when promoting the project we emphasised we were looking for those interested in

working in partnership to explore teaching practices through the lens of decolonising the curriculum. All the students that came forward, except one, were from BAME backgrounds. We recruited students from the Department so they had some level of disciplinary knowledge and could engage critically with the content. We chose not to partner students with staff who were teaching them (or would do so in the near future), as we wanted conversations to range freely outside of conventional classroom power relations. As there were more students than staff, two of the partnerships consisted of two students and one tutor.

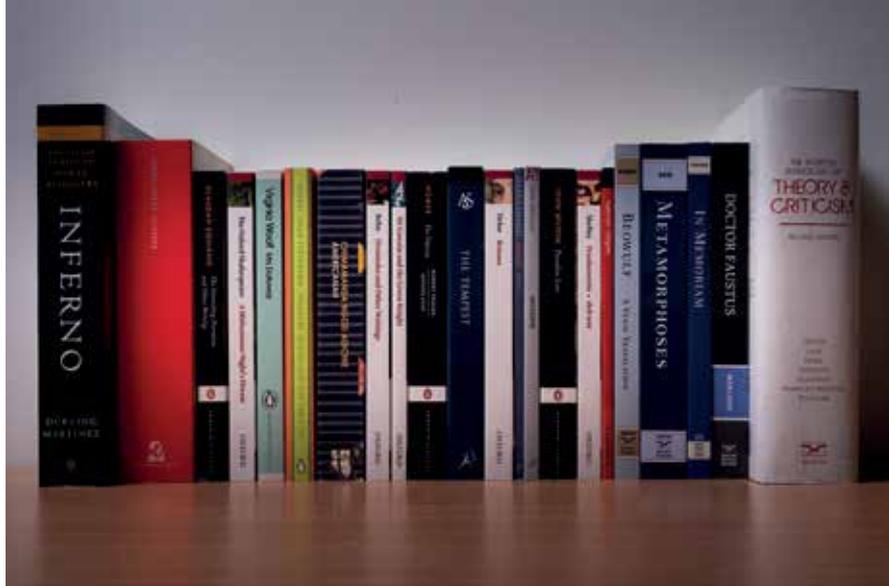
The partners met to agree which sessions were to be observed; key themes; how discussions were going to be recorded; and what resources (reading lists, module guide, session plans etc) the staff member was going to provide beforehand.

The nine students observed their staff partners between three and six times during Spring Term (2018-2019), took detailed notes and met with their partners to discuss potential improvements, areas of good practice and any actions relating to decolonising their teaching. The students were encouraged – with varying degrees of take up – to meet with YUSU staff to discuss progress, support needs and any actions arising from their discussions. YUSU also met with staff periodically to hear about their experiences and what they were exploring with students.

At the end of the project we asked students and staff to report on their discussions, learning and any ideas for improvements they discussed with their partners. We also held a roundtable to reflect collectively on learning for students, staff and the Department, and the project featured at a departmental Teaching Away Day.

Reflections and learning

The learning and reflections produced by the pilot were not intended to be silver bullets for either student-staff partnership projects or creating decolonised classrooms. These reflections emerged from the unique dialogues that seven



academics had with nine student partners. They are starting points for YUSU and the Department as we consider what might be required to create decolonised curricula and pedagogies through partnership.

The following stood out as key themes: Working in partnership deepened student and staff capacities to be reflective about learning and teaching

- It challenged me to look from a teacher's perspective at seminars, especially noticing the dynamics which go along with leading and facilitating discussions. I was shown that personal preference plays a considerable role in how teaching works (student);
- I've learned the value and pleasure of discussing teaching with undergraduate students. I've learned the importance of pace, variety, and careful pitch of questions (staff member);
- Some of the most important things I have learnt are, first, that the language used in seminars can be intimidating. For example, if you use the icebreaker of what books they like, that can be about cultural capital (Bourdieu) (staff member).

Students and staff were able to identify positive practice and recommend purposeful improvements relating to decolonising pedagogies and curricula:

- The use of weekly questions, use of presentations and individual tasks challenged students to engage with the texts. To improve, I would encourage examining how Black and Asian authors have creatively written about the Victorian era (Student);
- I've planned some reshaping of the curriculum to foreground Empire and "race" more, and hope to vary the pace of my teaching more (Staff member);
- How the spread of English came about was mentioned. Perhaps speak about how other countries gave back to English, making English what it is today. Give reference to examples of words taken from African and Asian languages eg

West African words/origin: banana, apartheid, Coffee – Ethiopian, Jive and Jazz from Wolof language (Gambia/Senegal), Tango – Niger/Congo, Zombie – Central Africa. Shows the language trade wasn't passive and that Africans contributed, not just accepted (Student);

- Through the project, I have come to the conclusion that as a white British woman I need to think of myself as an ally and be very careful not to project myself as a saviour. Intersectional feminism is crucial in this regard, and I need to keep in mind Gayatri Chakravorty Spivak's warning not to 'speak for' the other (Staff member);
- They did an excellent job of addressing the different races within the novel, discussing the discrimination that occurs, and finally, relating to situations within the novel to our modern lives (Student).

Staff clearly identified the benefits of the new angles students can bring to their teaching practice

- I'm more conscious of the different perspectives students may bring to bear on a given topic, including experience of other disciplinary pedagogies;
- I have learnt that students are more interested in reflexivity than I would have thought and that they can input very productively into the classroom experience. I've learnt that establishing a bidirectional relationship is key early on;
- A text can be made to reflect on race, gender and diversity issues even if these are not major themes of the text or the author.

Implications and future promise
Implications for student-staff partnerships.

- Although there were challenges in terms of engagement, especially in relation to gathering reflections at the end of the project, students and staff clearly valued the experience of working on a partnership project. One staff member reflected that the project

was more meaningful than Course Reps, and feedback suggested that the 'SaC' approach enabled students and staff to engage in richer dialogue and identify ways in which teaching practice could better support learning.

- The process of intentionally entering into exchanges about race, coloniality and diversity with students offered unique insights into classroom dynamics, student and staff identities and how to address diversity in both pedagogy and curricula. The dialogical and reciprocal ethos of 'SaC' fit well with the theme of decolonising, as it generated strong respect for one another's experiences and perspectives and increased students' awareness of the challenges faced by teachers in terms of negotiating power dynamics.
- Keeping students engaged throughout a term long partnership project was challenging. For others considering a student-staff partnership it is important to recognise time constraints for students and academics. Moreover, it is also important to explore incentives and ways of recognising student and staff participation in partnership projects.

Thanks to the students and staff from the Department of English and Related Literature and the YUSU Student Voice Team – who all worked in partnership to make this project happen.

References

Cook-Sather, A. 2008. "What You Get Is Looking in a Mirror, Only Better": Inviting Students to Reflect (on) College Teaching." *Reflective Practice* 9 (4): 473-483.

Cook-Sather, A (2010). Students as learners and teachers: taking responsibility, transforming education, and redefining accountability. *Curriculum Inquiry*, 40:4, 555-575.

Cook-Sather, A & Motz-Storey, D (2019). Viewing Teaching and Learning from a New Angle: Student Consultants' Perspectives on Classroom Practice, *College Teaching*, 64:4, 168-177.

Freire, P (1968). *Pedagogy of the Oppressed*. [Chapter 2-3 accessed at: http://commons.princeton.edu/inclusivepedagogy/wp-content/uploads/sites/17/2016/07/freire_pedagogy_of_the_oppressed_ch2-3.pdf



Nicholas Glover is YUSU's Student Voice and Insight Manager, with a background in critical approaches to student engagement in higher education. He is particularly interested in the theory and practice of Students as Partners and the potential of student-staff partnerships to resist neoliberal approaches to 'the student voice'.

STUDENTS AS PARTNERS IN THE DESIGN OF MODULE MATERIALS: *An experience in using Google Docs in seminars*

Marina N. Cantarutti, a GTA in the Department of Language and Linguistic Science, reflects upon her experience involving students in creating seminar task “answer keys” through collaborative work with Google Docs.

Introduction

The university seminar is a space where knowledge and skills consolidation are built through interaction with peers and a tutor. It is also an opportunity for the tutor to gauge levels of student understanding and their engagement with the subject and its procedures.

Depending on the module, seminars may involve different dynamics and, particularly in some Linguistics subjects, exercises requiring students to come up with the “right” answers. Therefore, it may prove difficult at times to make students feel the seminar is a “safe space” to engage in conversation and collaboration. Making sure that students participate actively and feel ready to take risks is, then, one of the many challenges seminar tutors face.

Moreover, seminars are generally not lecture-captured and may be seen as experiential or discovery spaces by students, but, in reality, they are sessions which are actually consequential for the development of skills and content assessed in end-of-term essays and exams. Often, after the seminar has taken place, module leaders provide a key to the activities on the VLE as a means of leaving a record of what is “expected”. As has been reported for lecture capture (Edwards & Clinton, 2019), students may be tempted to use this key as a replacement for seminar attendance.

This short article will show how, instead of a lecturer-designed key, engaging students in producing and publishing a collaboratively-achieved product at the end of the seminar has proven a useful way for students to re-

experience seminars, revisit procedures, and for the tutor to have a clearer idea of student progress while engaging in “live” but less exposing forms of feedback. This article will informally review an experience in using Google Docs during seminars for the final-year module “The Prosody of English” in the Department of Language and Linguistic Science to involve students as partners (Healey, 2016) in the design of task keys.

Google Docs and the collaborative design of “task keys”

In the module The Prosody of English, students learn technical skills to perceive and measure aspects of the intonation of English and to analyse recorded data on the basis of different theoretical models. Because of this, all seminars and practicals take place in PC classrooms. This proved a challenge when attempting to engage students in group work, as

the layout in some of the PC rooms was not inviting. Opportunities for real collaboration had to be created in such a way that students could interact with each other while also working on an output.

The seminar tasks were designed by previous module convenors so, as a GTA in a temporary convenor role, I decided to change the method of delivery rather than the task itself. Seminar tasks early in the module involved the retrieval of key information from highly-technical texts, whereas from week 5 students were engaged in data transcription and analysis tasks.

The early seminars got students working on their bibliography, and each group was assigned a reading or a concept and an easy bit.ly link to a Google Form/Slides/Doc. The first seminar invited students to complete a Google Form with key definitions that had to be

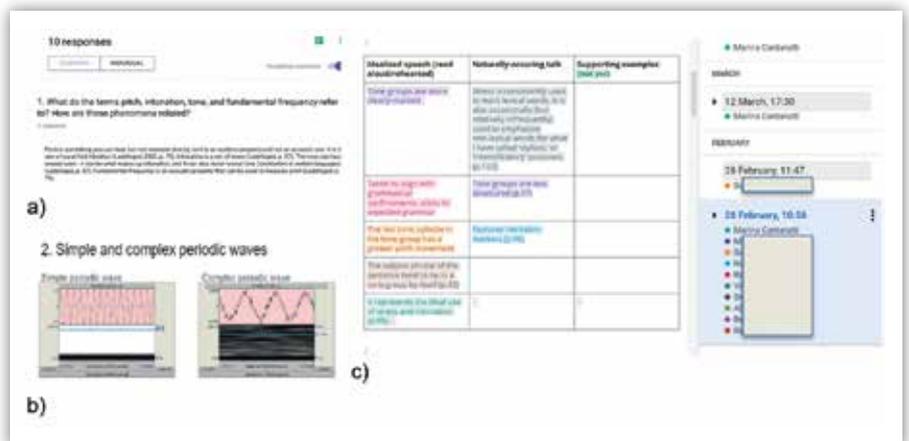


Figure 1: Examples of collaborative student work on a) Google Forms; b) Google Slides; c) Google Docs

cited. The second seminar involved the use of Google Slides, where key concepts in the bibliography had to be illustrated graphically, one per slide. The third seminar invited collaborative completion and illustration of some comparative dimensions put forward in the reading. Due to time constraints, these productions only received oral feedback from the lecturer, and this was lecture-captured. All materials and comments were added to the VLE as session records, but it is recognised that a better use of these collaborative resources will need to be made in future iterations of the module to avoid student reliance on tutor validation and to involve students in peer feedback. Figure 1 (on previous page) shows some of the first-draft outputs of these sessions.

The most exciting and most effective use of Google Docs happened during the data analysis sessions, starting in the fourth seminar. All students were given the same data and two questions to answer, and each group picked one. It was inspiring to see students distribute roles, with some creating the pitch analysis figures, others working on the transcription, and other team members working on theoretical accounts, as they collaboratively discussed the resolution of the tasks. During the first part of the session, I would walk around, answering questions and offering help when students appeared confused. Later in the session, as the first answers cropped up on the Google Docs, my support would be input as comments, providing feedback in real time which was acted upon immediately by students, who would tackle any issues and click “resolve” on my comments to leave a new, improved version “on record”. Some data analysis was carried over to the next session, and students would then take some time to address my comments and



It was inspiring to see students distribute roles, with some creating the pitch analysis figures, others working on the transcription, and other team members working on theoretical accounts, as they collaboratively discussed the resolution of the tasks.



make adjustments towards an improved version of the analysis. Figure 2 shows how different students (marked in different colours by the “History” feature of Google Docs) worked on different aspects of the task and made corrections after receiving feedback within and outside the seminar session.

At the end of each week, students would then have a copy of a resolved exercise with my own comments and some post-session advice input on a different colour, available on the VLE. Students were thus made co-responsible for designing instructional materials for the course while attempting the (exam-like) tasks. Collaboration was taken beyond the seminar: one of the students accomplishing a good output figure of the phenomena under study offered his own preparation files as a Google Drive link as a comment on the document.

Students attended the sessions, got actively involved solving the exercises, and demonstrated autonomy in their groupwork, consulting each other and seeking advice from peers before requesting the tutor’s help. The documents were frequently consulted after the sessions, as the bit.ly reports demonstrate.

The benefits of collaborative work

through Google Docs have been described widely, as have its shortcomings (eg see Firth & Mesureur 2010; Blau & Caspi 2009). The opportunity to use Google Docs during seminars in a way that does not preclude face-to-face interaction with the tutor and peers, and which offers written synchronous but not exposing feedback, has proven to be invaluable. It enabled students to take an active and committed role in designing materials for the module in preparation for their exams so that their joint attempts would become a “key” to the activities, it allowed students to self-organise as teams and offer each other feedback, and it provided the tutor with important information as to what content or skills required further support, which could be acted upon on the spot.

References

Blau, I. & Caspi, A., 2009. What type of collaboration helps? Psychological ownership, perceived learning and outcome quality of collaboration using Google Docs. In *Proceedings of the Chais conference on instructional technologies research*. pp. 48-55.

Edwards, M.R. & Clinton, M.E., 2019. A study exploring the impact of lecture capture availability and lecture capture usage on student attendance and attainment. *Higher Education*, 77(3), pp.403-421.

Firth, M. & Mesureur, G., 2010. Innovative uses for Google Docs in a university. *Jalt call journal*, 6(1), pp.3-16.

Healey, M., 2016. Students as Partners and Change Agents in learning and teaching in higher education.

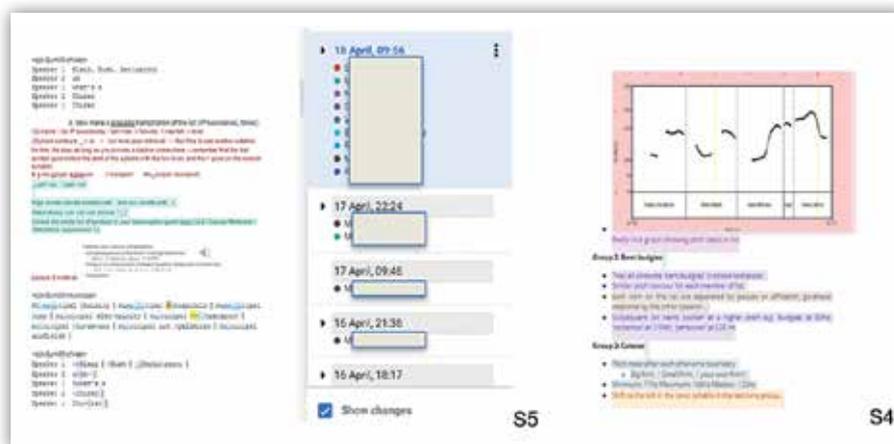


Figure 2: Examples of collaborative solving of the tasks in seminars 4 and 5 (students’ names anonymised)



Marina N. Cantarutti is a PhD student and GTA in the Department of Language and Linguistic Science, researching prosody and gesture in co-productions in interaction. She lectures in The Prosody of English and is a seminar tutor in Introduction to Phonetics and Phonology. She holds 10 years’ teaching experience in Higher Education, having lectured in Phonetics in Buenos Aires, Argentina. marina.cantarutti@york.ac.uk

Support, development and recognition for LEARNING AND TEACHING

FORUM WORKSHOPS

The Learning and Teaching Forum organises an exciting series of one-off workshops and events, delivered and facilitated by experienced academic and support staff. Workshops are open to all staff and postgraduate students. If you are unable to attend an event but would like a copy of the materials, please let us know. For further information, see: york.ac.uk/staff/teaching/develop/forum/workshops

THE SCHOLARSHIP OF TEACHING AND LEARNING NETWORK (SOTLN)

The SoTL Network brings together a suite of resources, professional development, discussion and dissemination opportunities focused upon looking at teaching and student learning in a scholarly and research-orientated way. The current range of activities organised as part of the network includes an annual SoTL journal, invited speakers, and a strand of seminars designed to engage colleagues with key and emerging pedagogical literature. For more information, see: york.ac.uk/staff/teaching/develop/sotl-network

FUNDING OPPORTUNITIES

The Rapid Response Fund supports small-scale short-term projects, initiatives or purchases to enhance the quality of learning and teaching by addressing a clearly-identified need or issue. Funding is limited, and grants will be awarded on a first-come, first-served basis; please also note that departments in a stronger financial position may be asked to fund initiatives from their own resources. For more information, see: york.ac.uk/staff/teaching/initiatives-and-funding/rapid-response-grants

THE YORK PROFESSIONAL AND ACADEMIC DEVELOPMENT (YPAD) SCHEME

The YPAD scheme is based upon the University's Peer Support for Teaching policy, and involves participants working to develop their practice in groups supported and facilitated by an experienced colleague. The scheme is designed to be inclusive of all staff groups who teach or support student learning (including graduate teaching assistants, research staff with teaching responsibilities, associate staff and learning and teaching support staff) and caters for all levels of experience. YPAD is accredited by Advance HE (formerly the Higher Education Academy); this means individuals who successfully engage with the scheme will secure professional recognition through the award of an HEA Fellowship category appropriate to their role and their level of responsibility for teaching and supporting learning. For more information, see: york.ac.uk/staff/teaching/develop/ypad

THE NATIONAL TEACHING FELLOWSHIP SCHEME (NTFS) AND COLLABORATIVE AWARD FOR TEACHING EXCELLENCE (CATE)

The NTFS and CATE awards form part of a nationwide, government-funded initiative to promote excellence in learning and teaching. Operated by Advance HE (formerly the Higher Education Academy), the individual awards competition recognises individuals who have made an outstanding impact on the student learning experience, while the CATE awards recognise teams which have changed practice for colleagues or students at departmental or institutional level. For more information, see: york.ac.uk/staff/teaching/develop/ntfs

SUPPORT FOR TECHNOLOGY ENHANCED LEARNING (TEL)

Technology enhanced learning refers to the use of online systems and tools in support of learning and teaching activities. TEL support at the University of York is provided by the Programme Design and Learning Technology team in the Academic Support Office. The team offers individuals and Departments support in the design, delivery and evaluation of learning technology interventions at the activity, module and programme level. This includes guidance on the use of the University's centrally-supported virtual learning environment *Yorkshare*, and advice on a wide range of learning technologies, including use of Google Sites for portfolios, multimedia and video, lecture recording, technology-supported assessment, in-class technologies and collaboration out of class. For more information, see: york.ac.uk/staff/teaching/learning-design

ANNUAL LEARNING AND TEACHING CONFERENCE FRIDAY 13 MARCH 2020

The call for contributions for the next University of York Learning and Teaching Conference is now open! The theme of the conference is 'Inclusive and Engaged Learning'. Proposals for workshops, oral presentations, lightning talks and poster presentations are all invited, by the deadline of 3 February 2020. For more information, see york.ac.uk/staff/teaching/develop/annual-conference

If you are interested in contributing an article for the next or a subsequent issue of *Forum* magazine, please contact the sub-editor, Phil Robinson-Self.