First published in January 2021 by:

Greenwich Learning & Teaching University of Greenwich Old Royal Naval College Park Row London SE10 9LS United Kingdom

Editors

Rachel George, Greenwich Learning & Teaching, University of Greenwich Yang Yang, Greenwich Learning & Teaching, University of Greenwich

Sub-editor

Jim Bennett, Gold Leaf

Editorial Assistant

Gillian Keyms, Greenwich Learning & Teaching, University of Greenwich

Editorial Board

Paul Breen, University of Westminster
Louise Hewitt, University of Greenwich
Gillian Lazar, Middlesex University London
Ed de Quincey, Keele University
Dawn Reilly, University of Greenwich
Clare Rossato, University of Greenwich
James Wisdom, Higher Education Consultant and Editor of the SEDA series

Reviewers

Harriet Lowe, University of Greenwich
Asegul Hulus, University of Greenwich
Emma Kennedy, University of Greenwich
James Wisdom, Higher Education Consultant and Editor of the SEDA series
Tesfa Mehari, University of Greenwich
Nihal Amer, MSA, Cairo
Jenny Marie, University of Greenwich
Nicky Garsten, University of Greenwich
Gillian Lazar, Middlesex University London
Yang Yang, University of Greenwich
Rachel George, University of Greenwich
Kerry Dobbins, University of Leicester
Ed de Quincey, Keele University
Dawn Reilly, University of Greenwich

Editors' Introduction Yang Yang, Rachel George	4-7
Opinion Pieces Defining social change as social action: higher education's role in addressing social change Mazia Yassim	8-11
Realising the inclusive potential of online teaching and learning for marginalised students Donna Hurford ¹ , Andrew Read ²	12-15
Case Studies	
Developing the Inclusive Course Design Tool: a tool to support staff reflection on their inclusive practice Susan V Smith, Ruth Pickford, Janice Priestley, Rebecca Sellers	16-31
Learning Theories in the context of teaching Law Nandini S. Boodia-Canoo	32-37
Learning how to read? The value of lectures in the context of HE English Literature Dr. Katarina Stenke	38-49
Cinematic reproduction as multimodal composition in first-year composition Rachel McCabe	50-61
Case study: Using a codesign process as an opportunity and to increase assessment literacy Professor Debbie Bartlett	62-71
Articles	
Improving written communication using a blended-learning approach and self-regulated learning dimensions Agnieszka Herdan, Lorenzo Neri, Antonella Russo, Elizabeth Warren	72-90
An investigation into digital tools for lecture engagement: a feasibility study Michael Detyna, Eleanor J. Dommett	91-109
The impact of camera angles in learning videos on the perception of teaching excellence and emotional connectedness of students in the creative industries Dennis A Olsen	110-120

Welcome to volume 14, issue 1 of Compass, Journal of Learning and Teaching!

We are excited to bring you the first edition of 2021. This Winter issue contains a fascinating range of articles, including a report on an iterative design process of an 'Inclusive Course Design Tool'; a scrutiny of technological systems applications in HE; and an evaluation of a blended-learning strategy incorporating self-regulated learning. Contrasting case studies demonstrate a pedagogical intervention to develop creative writing skills; collaborative assessment design in the context of education for sustainable development; an evaluation of using 'talking-head' videos in online delivery and a call to re-establish the significance of traditional lectures in teaching English Literature. There are also thought-provoking pieces: one proposes a framework on the elimination of race-based inequality in the world through Higher Education; another offers timely insights on inclusive online teaching. A brief snapshot of each paper follows.

Dennis A Olsen, of the University at West London, conducts an interesting exploration into and evaluation of the application of 'talking-head' videos as a pedagogical tool in the online delivery of material to undergraduate students following subject courses in the creative industries. This well-balanced and informative paper describes how focus groups of students watched two videos - identical except for the camera angle (eye-level and low-shot) - of a presenter, presenting, before discussing their perceptions of the quality of the medium and of the teaching. In the context of both the Teaching Excellence and Student Outcome Framework and the ineluctable movement of higher educational institutions to online teaching because of Covid-19, the research exercise confirmed that students regarded the eye-level camera angle as superior to the low, but that they had, as regular YouTubers, reservations about production quality and also about the apparent lack of the kind of sparkle they experienced in face-to-face tutorials, this latter much more likely to enthuse and engage them. The author draws conclusions about the need for institutional support for staff producing and taking part in such videos and the means by which presenters may enhance emotional connectedness, learning partnership and mutual respect in the student-staff relationship. Presenter-centred videos may well not alone achieve these results or positively influence student satisfaction, though they have potential value, especially for revision purposes. The paper concludes with some suggestions for future research into relevant aspects of this approach.

A detailed presentation of the 'Inclusive Course Design Tool' (ICDT) describes the creation of a systematic means of addressing, in particular, the black, Asian and minority ethnic (BAME) achievement gap at Leeds Beckett University. It was intended as a way of encouraging course designers and course teams across the institution to examine their practice and reflect on how their courses might fail to be inclusive and thus not adequately meet the needs of very diverse groups of students, not just BAME. By focusing attention on curricula, the classroom (virtual or physical), pedagogy and possible implicit and unconscious bias, the ICDT has, in its first outing, clearly demonstrated its scope for enhancing teaching and learning for all students and, especially, those from underrepresented groups. The authors of this paper, Susan V Smith, Ruth Pickford, Janice Priestley and Rebecca Seller, are committed to the principles which underpin the tool's application and here, against a background of relevant literature, describe the structured approach it offers, covering course planning, course management, student support, establishment and nurturing of a course community, provision of development opportunities

for all students and ensuring challenge for all. Eminently clear from this paper are the complete commitment of the whole institution to the implementation of the tool, evidence of the creators' careful consultation beforehand and the painstaking subsequent collection of feedback data to inform its continuing development. It is perhaps unsurprising that other higher education institutions have requested it and the authors confirm their intention that it should be made available.

Objective scrutiny of the various technological systems now available for application in education is vital if their best features are to support active learning and effective teaching, especially at a time when the traditional lecture has been very adversely appraised and, indeed, when lectures have not been permissible because of a pandemic. After providing sessions to familiarise all participants equally with the nature and practical characteristics of particular tools, Michael Detyna and Eleanor Dommett of King's College London conducted small focus groups to take account of both student and staff perceptions, seeking to discover user views of which individual technologies might variously be harnessed to maximum pedagogical effect – in order to enhance the value of lectures by incorporating interactive and problem-solving experiences. Their findings drew attention to how best to optimise existing practice, to support new approaches, to ensure ease of use for both students and staff and to avoid overload and distraction. There is considerable food for thought in this balanced and meticulous study, which recognises the importance of taking account of the often-conflicting attitudes to digital methodologies of students and teachers respectively.

Agnieszka Herdan, Antonella Russo and Elizabeth Warren, of University of Greenwich and Lorenzo Neri of Birbeck University, carefully outline their study of the effectiveness of a blended-learning strategy incorporating self-regulated learning (SLR) in enhancing the writing skills of business school students, in this case those following accounting courses. They report on their deployment of MyWritingLab as a transferable means of addressing the identifiable written communication deficiencies in new graduates entering the workplace. The detailed findings of this research paint a very positive picture of the impact of the approach on students' written communication skills as well as on student engagement and confidence, for such a method appears to promote a sense of personal responsibility for learning and a degree of autonomy; students also have control over their pace of study. Such independent learning, in the context of dedicated online tools and teacher support in the classroom, clearly does produce in students a sense of satisfaction at having come to understand what they do and don't know about writing and thus at being able to improve relevant skills. This paper offers helpful practical suggestions as to how to apply SLR within blended learning.

A fascinating exercise in analytical composition is provided by Rachel McCabe of La Salle University, who sought to develop in students an appropriate understanding of text (here, film) and of the complex choices behind its creation, in order to develop in their written responses a sharper critical awareness, a deeper and more sophisticated exploration of method and a more refined and relevant specialist vocabulary for discussing construction and impact of text. What is particularly interesting in this case study is the manner in which the author adjusted, over time and in the light of experience, the nature of the task, which began as small-group creation – using personal cellphones – of a film scene or trailer that typified a particular genre, but eventually became the filmed re-creation of a scene from a professional movie. This evolution helped to eliminate unnecessary and time-wasting preparation of original material and to achieve focus on analysis; it evened up inequalities in the creative skills students brought with them; it also aided innovation. The reader of this

paper is left with a powerful sense of student engagement: the participants watched original scenes repeatedly and together interacted with the content; post-screening discussion between creators and audience honed mutual appreciation; they were ultimately able to articulate well in writing the elements of composition, skills readily transferable to other kinds of text.

Evidence of social inequalities, social injustices and the persistence of racial prejudice is not difficult to find, however frequent the calls for change. In this forthright and cogent opinion piece, Mazia Yassim of University of Greenwich offers a coherent strategy for higher education institutions to adopt in order to move their policy and practice from mere raising awareness of these issues to logical steps to the genuine achievement social change. The author sees the five stages of Goodman's (2013) 'Cultural Competency for Social Justice' proposal as a framework which, when given equal weight and profile right across institutions, will help to develop in their whole communities a sense of social justice and cultural competence and encourage in students the self-belief and determination to become social change makers. Effective education about social change, she argues, must be embedded in the curriculum and the staff must be appropriately trained and supported to deliver it; students must enter employment confident that they can make a difference and achieve change. Perhaps most striking in this piece is the author's emphasis on adequate measurement of change at programme, institutional and even national levels; unless social change engagements by alumni are specifically included in the tracking of their progress beyond higher education and unless the impact of related institutional practices are monitored and properly measured, true improvement to society will remain elusive.

It is certainly true that good teachers are those who continuously reflect on their own practice and are prepared to question methodology in the interests of pedagogical improvement. Finding herself once again a student – on the Postgraduate Certificate in Higher Education course at the University of Greenwich – Nandini Boodia-Canoo took the opportunity to consider the teaching of higher education Law (and her own previous teaching experience therein) in the light of, specifically, Social Learning Theory, Constructivism and Cognitive Load Theory. Her reflective paper here is a tribute to her critical acumen in appraising these theories against both her own teaching and generally accepted practices in teaching law to undergraduates; she is keen to stimulate discussion and debate and to encourage willingness to innovate, to challenge teachers' personally held assumptions about students and how they learn, to question the efficacy of particular approaches, to review methods and materials and to enhance the learning experience of all those who choose to follow courses in Law.

The provision of expert advice on upskilling by staff to meet a real challenge – in this case, the application of online learning and teaching strategies in a pandemic context, when socially distanced, on-campus and 'in-person' measures have their own disadvantages – is always to be welcomed, particularly when it reminds us of the broader needs of all students and particularly of those who may be marginalised. Donna Hurford of the University of Southern Denmark and Andrew Read of London South Bank University, recognise that universities and their staff may well benefit from some timely guidance about the provision of online delivery to ensure that it is both motivating and inclusive. This helpful paper summarises the key aspects of online methodology, listing the key principles for making it effective and accessible, and then offers precise information about putting those principles

into practice. The whole is an excellent aide-memoire for all, emphasising as it does the fact that those students with the least sense of belonging are likely to be the greatest beneficiaries of a well-executed strategy.

In the context of a level 5 Environmental Management module, Debbie Bartlett of the University of Greenwich set out to involve two small consecutive cohorts of students in curriculum and assessment design. In accordance with the literature, which clearly demonstrates the value of formative feedback in stimulating reflection and developing learning (because it is much more akin to workplace reality than ever summative assessment can be), the author opted to engage her students in module co-design in a conscious effort to increase their control over their own learning and to stimulate their assessment literacy. The students chose to use the 'sustainable development goals' as their focus, with two assessment tasks - a group presentation and an individual report. The reader will be interested to note that, during the course of her description of the work of the two cohorts, the author makes a clear case change from third to first person plural, which confirms the collaborative and participatory nature of this student/staff relationship. Another striking aspect of this paper is the evidence of student enthusiasm for 'real-world' opportunities in the form of contribution to their institution's ISO14001 submission and the delivering of a conference presentation. The overall logic of this study is undeniable: if students exercise control over their curriculum and understand how it is to be assessed, the benefits to them far exceed conventional methods of final assessment.

In a reasoned and well-constructed argument, Katarina Stenke of the University of Greenwich maintains that, for English Literature, the traditional lecture continues to have significant value and relevance, for students in this discipline are 'expected to read at length or otherwise to engage with extended and complex discursive modes' and are not, contrary to recent research, mere passive learners in the lecture setting; nor, indeed, is a literature lecture just a one-way transmission of content. The author argues that the literature lecture does a range of very powerful things: it introduces and advertises set texts, habituates students to academic and literary discourse, models best practice in reading attention and critical argument and demonstrates how to read and transform into personalised meaning what is often very abstruse material. Looked at another way, the literature lecture becomes a social and worldly experience, a 'community of practice' that stimulates thinking and promotes reflective engagement. Helpfully, the author illustrates ways by which such a learning and teaching medium can enthuse students and suggests that the social learning theories that lie behind condemnation of the lecture need to be repurposed to recognise their genuine constructive qualities. Some offered insight into observations of Katarina's own teaching practice confirm that a lecturer's personal dynamism and love of literature, as well as awareness of how to generate interaction in the lecture setting, may be also of crucial importance to a lecture's success.

We hope that readers will find these papers stimulating and helpful and will enjoy reading them as much as we have enjoyed collaborating with our hard-working authors and reviewers to put this issue together.

With best wishes to all Compass readers and contributors,

Rachel and Yang

Defining social change as social action: higher education's role in addressing social change

Mazia Yassim University of Greenwich, UK

Abstract

Social issues that need addressing have never been in short supply and, despite regular calls for action, some of them recur with unfortunate regularity. Higher education institutions have a key role to play in addressing social change issues, through the education and empowerment of students. Based on critical discourse, this article puts forward the opinion that effective development of students as social change makers requires education and impact measurement.

Context

The world we currently live in has undergone changes for the better in very many ways, from social and economic to technical aspects. We cannot deny that we have made great strides in very many areas. However, there are some fundamental, seemingly recurrent issues which affect society in many parts of the world. Racism is one of them.

Racism is not a new phenomenon and goes back centuries. We have lost count of the number of campaigns to address racism and the number of world leaders who promised to address it. But how much has actually changed? Recent resurgence of the 'Black Lives Matter' movement as a result of George Floyd's death in the United States of America is an unfortunate and uncomfortable reminder to us all that this issue has not been effectively dealt with.

The efforts of higher education institutions to raise awareness of social issues

The global financial crisis of 2007/8 was a wake-up call for many educational institutions, especially for Business Schools, to reform educational approaches. Following critique of the focus of higher education institutions (HEIs) on developing economic beings (Abbott, 2007), many HEIs have taken measures to instil social consciousness as part of their graduate development (Iverson and James, 2010; Rountree and Koernig, 2015) and have introduced various initiatives. These include incorporating the 'Sustainability Development Goals' (SDGs) of the United Nations (UN), appointing sustainability champions, promoting an inclusive curriculum and signing up to the UN Principles for Responsible Management Education (PRME), aimed at transforming business and management education. Given all these initiatives, why do we still encounter evidence of racial insensitivity and abuse? For instance, businesses and brands are often foremost in their support for challenges to racism and for movements such as Black Lives Matter. On the other hand, they may contradict themselves, for example by producing blackface sweaters (Gucci) and exploiting movements such as Black Lives Matter for commercial gain (Pepsi's use of Kendall Jenner in an advert depicting a protest). These are some constant reminders to us in HEIs that we need to do more and the recent resurgence of the Black Lives Matter movement should be prompting

us to review what we do and to see what more we can do. HEIs are doing well in raising awareness of social issues, but just being aware is not enough – it is now time to focus on action.

Moving on from awareness to action

Despite the various efforts by HEIs to build social change agendas into their practices, there is almost no evidence of the effectiveness of these methods. Unfortunately, to date, objective measurement of the impact on our students of social change initiatives has been negligible and so there is no reliable means of knowing whether our graduates are socially active in their employment arena or in life in general. We also remain in the dark as to whether their increased social consciousness is influencing their lives – and, if so, how – and also, in particular, employment practices. So how may we ensure that we move from merely raising awareness to facilitating action? There are at least two ways by which we can do this – education and measurement.

An HEI wishing to be successful in embedding sound practice for educating students about social change must, with full senior management buy-in, establish it as an integral part of its culture. It must also ensure that social change is given the same curricular weight and profile by *all* disciplines. A framework that can help with this is the Cultural Competency for Social Justice (CCSJ) proposed by Goodman (2013). The author suggests that social justice should be part of the culture we develop in students and, in order to inspire a sense of social justice and cultural competence in our students, we need to facilitate their development through five stages:

- 1. Self-awareness addresses, among other things, our own prejudices, biases and internalised notions of superiority or inferiority.
- 2. Understanding and valuing others addresses aspects such as social identities and culture of others and the ability to value those who have different perspectives.
- 3. Knowledge and societal inequities is about understanding the history, ideologies and various manifestations of inequalities.
- 4. Skills to interact effectively with a diversity of people in different contexts is about the skills needed to deal with conflict arising from cultural differences, social identities and inequality.
- 5. Skills to foster equity and inclusion is focused on developing the skills required to transform institutions and create social change.

Part of this education of students should also build their confidence in their own ability to create change. It is important that we do not allow our students to fall into the downward spiral of a feeling of individual helplessness 'What can one person do?' or 'I don't have the power to make any difference.' Research into the development of people from children to adults has shown that empathy, positive emotions and a growth mindset all have a positive impact on prosocial behaviour and social responsibility (Oros and Fontana Nalesso, 2015; Hernández and Carranza Esteban, 2017). Every one of us, regardless of who we are and where we are on our career ladder, can influence society positively. It is important that our students graduate with not just the confidence to exercise their discipline or employment-specific skills and knowledge, but also with full competence and confidence to be able to create and deliver social change.

Of course, to educate our students effectively about social change and to develop this social justice cultural competence, we need to ensure that all our academics receive the relevant training and support to embed into the curriculum the means of generating such competence and to convert it into suitable content.

Measurement of social change initiatives is essential if we are do more than merely demonstrate evidence of impact: to understand how and where we can improve. According to Ratliff (2019) the measurement starts from embedding social change cultural competences into learning outcomes across a programme of study. This ensures that, at a programme level in every discipline, emphasis is given to developing student skills to create social change. As well as programme-level measurements, institutional and sector-wide measurements are also key to driving this change. In the higher education (HE) sector and in a given market, measurement of the standing and reputation of HEIs needs to take into account the level of social change measures that are implemented effectively. Tracking of alumni progress and career profiles should include consideration of their social change engagements. National surveys – such as Destination of Leavers from Higher Education (DLHE), National Student Survey (NSS) and Postgraduate Taught Experience Survey (PTES) – must include social change components so that social change education forms part of the focus of all HEIs.

Conclusion

HE has a duty to consider social change as a necessary part of student development (Simpson, 2014). In order to ensure that social justice and support for related movements such as Black Lives Matter do not remain a futile concept, there must be a focus on education and measurement. Students need to understand how to define social issues – in terms of specific change action within any given discipline or sector – and have the skills and confidence to be able to create and deliver these change actions. Measurements at programme, institutional and even national levels are key to ensuring that social change remains at the forefront of the HE sector's practices.

Reference list

Abbott, A. (2007) 'Education for humanity: A challenge within globalisation.' *The International Journal of the Humanities*, 5, 223-227.

Goodman, D.J. (2013) 'Cultural Competency for Social Justice,' *The CSJC Blog.* Available at: https://acpacsje.wordpress.com/2013/02/05/cultural-competency-for-social-justice-by-diane-j-goodman-ed-d/ (Accessed: 1st August 2020).

Hernández, R.M. and Carranza Esteban, R.F. (2017) 'Happiness, optimism and self-realization in students from a higher education program for adults.' [Felicidad, optimismo y autorrealización en estudiantes de un programa de educación superior para adultos.] *Interdisciplinaria*, 34, 307-325.

Iverson, S.V. and James, J.H. (2010) 'Becoming "effective" citizens? Change-oriented service in a teacher education program.' *Innovation in Higher Education*, 35, 19-35.

Opinion Pieces

Oros, L.B. and Fontana Nalesso, A.C. (2015) 'Socially skilful children: How much influence do positive emotions and empathy have?' [Niños socialmente hábiles: ¿Cuánto influyen la empatía y las emociones positivas?] *Interdisciplinaria*, 32,109-125.

Ratliff, D. (2019) 'Educating for justice: Curricular social justice education at institutions of Higher Education,' *Jesuit Higher Education: A Journal*, 8, 37-48.

Rountree, M.M. and Koernig, S.K. (2015) 'Values-based education for sustainability marketers: Two approaches for enhancing student social consciousness,' *Journal of Marketing Education*, 37, 5-24.

Simpson, J.S. (2014) Longing for Justice: Higher Education and Democracy's Agenda, Toronto: University of Toronto Press. ISBN: 978-0-8020-9670-8

Realising the inclusive potential of online teaching and learning for marginalised students

Donna Hurford¹, Andrew Read² University of Southern Denmark¹, London South Bank University, UK²

What's the problem?

In spring 2020, in response to COVID-19, <u>United Kingdom (UK) universities shifted much of their provision online</u> (Baker, 2020). However, because of a number of practical and commercial factors, many universities have retained elements of on-campus provision. As a consequence, hybrid approaches to teaching and learning, combining online and on-campus components, are now widely employed by UK universities.

The hybrid model presents universities with logistical and ethical challenges. Universities offering courses which involve <u>practice-based assessment</u> – in, for example, laboratory environments or the creative arts and performance – face complex decisions about how to facilitate socially distanced on-campus provision. It may be impossible to replicate online the full range of resources available to all students on-campus. On top of this, pressure to make a competitive offer to new students has pushed universities to return to 'in-person' teaching for the start of the new academic year (Universities UK, 2020) and consequently to put in place safeguards to minimise the potential health risk to students.

But the provision of socially distanced, in-person, on-campus teaching presents significant ethical and logistical challenges. Black, Asian and minority ethnic students are at increased risk of infection and death from COVID-19 (Aldridge *et al.*, 2020). The orchestration of oncampus, discrete, socially distanced groups – to enable students to have meaningful discussions, collate their thoughts and then share these in meaningful ways with other groups – could place unreasonable or unrealistic demands on students, academics and ancillary staff.

Though on-campus provision may be essential in some contexts, online approaches can nevertheless offer a more practicable alternative to the 'in-person' socially distanced teaching across the board which many universities have committed to. Online delivery may well be able to replicate – or, at least, closely match – the pre-COVID on-campus provision and thus provide a more equitably accessible offer. For example, online platforms such as Teams or Zoom allow students to move between live, face-to-face, small group discussion and live whole-cohort debate in ways that would be almost impossible on a socially distanced campus. However, course designers do need to consider how to ensure that online collaboration is both motivating and inclusive.

Principles for inclusive online learning

1. Be aware that belonging is significant.

Recognise that some students do not feel they belong to their university communities and that this can, in turn, affect their persistence, learning outcomes and final grades (Amos and

Doku, 2019; Tinto, 2017; Masika and Jones, 2016). We must keep sight of this in our online teaching and learning.

2. Ensure that synchronous online teaching and learning are purposeful.

Acknowledge that constraints, including access to quiet study spaces and disparity in the quality of online and digital access, especially affect excluded groups – hence the need to be clear about the learning objectives and relevance of synchronous online teaching and collaborative learning activities.

3. Provide accessible guidance.

Avoid making assumptions about students' digital expertise and understanding. Provide clear, technical guidance on the online platforms; include the students in co-developing guidance on online etiquette.

4. Design inclusive online learning activities.

When designing synchronous and asynchronous online learning activities, apply a consistent design structure with which students can become familiar. In addition, design collaborative learning activities which require social interdependence and individual accountability, sending clear signals that collaboration is valued (Johnson *et al.*, 2014).

Putting principles into practice

- Be explicit about roles and responsibilities in the online course. Share research on effective collaborative learning (Johnson, op.cit.) and signal how the students' collaborative learning is valued in the course and its assessment.
- Prioritise synchronous collaborative learning activities by flipping the content. Make
 the content available asynchronously through videos, screencasts, readings etc., with
 associated reflective tasks which prepare students for synchronous collaborative
 learning activities.

Team-based learning provides a collaborative learning framework for face-to-face and online contexts. The online class starts with a meaningful quiz based on the flipped content. The students answer individually before being assigned to teams where they share their learning, re-take the test and in most cases improve their scores (Parmelee *et al.*, 2010). Following the team quiz, the teacher focuses the teaching on the weakest areas of student understanding and sets the teams learning activities which require the application of their new knowledge and understanding.

3. Integrate collaborative learning activities into synchronous teaching and allocate student groups to breakout rooms when using video conferencing platforms. Upload relevant resources and descriptions of learning activities to accessible online platforms, such as Microsoft Sway or Padlet, and share the link via the online platform's chat function. This way students can easily access relevant resources and learning activity descriptions.

Online resources – like Padlet or the whiteboards provided by some online platforms – facilitate resource sharing by the teacher and group-members. Each group can use its own whiteboard to mind-map or concept-map their ideas, as well as sharing uploaded resources (Novak and Gowin, 1984). In the plenary, group members can then share their individual screens with the group's whiteboard or other online resource where they have uploaded tasks or drafted their ideas.

Online teaching and learning can certainly contribute to inclusive and accessible teaching and learning. By prioritising inclusion, accessibility and careful planning, we may harness the potential of online platforms and resources for the benefit of all – and our most marginalised students will be the chief beneficiaries.

Reference list

Aldridge, R., Lewer, D., Katikireddi, S.V., Mathur, R., Pathak, N., Burns, R., Fragaszy, E.B., Johnson, A.M., Devakumar, D., Abubakar, I. and Hayward, A. (2020) 'Black, Asian and Minority Ethnic groups in England are at increased risk of death from COVID-19: indirect standardisation of NHS mortality data.' *Wellcome Open Research*. Available at: https://wellcomeopenresearch.org/articles/5-88/v2 (Accessed: 03 September 2020).

Amos, V. and Doku, A. (2019) 'Black, Asian and Minority Ethnic Student Attainment at UK Universities: #Closing the Gap.' Available at: https://www.universitiesuk.ac.uk/policy-and-analysis/reports/Pages/bame-student-attainment-uk-universities-closing-the-gap.aspx (Accessed: 03 September 2020).

Baker, S. (2020) 'Coronavirus: growing number of UK universities move to online teaching.' *Times Higher Education Supplement*, 13 March. Available at: https://www.timeshighereducation.com/news/coronavirus-growing-number-uk-universities-move-online-teaching (Accessed: 03 September 2020).

Department for Education (2020) 'Higher education: reopening buildings and campuses.' Available at: https://www.gov.uk/government/publications/higher-education-reopening-buildings-and-campuses (Accessed: 03 September 2020).

Johnson, D.W., Johnson, R.T. and Smith, K.A. (2014) 'Cooperative learning: Improving university instruction by basing practice on validated theory.' *Journal on Excellence in College Teaching*, 25(3&4), 85-118. Available at: ISSN: 1052-4800 (Accessed: 19 December 2020).

Masika, R. and Jones, J. (2016) 'Building student belonging and engagement: insights into higher education students' experiences of participating and learning together.' *Teaching in Higher Education*, 21(2), 138-150. Available at: DOI: 10.1080/13562517.2015.1122585 (Accessed: 17 December 2020).

Novak, J. and Gowin, B. (1984) *Learning How to Learn*. New York: Cambridge Press. Available at: DOI: https://doi.org/10.1017/CBO9781139173469 (Accessed: 19/12/2020).

Opinion Pieces

Parmelee, D. and Michaelsen, L.K. (2010) 'Twelve tips for doing effective Team-Based Learning (TBL).' *Medical Teacher*, 32, 118-122. Available at: DOI: 10.3109/01421590903548562 (Accessed: 17 December 2020).

Quality Assurance Agency for Higher Education (2020) 'COVID-19: Thematic Guidance – practice and lab-based assessment.' Available at: https://www.qaa.ac.uk/docs/qaa/guidance/covid-19-thematic-guidance-practice-lab-based-assessment.pdf (Accessed: 30 November 2020).

Tinto, V. (2017) 'Reflections on Student Persistence.' *Student Success: A journal exploring the experiences of students in tertiary education*, 8(2), 1-8. Available at: https://doi.org/10.5204/ssj.v8i2.376 (Accessed: 17 December 2020).

Universities UK (2020) 'Most universities will teach in-person this autumn.' Available at: https://www.universitiesuk.ac.uk/news/Pages/Most-universities-will-teach-in-person-this-autumn.aspx (Accessed: 03 September 2020).

Developing the Inclusive Course Design Tool: a tool to support staff reflection on their inclusive practice

Susan V Smith, Ruth Pickford, Janice Priestley, Rebecca Sellers Centre for Learning & Teaching, Leeds Beckett University, UK

Abstract

Inclusivity is fundamental to higher education, its course design, its assessment and its delivery. The principles of inclusivity offer all students the opportunities to achieve to the best of their ability. The purpose of this case-study is to outline the context, process, development and initial evaluation of a newly generated tool designed for academic colleagues. The Inclusive Course Design Tool (ICDT) offers a series of questions for reflection with supporting guidance rooted in theory and research on inclusion, pedagogy, multiculturalism, universal design for learning and implicit and unconscious bias. This first version of the tool encourages course teams to reflect on and interrogate the nature of inclusive academic practice in their courses, in their course curricula, their classrooms (virtual or physical) and their approaches to student learning and support. The contextualised rationale for the tool, its design, the consultation process, its early evaluation and future considerations as an institutional tool are explored. This paper specifically explores its use to try to reduce the black, asian and minority ethnic (BAME) student award gap and enhance success and graduate outcomes, as well as academic practice and staff reflection.

Introduction

A project team in The Centre for Learning & Teaching generated The Inclusive Course Design Tool as part of our institutional Access and Participation Plan (APP) activity, particularly, at first, to help to address our BAME student award gap and also to address and support the Office for Students' (2019) drive for wider excellent inclusive practice. It is one strand of a range of initiatives to catalyse Leeds Beckett University to fulfil its key performance indicators for student continuation, satisfaction and success and to generate impetus in improving our inclusive practice specifically at course level to support all our diverse student groups and to improve the equality of opportunity for under-represented groups to access higher education (HE) and to progress and succeed in it.

The inclusive design and delivery of teaching, learning and assessment methods that allow all students to engage meaningfully with the curriculum and achieve their full potential is fundamental to good course design (Thomas and May, 2010) and the project team felt that 'the course' – its curriculum, syllabus and design – was the place to concentrate colleagues' energies. The tool was born of many institutional and sector contextual and practical pressures and a strong feeling that we needed a simple 'one-stop device' which would enable staff to scrutinise the design and detail of their courses through a diversity and inclusion lens.

The tool was intended to catalyse the course teams to reflect on and interrogate their course-level inclusive design and practice. It was to be used once for each individual course at the design phase and thereafter as an enhancement tool. We wanted the outcome of our

collaborative work to promote ownership of subject-specific inclusive practice and catalyse actions for enhancement through deep reflection, not just a superficial 'ticking off' of perceived activity. A pure 'checklist' approach would not have fostered in educators this deep reflection (De la Croix and Veen, 2018) and colleagues' feedback showed something better designed, likely to promote reflection, interrogatory and yet administratively 'light' would encourage more ownership and colleague engagement.

Our different diverse student groups

There was a clear need to consider the inclusive learning experience of and best practice for different student groups and their intersectionality had become a priority. In addition, we had to address a closing of our BAME student award gap while also respecting the specific needs of all our diverse student groupings: for example, our international students, those with mental health needs, disabled students, those from a disadvantaged socio-economic background, students who commute, estranged students or those who may be entering university from care.

For 2019-20, however, the reducing of the BAME student award gap needed close attention to catalyse more rapid change and improvement. In 2020, 19.2 % of our students are BAME (Leeds Beckett University, 2020) and our gap has been slowly closing with a downward trend over the past three years from 2016, reducing from 20.7% to 14.4%. The University had already made a range of clear, evidence-based strategic actions to address this – such as projects to research BAME students' lived experience (Smith, 2017), focused activity relating to placement access, inclusive practice resources and webpages, enhanced practice guidance (Centre for Learning and Teaching, 2018; 2019), exploration and enhancement of course entry routes and the decolonising of curricular content and reading lists – but institutional results were patchy. The tool was 'invented' 1) to combine a full consideration of the evidenced factors which have impact on student achievement, with a nuanced understanding of course-specific pedagogy; 2) to allow staff to consider, specifically, the highlighting and enhancement of BAME students' experience.

Contextual literature

The tool questions needed to be rooted in best practice research. A literature review explored the key factors which impact on student satisfaction in higher education, student success and inclusive academic practice. The tool project team synthesised the findings and distilled them into the early drafts of the tool questions. The project team explored literature about intercultural education (Salkind, 2008; HEA, 2014; Advance HE, 2013; Sian, 2017), ethnicity and attainment (Cotton et al., 2013; Stevenson, 2012; Smith, 2018; Miller, 2016; Hoffmann et al., 2002) and students' sense of belonging (Ahn and Davis, 2019; Hausmann et al., 2007; Woodyat and Brooker, 2019; Tovar, 2013) to give context to the key issues. Then, literature relating to teaching excellence (Pickford, 2018; Palmer et al., 2014), cocreation of curricula (Bovill et al., 2016) inclusive feedback (Thomas and Jones, 2017;) placement practice (Jones et al., 2017) and institutional racism and microaggressions (Sue et al., 2007; Pilkington, 2013) was used to identify best practice. For local and applied context, academic colleagues and our BAME student ambassadors discussed our own recent institutional projects into our BAME student award gap, the needs of commuting students (disproportionately represented in BAME students) (Smith, 2017; 2018) and hopes for the future of the education of all our students.

Main aims of the ICDT

The tool was primarily developed to:

- encourage colleagues, through active reflection stemming from using the tool, to be more focused in their appreciation of inclusive practice as core to their design of new courses and integral to the content and approach of existing courses;
- b) underpin the 'signing- off' for quality purposes (by school senior leadership teams) of the linked tool action plans;
- focus colleagues' attention on considering the factors which impact on student success and narrowing the award gap for BAME students. The flagged questions are designed to help with this;
- d) embed basic standards of inclusive practice for all, thereby enabling a review of the current reasonable adjustment process;
- e) increase the visibility of specific groups of students through the wording of the questions and the language and terms used;
- f) ensure accessibility. Under the Equality Act (2010), we are required to ensure that all our services and materials are accessible to disabled students. As such, it is necessary to ensure that all teaching and learning environments can be accessed and used by any disabled student, not only those students who choose to tell us they have a disability. We used the JAWS (Job Access With Speech) accessibility test to assess the accessibility of features used in the tool on Android and ios devices;
- g) be suitable for teams of course staff to use online or face to face or on blended courses. This was especially pertinent with changing ways of practice during and after the coronavirus pandemic. Equally, the language used in the tool needed to relate to the diverse ways we deliver courses (i.e. wholly online, blended and face to face).

Alongside the literature review of current contextual research, we undertook a scoping of other course-focused inclusive practice resources in the sector, reviewing their accessibility, quality, breadth, practicality and supporting guidance (MMU, 2020; SOAS, 2018; UCL, 2018).

Most of these resources, though valuable, adopt a checklist approach or one that focuses on specifics and less on the adoption of a coherent holistic approach to good course design, delivery and pedagogy. Our approach acknowledges the philosophy of the 'Connected Curriculum' (Fung, 2017) which advocates that students should learn actively through research and critical enquiry, rather than by passively receiving accepted knowledge. It also reflects Croucher and Roman's (2007) work, which affirms that inclusive course design acknowledges all students' entitlement to access a course and to participate in it and advocates consideration of this entitlement through all elements of a course life cycle. We also acknowledge that students are individuals and learn in different ways and that a non-

fragmented, coherent and inclusive course design lends itself to simpler teaching, is easier to plan, is easier and more meaningful for all students to understand and generates better student outcomes (HEA, 2011; Hockings, 2010). Although Moore *et al.* (2017) have devised a reflective tool for United States (US) universities which considers inclusion, this primarily addresses broader social issues (e.g. unconscious bias, multicultural education and the hidden curriculum) and has less emphasis on specific reflection upon the practical and pedagogic course-related issues. Our ICDT uniquely focuses on six elements (Pickford, 2018) which, when synthesised, enhances the coherence of the design but also offers the opportunity for colleagues to reflect on the specific needs and style of their course and how to improve its pedagogy and practical delivery.

Key features of the ICDT

The key features and approach to implementation are:

a) We mapped and considered our institutional APP requirements as part of conceptualisation and design of the tool. The tool itself (and its questions for reflection) is designed around the philosophy that student success is dependent upon individual student engagement and that engagement is an individually-owned and personal concept (Saks, 2006). Our methodology builds on this philosophy by explicitly specifying the requirements for maximising student engagement in a course (table 1, Pickford, 2016). The tool specifically focuses course team reflection on curriculum design, the learning environment and different learning activities.

Table 1: Inclusive course-level design.

Requires opportunities for all	Can be provided only	Is achieved through
students individually to	through design of a	course-level:
engage with their course:	course's:	
behaviourally	curriculum	planning
	learning environment	management
emotionally		student support
	learning activities	community
conceptually		student development
	curriculum	student challenge

These six best practice core sections which structure the format of the tool (see figures 1a-1f below) are consequently 1.) planning your course, 2.) managing your course, 3.) supporting all students on the course, 4.) building the course community, 5.) providing appropriate development opportunities for all students and 6.) challenging all students on the course. Institutional priorities (for satisfaction, continuation and student outcomes) and requirements for the United Kingdom (UK) Quality Code for HE and Framework for Higher Education Qualifications (FHEQ) requirements and outcomes are encapsulated in its content (Pickford, 2018). It has underpinned approaches to course development at Leeds Beckett University since 2016 and has been evaluated and tested in use at an institutional level as well as having informed practice across the sector. Its perceived quality has led to requests to use it from other higher education institutions (HEIs). The tool's questions are all underpinned by research evidence and a full, linked TALIS Aspire reading list is

integrated into each of its sections. Each segment of it has tailored resources and simple, jargon free, contextual guidance.

- b) We developed contextual guidance which was then reviewed through several iterations by colleagues for relevance and understanding. We also asked them to offer their own discipline-specific literature on inclusive practice to inform the research base and we integrated suggestions into the reading list.
- c) Our internal Centre for Learning and Teaching (CLT) Teach Learn page hosts the tool and its guidance, with supporting text for colleagues. We intend to make it available to the sector through open access and we'll consider licensing it to Creative Commons after it has been fully evaluated on completion of two academic cycles.
- d) We established face-to-face and online webinars for staff development across both campuses to support colleagues to use the tool.
- e) All course teams were expected to use the tool from March 2020 (after its approval by the University Academic Board) to explore their inclusive practice in both the design and delivery of their courses.
- f) Course directors were expected, by summer 2020, to formulate an initial action plan, which in the first year focuses specifically on the thirteen flagged specific BAME attainment / experience-related questions. (see figures 1a-1f). In practice, some of this activity was unfortunately delayed and patchy due to pandemic related priorities.
- g) Action plan implementation is to be undertaken as part of the course monitoring annual review and enhancement processes and reported on through our Academic Quality and Standards Committee.
- h) From 2020/21, the tool must be used to inform all new course validations. Our University deans will then need to sign off the use of the tool and its new course-design action plan prior to the granting of new course approval.

The development process:

We gradually refined the tool through four consultative phases from an initial booklet with seventy-three questions to a forty-two-question graphical form with eighty-five unique, supporting, evidence-based resources. We sought wide consultation over several months from academic and professional service staff, the Students' Union and their representatives prior to formal University approval.

This iterative development process revealed the need to consider inclusive practice at course, rather than module level. Colleagues felt that a more holistic reflection would offer a more integrated, coherent view of activity, identify gaps and reduce silo working. Staff felt that there was then potential for an individual module review of inclusive practice, to follow

once the gaps and concerns had first been identified and discussed collaboratively at course level.

The feedback from colleagues and students mainly focused on the need for: plain English; more flagging and increased visibility of the questions which targeted BAME students' learning experiences specifically; more rigorous accessibility software checking; ease of use (hard printed copy or online completion across all formats and platforms); and tighter, clearer, research-based guidance recommendations. A sign-off sheet for senior managers was also requested and this was included into the tool.

The tool questions:



The Inclusive Course Design Tool

Introduction

Who is this Tool for? All colleagues involved with the design and delivery of our courses.

What and When: The Inclusive Course Design Tool can be used to help teams reflect and focus on the design and delivery of high quality, inclusive UG and PG courses at LBU.

Course teams should consider the questions listed here as a way of interrogating and reflecting on their practice **prior to new course approval** or as a reflective tool **as part of ongoing course enhancement**.

The structure: This Tool is structured in six parts – planning your course, managing your course, supporting all students on the course, building the course community, developing all students on the course, challenging all students on the course (Pickford, 2018). It will take around an hour to complete.

The context: Consideration of all our diverse student groups* and how to maximise their learning and attainment is fundamental to course design and delivery and we must enable all students to be satisfied with their learning experience and progress to complete their study with a positive outcome.

Institutional priorities (for satisfaction, continuation and graduate employment) and requirements for the UK Quality Code for HE, our institutional APP and FHEQ requirements and outcomes are encapsulated in the Tool's reflective questions.

Questions marked with a highlight some important areas which may help to address our BAME student attainment gap.

Resources and guidance to help you answer each question are in a <u>Talis</u> reading list, links to which can be found <u>at the end of the document</u>. You may identify, after using the Tool, that your team needs further support with some questions. If so, please contact <u>clt@leedsbeckett.ac.uk</u> for further signposting and help.

Submit the completed document as an Appendix with your course validation documentation.

* Particularly, black, Asian, international students and those with mental health needs, disabled students, those who may be first in their family to enter HE, those from a disadvantaged socio-economic background, students who commute or are carers, estranged students or those entering HE from care. Intersectionality of these student groups should also be considered.

This guidance is produced by the Centre for Learning and Teaching

February 2020

Figure 1. Inclusive Course Design Tool

The tool's questions are detailed below in the shaded sections (sections 1a-1f). The questions marked with a highlight some important areas which, based on the literature, may help to address our BAME student award gap.

Some questions were piloted and rephrased many times during the consultation process to ensure clarity. Simple supplementary research-based explanations (to explain the rationale of each question) were inserted in the linked guidance. Academic colleagues do, as part of the nature of their role, take a critical and interrogatory approach to information. This was regarded as important during the writing of the questions and the supporting tool guidance. Ambiguities in wording which led to staff confusion were taken seriously. For example, during consultation, staff discussed their understanding of inclusive terminology and using inclusive images in relation to question 1.8 - "Do your course and module materials and handbooks use appropriate plain, inclusive terminology, language and images?"

The insertion of specific supporting references to enhance clarification, guidance from the Plain English campaign about inclusive language and the statement "Simple jargon-free language allows more students to engage more easily with materials "helped clarify understanding about the question for colleagues. Each question was systematically explained and addressed in this way.

PLANNING YOUR COURSE

- 1.1 Have you included a clear course statement related to inclusive programme values within your student-facing course documents?
- 1.2 Do your course aims and the overarching course design consider your students' diverse prior learning experiences (especially those who may be from under-represented groups)?
- 1.3 Does planning for the first term include taking active steps to understand the subject and broader academic/life experiences for all groups of incoming students?
- 1.4 Do you identify in advance, specific groups of students who may need additional support at pre–arrival, during induction or at course transition points?
- 1.5 Do you offer a choice of different assessment methods/tasks/topics to reduce the need for alternative assessments and is this choice clearly embedded in the module design and course assessment strategy?
- 1.6 Is there a clear course process for considering the clarity of assessment tasks and marking criteria?
- 1.7 Are your assessment submission dates planned using cultural calendars to ensure you are responsive to the religious and cultural needs of a diverse cohort?
- 1.8 Do your course and module materials and handbooks use appropriate plain, inclusive terminology, language and images?
- 1.9 Does the course team provide students with electronic copies of teaching materials developed and produced in accordance with UK accessibility guidance?
- 1.10 Do you specifically consider how to integrate commuting students into the course? (e.g. consideration of social space, careful timetabling, blended learning, assessment submission timing) □

Figure 1a. Questions for planning your course

MANAGING YOUR COURSE

- 2.1 Does your course monitor the number of applications received from different groups of students and actively seek to address any differences?
- 2.2 Do your interview (if applicable) and selection processes support all groups of applicants equally?
- 2.3 Are students made aware of all potential additional costs and equipment pre-entry?
- 2.4 Does your course have a consistent language and structure across its online spaces that students can easily navigate?
- 2.5 Do you record lectures/sessions? Do you have an agreed, documented course guidance on sharing recordings?
- 2.6 Do you have strategies in place to understand and share feedback on the experiences of all students (especially those from under-represented groups)?

Figure 1b. Questions for managing your course

SUPPORTING THE STUDENTS ON THE COURSE

- 3.1 Do you have access to the individual profiles and support requirements of all students?
- 3.2 Do you have a clear process for each student to have a named Academic Advisor (AA)?
- 3.3 Do you have any course AA projects/schemes that target specific groups of students?
- 3.4 Do you have library induction/study skills/diagnostic learning timetabled into induction and the early part of the course?
- 3.5 Do you provide online/face-to-face opportunities for all students to share their diverse experiences (especially those who may be from under-represented groups) very early in the course?
- 3.6 Do you offer formative bite-size assessment opportunities early in the course, so students have an opportunity to 'fail safely' and seek support?
- 3.7 Do you run defined sessions for students who may have failed elements of their assessments? (e.g. structured summer support, revision sessions etc.)?
- 3.8 Do you have a clear course communications process to promote engagement at critical times for all your students (pre-arrival, post-Christmas, first assessment period, during exams, study abroad, during off-campus placement)?
- 3.9 Is space and time given in some teaching sessions and office hours for students to openly acknowledge and discuss racist or racialising behaviours? □
- 3.10 Do your students have opportunities and a place to go to discuss racist or racialising behaviours which have impacted on them? □

Figure 1c. Questions on supporting the students on the course

BUILDING THE COURSE COMMUNITY

- 4.1 Does the programme explicitly plan activities that nurture a culture of academic belonging from the beginning?
- 4.2 Does the course explicitly foster a culture of social belonging at all levels?
- 4.3 Do you co-create or seek feedback from students on the planned course timetable and consider its potential to disadvantage certain groups?
- 4.4 Do in-class and online learning activities promote inclusion and expose students to a range of views, opinions and cultural contexts?
- 4.5 Do your course reading lists and resources offer a lens representative of a diverse population by including black and people of colour (BPOC), indigenous scholars and other authors with different cultural viewpoints?
- 4.6 Are your course materials and learning resources available electronically to support parity of access for distance, commuting, print-impaired students?
- 4.7 Does the way you allocate students to group work activities enable the creation of ethnically diverse groups from different educational backgrounds?

Figure 1d. Questions on building the course community

DEVELOPING ALL THE STUDENTS ON THE COURSE

- 5.1 Are there safe, well-managed, interactive, virtual and physical classroom opportunities for all students to develop critical thinking and debate on issues relating to race, gender, global, social and cultural issues?
- 5.2 Are there planned opportunities in the curriculum/course design and delivery for all students to co-create some elements of course activity if they wish?
- 5.3 Are there explicit, embedded and accessible opportunities for all students (especially those in under-represented or vulnerable groups) to access and benefit from qualityand-equality-checked placements, paid internships and preparation for graduate employability?
- 5.4 Are academic skills integrated into the course, preparing students to take control of their further development?
- 5.5 Do you vary the session type to allow for all different types of learners and could any of these inadvertently exclude particular groups of students?

Figure 1e. Questions on developing all the students on the course

CHALLENGING ALL THE STUDENTS ON THE COURSE

- 6.1 Does the course team have a way of identifying students who may be struggling with academic content?
- 6.2 Likewise, does the course team have clear practice in identifying talent and supporting those who need more stimulation and challenge?
- 6.3 Does the course use a range of differentiated activities and reading to support and challenge diverse cohorts?
- 6.4 Are the module assessment methods across each level of the course designed to enable all students to perform to the best of their ability?

Figure 1f. Questions on challenging all the students on the course

Evaluation

The tool's webpage has a feedback box, through which updates are continuously made in response to the users. The tool was being used by all our courses as mandatory in 2019-20 (161 undergraduate and 189 postgraduate courses). The Covid-19 emergency stalled initial completion by some of our courses, but all must complete and report on it as part of the 2020-21 academic quality cycle. Use of the tool will be fully evaluated after one academic cycle. An online survey and a focus group of a selection of academic course teams will explore: the quality of reflective discussions that were undertaken in the course teams; any changes made; the ease of use of the tool; its value and practicality and recommendations for future amendments. Module-level reflection will be encouraged once the initial course level gaps have been identified.

In parallel, we shall undertake some thematic qualitative analysis (Braun and Clark, 2013) of the action plans and enhancement reports to elicit innovative actions and practice themes which can be shared as best practice. We will also explore, as a specific measure, changes in course BAME attainment gaps, student satisfaction and retention rates as part of our continuous quality monitoring.

In the meantime, interim feedback has been sought from internal users by email. Users have welcomed the tool and appreciate the wide consultation which has informed its design. It is regarded as "very assertive, which many other inclusive initiatives lack". The flagged questions highlighting the focus on issues underpinning the BAME students' award and success gap have been praised for their focus. We will undertake a full evaluation and further cycle of amendments in time which will illuminate further staff thoughts on the tool. Early feedback is positive, especially in relation to the rooting of the questions in research, the simplicity of the guidance and language and the ability for course teams to discuss their own course needs in relation to consideration of their own course student demographics and teaching approach. The general nature of the questions means that solutions can be found that best suit the academic style of the students and the discipline being taught. For example, courses in our Business School, which had lower numbers of students accessing placements and internships (question 5.3), are working on a new project with the Careers staff to address this. Other courses, for example in Health and Social Care, that have no issue with placement access, have developed more focus on considering how students are allocated to groups (after question 4.7 generated practice gaps). The perception that "thankfully, this is not a one-size-fits-all approach" appears to be an emergent factor in colleagues' willingness to use the tool. Staff have used it to complement the institutional drive to improve our student retention and our graduate outcomes - which has been a cause for concern, with our institution reported to have fallen 15% behind the UK average of 80% for graduate jobs. In 2017, the gap between our performance and the national average, was 15%. This has now narrowed to 5%.

Future considerations

The tool is comprehensive and its aims and purpose and the innate complexity of enhancing inclusive practice will continue to make it a work in progress. It is just one part of a huge initiative the institution has taken, gradually to improve the outcomes of our students. There is more to be done to push the scores up.

Practising what we preach, we feel such an inclusion tool should be inclusive itself and thus we want it to available, as soon as it is refined after the next cycle to a broader network of educators to grow its visibility and effectiveness. We have already facilitated deeper conversations about inclusion and diversity in our university.

A follow-up activity which encourages teams to review their module practice and to focus on questions in the 'Supporting' (figure 1c), 'Building Community' (figure 1d), 'Developing' (figure 1e) and 'Challenging' (figure 1f) sections of the tool will be undertaken if the course-level reflection identifies gaps in practice which could usefully be ironed out at a more granular level.

Some staff feel that their awareness of diversity issues, raised through reflection on the questions has improved and changed their practice. Discussion with staff during and after early use of the tool and as part of the institutional drive to raise highly skilled graduate employment rates led to new initiatives for their student groups. These included planning a new BAME student mentoring scheme, improved detailed guidance and academic advisor practical staff training focused on supporting all diverse student groups. Institutionally, the funding of more mock assessment centres and student visits to employers are being

considered; such developments will form part of the institution's access and participation work and equality and diversity activity.

Recent world events have also led to discussions about wider black inclusion issues at our university. The tool – particularly the questions on racialised behaviour (questions 3.9 and 3.10), social belonging (question 4.2) and reading and resource lists (question 4.5) – have helped course teams understand that HE is not immune from racism and they must strive to address the persistent inequalities in students' access, participation and experience. This discussion is helping to raise awareness and bring about action through wider initiatives, such as our Zero Tolerance campaign, plans for contextual offers, hardship funding and our progress towards better outcomes reported through our APP narrative.

Close attention to the inclusivity of just one course, generated by a course team that takes the needs of all the diverse groups of students seriously and diligently, may well improve that one course over time, but one course alone will not be sufficient to meet the needs of a whole university and enhance its overall attainment and experience data. It is therefore important that the tool continues to be promoted via a coherent two-pronged approach — both as an institutional, strategic, contextualised directive *and* as a tool for course-specific, action-focused reflection and enhancement. In the meantime, the tool is for use by others and we shall seek — and much appreciate — feedback about its use, clarity and value in the wider HE sector.

Reference list

Advance HE (2013) 'Engaging Home and International Students: A Guide for New Lecturers.' Available at: https://www.advance-he.ac.uk/knowledge-hub/engaging-home-and-international-students-guide-new-lecturers (Accessed: 29 April 2020).

Ahn, M.Y. and Davis, H.H. (2019) 'Four Domains of Students' Sense of Belonging to University.' *Studies in Higher Education*, January 1-13. Available at: https://doi.org/10.1080/03075079.2018.1564902 (Accessed: 29 Apr 2020).

Bovill, C., Cook-Sather, A., Felten, P., Millard, L. and Moore-Cherry, N. (2016) 'Addressing potential challenges in co-creating learning and teaching: overcoming resistance, navigating institutional norms and ensuring inclusivity in student-staff partnerships.' *Higher Education*, 71(2), 195-208. Available at: http://dx.doi.org/10.1007/s10734-015-9896-4 (Accessed: 29 Apr 2020).

Braun, V. and Clarke, V. (2013) Successful Qualitative Research: A Practical Guide for Beginners. London: Sage. ISBN: 9781847875815.

Cotton, D., George, R. and Joyner, M. (2013) 'The Gender and Ethnicity Attainment Gap Research Project.' Pedagogic Research Institute and Observatory (PedRIO). Available at: https://www.plymouth.ac.uk/uploads/production/document/path/5/5853/PedRIO_Paper_2.pdf (Accessed: 29 April 2020).

Croucher, K. and Romer, W. (2007) 'Inclusivity in Teaching Practice and the Curriculum.' *Guides for Teaching and Learning in Archaeology*, 6. Liverpool: Higher Education Academy.

Available at:

https://www.heacademy.ac.uk/system/files/Number6 Teaching and Learning Guide Inclusivity.pdf (Accessed: 24 April 2020).

De la Croix, A. and Veen, M. (2018) 'The reflective zombie: Problematizing the conceptual framework of reflection in medical education.' *Perspectives on Medical Education*, 7, 394-400. Available at: https://doi.org/10.1007/s40037-018-0479-9 (Accessed: 29 April 2020).

Fung, D. (2017) A Connected Curriculum for Higher Education. London: UCL Press. ISBN: 978-1911576341.

Hausmann, L.R.M., Schofield, J.W. and Woods, R.L. (2007) 'Sense of Belonging as a Predictor of Intentions to Persist Among African American and White First-Year College Students.' *Research in Higher Education*, 48(7), 803-839. Available at: https://link.springer.com/article/10.1007/s11162-007-9052-9 (Accessed: 29 April 2020).

Higher Education Academy (2011) 'Inclusive curriculum design in higher education. Considerations for effective practice across and within subject areas.' Available at: https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/resources/introduction_and_overview_1568037036.pdf (Accessed: 30 May 2020).

Higher Education Academy (2014) 'Induction as Part of the Teaching International Students Project.' Report. Available at: https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/resources/induction_1568037224.pdf (Accessed: 29 April 2020).

Hockings, C. (2010) 'Inclusive learning and teaching in higher education: a synthesis of research.' Available at: https://www.advance-he.ac.uk/knowledge-hub/inclusive-learning-and-teaching-higher-education-synthesis-research (Accessed: 30 May 2020).

Hoffman, M., Richmond, J., Morrow, J. and Salomone, K. (2002) 'Investigating "Sense of Belonging" in First-Year College Students.' *Journal of College Student Retention: Research, Theory & Practice,* 4(3), 227-256. Available at: https://doi.org/10.2190/DRYC-CXQ9-JQ8V-HT4V (Accessed: 30 April 2020).

JAWS accessibility test. Available at: https://www.freedomscientific.com/products/software/jaws/ (Accessed: 29 April 2020).

Jones, C.M., Green, J P. and Higson, H.E. (2017) 'Do Work Placements Improve Final Year Academic Performance or Do High-Calibre Students Choose to Do Work Placements?' Studies in Higher Education, 42(6) June, 976-992. Available at: https://www.tandfonline.com/doi/full/10.1080/03075079.2015.1073249 (Accessed: 30 April 2020).

Leeds Beckett University (2020) First degree honours - Five-year degree classification explorer 2014/15 to 2018/19. Leeds Beckett University internal data report: unpublished.

Manchester Metropolitan University (MMU) (2020) *The Inclusive Curriculum Toolkit.* Manchester: Manchester Metropolitan University. Available at: https://www.celt.mmu.ac.uk/inclusion/toolkit.php (Accessed: 22 April 2020).

Miller, M. (2016) 'The Ethnicity Attainment Gap: Literature Review.' The University of Sheffield: Widening Participation Research and Evaluation Unit. Available at: https://www.sheffield.ac.uk/polopoly_fs/1.661523!/file/BME_Attainment_Gap_Literature_Review_EXTERNAL_-_Miriam_Miller.pdf (Accessed: 29 April 2020).

Moore, C., Brantmeir, E. and Brookfield, A. (2017) 'Inclusion by Design: Tool helps Faculty examine their teaching practice,' *Higher Education Teaching and Learning, Faculty Focus*. Available at: https://sites.evergreen.edu/ltc/wp-content/uploads/sites/440/2019/09/Inclusion-by-Design-Syllabus-Tool.pdf (Accessed: 30 June 2020).

Office for Students (2019) 'Access and Participation Plans.' Available at: https://www.officeforstudents.org.uk/advice-and-guidance/promoting-equal-opportunities/access-and-participation-plans/ (Accessed: 30 June 2020).

Palmer, M.S., Bach, D.J. and Streifer, A.C. (2014) 'Measuring the promise: A Learning-Focused Syllabus Rubric'. *Journal of Educational Development*, 33(1), 14-36. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1002/tia2.20004 (Accessed: 30 April 2020).

Pickford, R. (2016) 'Student Engagement: Body, Mind and Heart – A Proposal for an Embedded Multi-Dimensional Student Engagement Framework.' *Journal of Perspectives in Applied Academic Practice*, 4(2). ISSN 2051-9788. Available at: https://doi.org/10.14297/jpaap.v4i2.198 (Accessed: 11 April 2020).

Pickford, R. (2018) 'A Blueprint for Teaching Excellence.' *Journal of Perspectives in Applied Academic Practice*, 6(1) ISSN 2051-9788. Available at: https://jpaap.napier.ac.uk/index.php/JPAAP/article/view/299 (Accessed: 30 April 2020).

Pilkington, A. (2013) 'The Interacting Dynamics of Institutional Racism in Higher Education.' *Race, Ethnicity and Education*, 16(2), 225-245. Available at: https://www.tandfonline.com/doi/abs/10.1080/13613324.2011.646255 (Accessed: 10 April 2020).

Saks, A.M. (2006) 'Antecedents and consequences of employee engagement.' *Journal of Managerial Psychology*, 21(6), 600-619. Available at: https://www.researchgate.net/publication/275714108 Antecedents and Consequences of Employee_Engagement (Accessed: 30 April 2020).

Salkind, N. (2008) 'Cultural Deficit Model.' In: *Encyclopaedia of Educational Psychology*. SAGE Publications Inc: Thousand Oaks, CA: Available at: http://sk.sagepub.com/reference/educationalpsychology/n60.xml (Accessed: 29 April 2020).

Sian, K. (2017) 'Being Black in a White World: Understanding Racism.' *International Journal for Collective Identity Research.* 176. ISSN: 1695-6494. Available at: https://doi.org/10.1387/pceic.17625 (Accessed: 29 April 2020).

Smith, S,V, (2017) 'Exploring the BME student attainment gap: What Did It Tell Us? Actions to Address Home Black and Minority Ethnic (BME) Undergraduate Students' Degree Attainment.' *Journal of Perspectives in Applied Academic Practice*, 5(1), 48-57. ISSN 2051-9788 Available at: https://jpaap.napier.ac.uk/index.php/JPAAP/article/view/239/pdf (Accessed: 2 February 2020).

Smith, S. (2018) 'The Experience of Commuting and Living at Home: How Does It Affect the Engagement of BME Students with the University and Their Learning.' *Journal of Educational Innovation, Partnership and Change.* Volume 4, no 1, 1-14. Available at: https://journals.studentengagement.org.uk/index.php/studentchangeagents/article/view/520/pdf (Accessed: 29 April 2020).

SOAS (2018) 'Decolonising SOAS Learning and Teaching Toolkit for Programme and Module Convenors.' University of London. Available at: https://blogs.soas.ac.uk/decolonisingsoas/files/2018/10/Decolonising-SOAS-Learning-and-Teaching-Toolkit-AB.pdf (Accessed: 12 May 2020).

Stevenson, J. (2012) 'Black and Minority Ethnic Student Degree Retention and Attainment.' Higher Education Academy. Available at: https://s3.eu-west-2.amazonaws.com/assets.creode.advancehe-document-manager/documents/hea/private/bme_summit_final_report_1568036653.pdf (Accessed: 5 April 2020).

Sue, D.W., Capodilupo C.M., Torino G.C., Bucceri, J., Holder, A., Nadal, K. and Esquilin, M. (2007) 'Racial Microaggressions in Everyday Life: Implications for Clinical Practice.' The *American Psychologist*. Available at: https://www.ncbi.nlm.nih.gov/pubmed/17516773 (Accessed: 16 April 2020).

Thomas, L. and Jones, R. (2017) 'Student Engagement in the Context of Commuter Students.' London: TSEP. Available at: https://lizthomasassociates.co.uk/projects/2018/Commuter%20student%20engagement.pdf (Accessed: 20 April 2020).

Thomas, E and May, H. (2010) 'Inclusive Learning and Teaching in Higher Education.' Report, Higher Education Academy. Available at:

https://www.lboro.ac.uk/media/wwwlboroacuk/external/content/services/cap/downloads/documents/HEA%20Report%20on%20inclusive%20teaching.pdf (Accessed: 29 April 2020).

Tovar, E. (2013) 'A Conceptual Model on the Impact of Mattering, Sense of Belonging, Engagement/Involvement, and Socio-Academic Integrative Experiences on Community College Students' Intent to Persist.' CGU Theses and Dissertations. Available at: https://scholarship.claremont.edu/cgi/viewcontent.cgi?article=1083&context=cgu_etd (Accessed: 30 May 2020).

UCL (2018) *Inclusive Curriculum Healthcheck*. University College London. Available at: https://www.ucl.ac.uk/teaching-learning/sites/teaching-learning/files/ucl_inclusive_curriculum_healthcheck_2018.pdf (Accessed: 29 April 2020).

UK QUALITY CODE FOR HIGHER EDUCATION (2018) Available at: https://www.qaa.ac.uk/quality-code (Accessed: 29 April 2020.

Case Studies

Woodyatt, L. and Brooker, A. (2019) 'Student Success: Special Issue: Psychological Wellbeing and Distress in Higher Education.' *Student Success*, 10(3). Available at: https://studentsuccessjournal.org/article/view/1419 (Accessed :29 April 2020).

Learning Theories in the context of teaching Law

Nandini S. Boodia-Canoo

Abstract

The following is a reflective case study on common approaches to teaching Law in higher education, and how these may be informed by learning theories. The paper looks specifically at Social Learning Theory, Constructivism and Cognitive Load Theory. Following a critique of certain practices, suggestions are made to encourage further evolution of methods relevant to teaching problem-solving skills to Law students at undergraduate level.

Introduction

The previous academic year, I was fortunate to be a student again by enrolling for the Postgraduate Certificate in Higher Education course at the University of Greenwich. Completing the programme whilst working full time proved challenging yet genuinely rewarding. The opportunity to examine learning theories in some detail led me to reflect on their application in the context of teaching Law at university. Social Learning Theory and Cognitive Load Theory in particular raise important questions for the teaching of a social science that requires the acquisition of practical skills. The pedagogy of legal education remains a niche area, and it is hoped that the thoughts and arguments presented here will stimulate reflection and debate.

Teaching Law – how and why

To place the arguments in context for readers of different disciplines or jurisdictions, it should be noted that the process of qualifying as a lawyer in the UK is divided into three stages which can be summarised thus: an academic stage, a professional education stage and a practical training stage. It is the academic stage which is covered at undergraduate level. In order to progress to the professional education stage, a "Qualifying Law Degree" (QLD) must be obtained, the requirements of which are regulated by the relevant professional bodies.

¹ At the professional education stage the path splits. Those intending to become solicitors complete the Legal Practice Course, now soon to be replaced by the Solicitors Qualifying Examination (SQE), whereas those intending to qualify as a barrister undertake a Bar course (previously named the Bar Professional Training Course/Bar Vocational Course). The SQE will not require a QLD in the traditional sense, and since last autumn, elements of the Bar course may be completed at different points in time.

² The Graduate Diploma in Law for non-law graduates.

³ The Solicitors Regulation Authority and the Bar Standards Board. See 'Academic Stage Handbook' https://www.sra.org.uk/students/academic-stage/ accessed 3 January 2020.

Literature Review

Without much prior knowledge of learning theories, after studying a selection as part of the programme, I noticed one in particular: Social Learning Theory (SLT) as explored by Albert Bandura (1971). The key conceptualisation flowing from Bandura's research is that learning takes place primarily by observation. Thus, new behaviours are acquired not solely through direct experience, but through the observation of others (*ibid.* p.5), an exercise more accurately evoked through Bandura's choice of the word 'modelling' (*ibid.* p.5). Within his theory, certain cognitive processes are deemed essential, which are as follows:

1. Attention

Attentional processes are significant, because mere exposure to a concept will not induce learning by itself. A presence of mind is thus required at the outset to allow for learning to take place. Bandura posits that "associational preferences" are significant in this respect, since opportunities for learning will vary with context, and inevitably, some members of a social setting command greater attention than others.

2. Retention

This refers to the cognitive function of memory. Without the ability of long-term recall, observed behaviour cannot be repeated. Bandura recognises that not all observational learning occurs immediately, which accentuates the requirement of adequate recollection.

3. Motoric reproduction

In order to reproduce modelled behaviour, a person would have to possess the relevant set of skills. A lack of such skills, which may exist simply owing to physical limitations, would prevent reproduction of learned behaviour. Bandura gives the example of a child who has learned the associated movements for driving a car, but without suitable height will be unable to set the vehicle in motion.

4. Reinforcement and motivation

This final requirement illustrates Bandura's proposition that unless the behaviour in question is desired or otherwise received in a favourable manner, it is unlikely to reproduced, even if all the preceding processes are in place. As such, reward and punishment play a key role in encouraging observational learning.

I came to realise that I have previously employed Bandura's propositions extensively. This is likely because observational learning is linked to the most instinctive form of teaching: demonstrative instruction. "Look at me... pay attention! Watch what I am doing. Now do the same.... very good, well done!" – these are the sentences through which children are taught basic skills from an early age. Perhaps inevitably therefore, much of that approach channelled itself into my teaching practice, particularly in the delivery of modules concerned with practical skills. Learning by observation is the preferred method put in place for oral competencies such as advocacy or client interviewing. The student is expected to learn by observing the teacher, a lawyer in a video clip or, indeed, fellow students in practice sessions.

The widespread acceptance of this approach notwithstanding, the method has marked limitations, particularly in legal education. The primary skill to be acquired is that of incisive legal analysis. Arguably, the ability to discern relevant material from irrelevant detail can be

demonstrated easily enough, but more complex cognitive processes well beyond attention or recollection must be developed before the behaviour can be reproduced.

More broadly, the question of learning by observation in higher education raises a significant issue that must be considered in the context of a diverse student body. Bandura highlights a fundamental notion with regard to his first stipulation, namely attention. He states (Bandura, *op.cit.*, p.7):

"The functional value of the behaviors displayed by different models is highly influential in determining which models will be closely observed and which will be ignored. Attention to models is also channelled by their interpersonal attraction."

What then determines the 'functional value' of a model? For many students, it may boil down to whether they can relate to their teacher. At a time when students, especially from ethnic minorities, do not always feel they can identify with staff at their institution (Greenwich Students' Union, 2019), this raises pertinent questions. For example, how is learning affected in a department (or indeed an institution) where the composition of teaching staff does not mirror the student body? While there is a growing scholarship on issues of inclusion and diversity, more initiatives and focused research in this area are required.

Furthermore, a crucial issue with this type of learning theory is the significant number of assumptions it makes: it presupposes a certain 'baseline' in all learners with respect to mental and physical capacity. Proponents of this approach take these presumptions for granted (Wenger, 2008), which is problematic. It has been demonstrated that, for individuals with certain conditions such as autism, this method is less advantageous (Yang *et al.* 2017). As a consequence, if taken as a dominant understanding of how learning occurs, it may also create stigma for those who do not meet the assumed baseline of ability.

After contemplating these issues, it is with some shame I came to realise that my expectations of my students have frequently been based on assumptions too. Issues of mental capacity would be hard to discern, of course, unless disclosed by students. But assumptions are made even regarding physical abilities. For example, students are required to stand in Advocacy classes when delivering their arguments, including during the final assessment. While in my previous cohorts all appeared sufficiently able-bodied to do so, I assumed as much without enquiry. The basic instruction of letting me know if they are comfortable to stand for the duration required would be a simple measure for deconstructing assumptions in the assessment process.

It is worth noting that it may have not previously occurred to me to address such assumptions, because no-one enquired into my capacities when I was studying practical skills as a student. The temptation to teach precisely the way one was taught, or in the manner a subject is habitually taught, is unfortunately compelling.

To return to the limitations of SLT and observational learning for the time being, numerous assumptions as to learner ability is only one the criticisms that may be leveraged against this conceptualisation of learning. Another outcome I have observed, which may arise if there is a heavy emphasis on 'modelling' in teaching, is that of basic imitation without a critical thought process. This is perhaps more drastically illustrated in the context of written skills.

Teaching legal skills – a case study

As part of my teaching duties during the previous academic session, I was involved in the delivery of a module called 'Problem Solving and the Law'. It is a compulsory Level 4 (Year 1), fifteen-credit module on the Bachelor of Laws degree (LLB) at the University of Greenwich which takes place in the autumn term, and thus, at the very beginning of undergraduate studies for new Law students. The module requires students to work on two given scenarios for the entire term as a way to acquire problem solving skills. This approach to legal studies at undergraduate level is rather new but presents the preferred mode of instruction at post-graduate level for the professional courses which lead to qualification.

The problem-based way of instruction is rooted in constructivism and the notion that learners are to actively participate in the creation of knowledge and not to be passive receivers (Pritchard and Woollard, 2010). Proponents of the constructivist approach expound on its merits by emphasising learner independence, critical thinking and real-life problem solving, amongst others qualities that this teaching approach fosters (*ibid.*, p.45).

Prior to studying learning theories, I had only an instinctual (yet deeply-felt) reservation to employing this type of teaching strategy at Level 4. I considered that at such an early stage, students lacked the necessary knowledge (meaning the basic contents of statute and case law) to benefit from a problem-based learning approach. After the conclusion of the module and the final marking process, as well as acquiring a deeper understanding of learning theories in the meantime, I feel my concerns were valid.

Evaluation

Within weeks, it became evident that students were indeed very much struggling with this level of learner independence and critical thinking skills expected of them at the outset of their studies. This is dealt with on the course by exceedingly prescriptive modelling of how the problem scenarios provided are supposed to be tackled. Thus, unattainable constructivist expectations are ostensibly fulfilled, but by little more than observational learning. The students were shown how to write an answer – through instruction and written feedback on coursework – with no deviations from the model permitted.

Requiring strict adherence to a model answer runs counter to every proclaimed benefit of problem-based learning. Far from developing critical thinking in students, the pursuit is reduced to the most basic outcome derived from observational learning: reproduction.

The shortcomings of that approach became starkly evident for me when marking the final assessment, consisting of one written answer that had received detailed prior feedback, and one answer which had been composed by students without extensive guidance from their tutor. Frequently, the second answer fell short, on the very same aspects the student had purportedly already 'learned' when composing the first answer. In such circumstances it was clear that no actual learning had in fact occurred, for the 'knowledge' was not being replicated. It also put into question the value of the feedback provided, which manifestly was not developmental.

This serves to illustrate the limitations of the observational learning and teaching approach. If the modelling (whether by direct instruction or feedback) is highly prescriptive, a frequent outcome will be merely mechanic imitation. The learner will not have grasped the reasoning

behind the instruction or the feedback, and thus will be unable to successfully apply the concept to a separate situation. In the case of the module discussed, students experience the lowest manifestation of the two teaching approaches, with the ambitious constructivist aspirations of PBL remaining out of reach as a diminished form of observational teaching is employed to achieve a basic replicative outcome.

What could be a potential alternative? Cognitive Load Theory (CLT) takes a critical stance on constructivist approaches. It draws a distinction between what is termed 'biologically primary knowledge' and 'biologically secondary knowledge', arguing (in broad terms) that the former is acquired through evolutionary cognitive abilities which cannot be taught.⁴ Only the latter, presenting knowledge obtained for social or cultural reasons can be – and are – taught (Pritchard and Woollard, *ibid.*).

CLT stresses the importance of long-term memory as the place where learning is stored, and it is claimed that "[t]he purpose of instruction is to increase the store of knowledge in long-term memory. If nothing has changed in long-term memory, nothing has been learned." (Pritchard and Woollard, *ibid.* p.24.) Knowledge, in the sense of biologically secondary knowledge that makes up curricula, consists of "domain-specific schemas that must be acquired" and which "[provide] a complete description of expertise." (*Ibid.*)

This lays out an interesting hypothesis to a dilemma I have been pondering since I started to work as a lecturer. I have wondered how do I teach what is arguably the main skill emanating from any Law module: legal reasoning. The question has puzzled me for a long time, and occasionally I have queried whether it is teachable at all. The module described above aims to focus specifically on that particular skill, but, in my view, largely fails to do so. The question arises as to why this difficulty exists.

Legal reasoning could be considered simply an advanced version of basic problem solving. It is a process that similarly requires the application of plain logic, but with the difference of operating within the parameters of a certain set of rules. If taken as such, legal reasoning would amount to what CLT terms biologically primary knowledge, and therefore would not actually be teachable. What is teachable, and what represents 'expertise', are, as noted above, domain-specific schemas, meaning in this instance patterns of thoughts relevant to legal practice. This insight has profound implications for a conceptual understanding of legal education. If the skill I am seeking to teach is not acquired through instruction (because it cannot be taught) but through exposure to the relevant patterns of thought, my entire approach must be designed to implement that; otherwise the endeavour is futile.

Research related to CLT indicates that, in order to achieve expertise in an area, domain-specific knowledge must be acquired first, as shown by de Groot's work with chess players (Pritchard and Woollard, *ibid.*). This supports my submission as to why I consider the problem-solving approach at Level 4 not a useful exercise. "We must carefully consider whether many recently popular instructional techniques associated with inquiry, problem-based or constructivist learning procedures that do not emphasise domain-specific knowledge have any base in our cognitive architecture." (*Ibid.*, p. 25) As already mentioned, problem-based learning as part of legal studies commonly takes place at post-graduate level, which indeed seems a more suitable point in time for this method. The trend to

-

⁴ Sweller, J., Ayres, P. and Kalyuga, S. (2011) Cognitive Load Theory. New York: Springer.

introduce this approach at undergraduate level is recent, and no doubt partly engineered with the aim to increase the employability appeal of the LLB.

What has become clear to me however is that the timing and manner of instruction is crucial for the exercise to be successful. Constructivist techniques are useful and have their validity, but only after a sufficient grounding in basic understanding has been achieved. Further, the instruction method of SLT ("observe and reproduce") should not become the default fall-back teaching approach, even if it is liable to be treated as such.

Conclusion

Where praxis-orientated subjects are concerned, learning theories are easily dismissed as hypothetical concepts of remote speculation. Yet, on closer view, they present a wide repository of inspiration and teachers of Law should be encouraged to engage more with the various hypotheses of how learning occurs. Despite the strong psychological pull to shirk innovation which perhaps inevitably accompanies the delivery of a regulated degree, it is important for instructors to assert their agency in reviewing and using inherited course materials. This also applies to the adoption of modern trends, for all strategies must be rigorously tested, and nothing is as effective and insightful for doing so as the lived classroom experience.

Part of the process is willingness to dismantle personally held assumptions we as teachers hold about students and teaching and learning processes. Reflection, whether as I have done here in this paper or in discussions with colleagues, is the driver for the requisite sustained improvement of legal education.

Reference list

Bandura, A. (1971) Social Learning Theory. New York: General Learning Press. ISBN: 9780382250255.

Greenwich Students' Union (2019) Minority Ethnic (BAME) Student Consultation Group: Final Recommendations [unpublished report]. University of Greenwich.

Pritchard, A. and Woollard, J. (2010) Psychology for the Classroom: Constructivism and Social Learning. Oxford: Routledge. ISBN: 9780203855171.

Sweller, J., Ayres, P. and Kalyuga, S. (2011) Cognitive Load Theory. New York: Springer. ISBN: 9781441981264.

Wenger, E. (2008) 'A Social Theory of Learning', in Contemporary Theories of Learning, ed. by Illeris, K. Oxford: Routledge, 216. ISBN: 9780415473446.

Yang, Y., Tian, Y., Fang, J., Lu, H., Wei, K., Yi, L. (2017) 'Trust and Deception in Children with Autism Spectrum Disorders: A Social Learning Perspective', Journal of Autism and Developmental Disorders 47, 615. Available at:

https://link.springer.com/article/10.1007/s10803-016-2983-2> (accessed 18 November 2019).

Learning how to read? The value of lectures in the context of HE English Literature⁵

Dr. Katarina Stenke University of Greenwich, London, UK

Abstract

The increasing pace of change in today's teaching and learning, the challenging employability environments and the plethora of new technologies now at the disposal of teachers may seem to render obsolete the older teaching and learning methodologies. However, this reflective case study suggests that one of the oldest delivery modes of all, the lecture, remains a relevant and potentially valuable way of connecting with and supporting students in their learning, particularly in subjects where students are expected to read at length or otherwise to engage with extended and complex discursive modes. This case study offers evidence and arguments for reconsidering the role of lectures in teaching and learning higher education English Literature, taking as its evidence base levels 4 and 6 undergraduate English Literature modules delivered in 2017-18 and 2018-19 at the University of Greenwich. Rather than dismissing – as does much recent research – lectures as encouraging 'passive' learning, this reflective study proposes lecturing as a teaching methodology with unique potential.

Introduction

This reflective case study considers the value of lectures for teaching and learning in higher education (HE) English Literature, drawing on constructivism and social learning theory to re-think the function of lectures. The evidence base for the study consists of student and third-party observational feedback, along with the author's own teaching experience, on levels 4 and 6 English Literature modules delivered at the University of Greenwich in 2017-2019.

The argument made in this study is that traditional lectures should not be stigmatised as a medium encouraging passivity (Fry, 2015, p.64), ineffective for promoting thought (as cited in Bligh, 1972) or excessively teacher-led. Instead, this study supports the findings of recent research that attest to the value of lectures across HE (Light *et al.*, 2009, p.105; French and Kennedy, 2017) and argues that, in the case of HE English Literature, this mode of teaching acts as a vital complement to other formats, one that can transform student affects in response to the subject matter and thus their attitudes towards it.

History and context: teaching and learning literature at university

⁻

⁵ I would like to extend my thanks to the tutors on the University of Greenwich PGCert in Higher Education, my participation in which was the initial prompt for the present case study; and to my Greenwich colleagues in English Literature, whose brilliant lectures constitute indisputable proof of the claims I make here. Particular thanks go to Ms Sally Alsford and Dr John Morton for their permission to quote excerpts from their unpublished reports (see Appendix).

English Literature as a university subject dates from the early nineteenth century (Scholes, 1998; Graff, 1987), when lectures were the dominant formal learning activity (Scholes, *op.cit.*). This may be contrasted to subjects in the sciences, such as Chemistry, where practice-based learning, typically in laboratories, has been important since at least the eighteenth century. Despite many changes to syllabus design, especially in the last thirty years, lectures continue to be a major component of most HE English Literature programmes in the United Kingdom.

The function of English Literature lectures in today's learning and teaching environment needs to be understood in the context of disciplinary learning norms. It is a striking yet underacknowledged fact that the most important learning activity for a student of HE English Literature is the independent reading of literature (Chambers and Marshall, 2006, p.136). In any given week, literature undergraduates will be asked to read hundreds of pages of imaginative and critical writing – and to read them more intensively and with a different kind of attention than would peers following other humanities subjects. As well as understanding what is being said, literature students are expected to pay attention to how it's being said (Young, 2008, p.62).

What are the teaching and learning implications of the centrality of independent, long-form reading to the study of English Literature? At the most basic level, one might suggest, students enrolled at university on a programme based on the reading of literature can and should be expected to become habituated to reading at length and are therefore likely to engage better than average with monologic, long-form teaching formats such as lectures. Conversely, students who are being asked to develop the skills needed to read works of literature are likely to benefit from the experience of attending lectures, which may be said to consist of the oral and visual delivery of discourse and, as such, can themselves be considered a kind of text.

Given the correlation of the skill sets required and fostered by lectures and literary reading, the potential benefit of relying exclusively on conventional 'practice-based' group learning activities to support English Literature students is less than self-evident. Considering the attention span and independent development of comprehension required to read a Victorian novel, for example, it seems dangerous to assume that the best mode of learning for such students will, necessarily and/or exclusively, involve short-form group exercises in a frequently rotating variety of formats.

These claims seem to run counter not just to widely-disseminated studies arguing a deficit of student attention in lectures (Lloyd, 1968; see Wilson, 2007), but also to learning frameworks proposed by some of the most influential twentieth-century theories of teaching and learning. The next section considers constructivism and evaluates its usefulness in the specific context of University of Greenwich BA English Literature students, drawing on evidence from the author's seminar-based teaching and third-party feedback. After arguing that student-led, constructivist approaches as instantiated in seminar teaching, while undoubtedly valuable, are not sufficient in themselves for encouraging learning in English Literature, the study considers lectures as complements to seminar learning and discusses lectures given as part of level 4 and level 6 English Literature modules delivered in 2017/18 and 2018/19 at the University of Greenwich. Subsequent to this discussion is a brief list of lecture strategies that the author has found to foster active learning and positive attitudes towards set reading

among students. Finally, the study turns to social learning theory to re-conceptualise the role of lectures in the discipline-specific context.

Constructivism in seminar-based learning for English Literature levels 4-6

At the University of Greenwich, English Literature students at levels 4, 5 and 6 are mostly taught via a combination of lectures and seminars. Each week, for a given module, they will attend a two-hour session consisting of a fifty-minute lecture followed by a fifty-minute seminar. For this session, they will be expected to have completed a reading assignment. In 2017/18, the author underwent two third-party observations (TPOs), one by a School mentor, Dr John Morton, of a lecture for the level 4 module 'The Canon' and one by a Postgraduate Certificate in Education (PGCE) in HE observer, Ms Sally Alsford, of a full two-hour session for the level 6 'Literature of the Eighteenth-Century' module. Students on these modules also completed an end-of-year evaluative feedback form.

As in other humanities subjects, activity- and discussion-based seminars are key to the teaching of these modules, yet to be successful they need to fulfil certain criteria. From a constructivist point of view, learning is most likely to be successful when it is 'constructed', 'active', 'reflective', 'collaborative', 'enquiry-based' and 'evolving' (Papert, 1993). By these criteria, one of the crucial tasks for a teacher is to foster an environment where individuals feel 1) empowered to construct their learning actively, alongside and in 'collaboration' with their peers and 2) confident enough to engage in collective enquiry and reflection. For this, a minimum group consensus is required in order to allow conversations to develop. Additionally, as far as group learning in English Literature is concerned, 'active' critical debate among students is impossible if there is no common basis of textual knowledge – i.e. what constructivists would term shared 'schemata' (Piaget 1950) – on which to apply the critical analyses and syntheses that are central to the practice of English Literature as a discipline.

One way of ensuring that everyone engages in a seminar is to plan activities that don't rely on prior module-specific knowledge. For example, the second TPO (January 2018), observed by PGCE in HE tutor Alsford, included an activity requiring students to (re-)read one of the two set scatological poems by the eighteenth-century writer Jonathan Swift, mapping the various body parts mentioned on a printed skeleton. The aim was to draw attention to the divergent manner in which Swift invokes the body in each of the respective works. Students responded well and Alsford, in her verbal feedback, commented favourably on the exercise, though she added that students would ideally have moved from structured analysis to open, student-led synthesis, a process that could have been stimulated by appropriate questions on my part.⁶

That exercise used a format popular in the discipline, namely to provide short passages from the set text – which can be read and analysed in five to ten minutes – that the attendees close (re-)read before responding to questions or discussion points in groups. Such an activity thus effectively provides the textual and historical 'data' – and the 'schemata' – in seminar. This provides a basis of shared knowledge and allows meaningfully evidenced

-

⁶ Details of this TPO report, with relevant excerpts, are given in the Appendix.

arguments to develop, but the trade-off is that solitary (re-)reading takes up time that could be used for developing critical and analytical skills in group settings.

Furthermore, as Alsford recognized, the wider contexts of a given passage, and the higher levels of the Bloom taxonomy, tend to get left to one side. Lastly, not just in this instance but also in my wider experience, generally less-engaged students tend to remain so. Thus in this kind of group activity, the disparity between those who have completed the set reading and those who haven't persists. The former are able and often keen to contextualise the short passage with reference to the set reading as a whole, and tend to feel frustrated if they are in the minority. By contrast, those who haven't completed the preparatory reading tend to fall silent and dis-engage once discussion moves to incorporate the whole text. In short, where a sizeable proportion of students have not completed the preparatory reading, the potential 'constructive' outcomes of seminar-based learning remain limited regardless of in-seminar strategies designed to level the playing field.

One of the key challenges in HE English Literature teaching is therefore to find ways of supporting and encouraging students to complete the required reading. Based on informal polls among my own students, I estimate that sixty per cent of students who attend a level 4 or 5 core seminar will regularly admit to not having completed the set reading – this, despite the fact that reading is carefully paced to be manageable for students and is only slightly more substantial than the volume of reading expected of A-level English Literature students.

Analysis: lectures as complements to seminars

Considering these challenges, and on the evidence of the present case study, it seems likely that a conventional lecture – acting as an advertisement for and introduction to the set text, habituating students to academic and literary discourse and modelling best practice in reading attention and academic argument – has the potential to foster positive attitudes to learning materials, get students reading and encourage active learning, both in seminars and during independent study.

This, I propose, works in several ways. Lectures, at their most basic, can ensure a minimum cross-group level of contextual/textual knowledge in advance of seminars, where, as we have seen, constructive learning relies on students' having a shared basis of textual and contextual knowledge on which to practise critical and other skills.

Furthermore, where students are initially unwilling to engage in 'flipped' learning outside the classroom (Steen-Utheim and Foldnes, 2018), I have found that successful lectures can help to enthuse as well as inform, so that learners leave the classroom more confident and engaged and therefore more likely to tackle future preparatory reading assignments. The lectures delivered for the English Literature BA are frequently mentioned in the positive feedback column of student evaluation surveys as engaging and informative, views supported by third-party observation reports.⁷

In both of the TPOs, the observers commented on the evident engagement and attention of the students and the positive relationship between students and lecturer; they also praised

⁻

⁷ These quotations are from the aforementioned TPO report by John Morton (2017) and from University of Greenwich student evaluation surveys from the modules under discussion. See Appendix for details of and the relevant excerpts from these sources.

the interest of the materials – this is also typical of lectures by colleagues.⁸ Additionally, in several of my first-year core module seminars, students who verbally admitted to not having read the text added that attending the lecture motivated and equipped them to tackle the text in advance of the following week's session.

This evidence emphasises the fact that lectures don't just – or even primarily – convey information. They have the potential to offer a live demonstration of how to read and of how the abstruse material of a literary work can be transformed into personalised meaning; they also advertise set texts as worth reading. Consequently, they can transform students' affects in response to a text, enthusing them to attempt extensive independent reading.

Drawing on the evidence discussed in this analysis and identifying common techniques from positively-evaluated lectures in my subject area, I suggest that lecture strategies for enthusing English Literature students and fostering independent reading of literary texts might include:

- explicitly sharing personal enthusiasm for, and enjoyment of, reading in general and of the set text in particular, while allowing students the space to articulate their own responses;
- clearly articulating the benefits to students of reading and engaging critically with a given text; (These benefits might be learning-specific e.g. 'this text is a great example of how novels can use point of view to shape reader sympathies'; 'reading this Elizabethan sonnet will be helpful to you in future reading assignments, because its rhetorical and metrical strategies are imitated, developed and parodied in so many of the poems you'll be reading over the next few years' or they might be at the level of enjoyment or personal meaning 'although this book initially seems rather serious in tone, later chapters are very funny; if you get as far as chapter 5 you'll be rewarded with a comical set piece on...'; 'if you've ever experienced x you may find this work really speaks to you, because...')
- taking time to 'narrativise' the lecture for instance by announcing the kind of
 critical argument that will be made across (a section of) it or the kind of
 historical narrative that will be traced and by reminding students that these are
 practices they are expected to demonstrate in assessments; (This adds a
 sense of purpose to the sequence of materials and gives the students a way of
 connecting to the lecture beyond the interest/relevance of information
 provided.)
- reflecting in-lecture on the lecturer's own readings of set texts especially difficulties they might have experienced as a reader before beginning to enjoy a challenging work or the different ways they might have interpreted a text before deciding on how to present it in the lecture; (The aim here is communicate to students that it is possible to learn to enjoy reading a work that initially seems challenging. It can also be a way of reminding students that lectures not only present information but are also the outcomes of reading processes and critical analyses skills that they themselves are developing.)

-

⁸ See Appendix.

- regularly noting the diversity of critical views that exist of a given work;
 (This can help activate students' sense of agency as readers, by showing them that there are many ways of responding to a text and that these freedoms are available to them as readers.)
- pinpointing connections between the often historical and contextually remote

 texts and students' existing knowledge, experience and interests, such as
 current events, shared life experiences, cultural practices etc; (This offers a
 shared 'schemata' within which both lecturer and students are able to connect
 to a text and engage meaningfully with it.)
- using in-lecture surveys or questions (via Mentimeter or similar software) to help create collective 'schemata', foster inclusivity and enhance engagement.

In implementing such strategies, it would be crucial to ensure constructive alignment between these elements of the lecture and the seminars to follow.

Re-theorising English Literature lectures

Bearing the above in mind, how might we make use of established teaching and learning theory to understand discipline-specific learning parameters as well as how lectures operate, not necessarily in general HE or humanities contexts, but specifically for English Literature? One approach would be to challenge the hidden assumptions in such theories that misrecognise the nature of reading and of lectures as a teaching format and to re-tool the theory so that it can help us optimise our lectures. Theories that at first sight seem inapplicable to literature studies and to contra-indicate lectures might thus allow us to re-imagine their function and effects.

Take, for instance, social learning. One way to apply this theory to lectures is to argue that in a diverse and disaggregated student body, lectures help establish what Etienne Wenger terms 'a community of practice', in which subsequent active and social learning can develop (Wenger, 1998; Wenger, McDermott and Synder, 2002). Yet many aspects of social learning theory militate against such a format. Just as for Papert, who argues that 'the construction that takes place in the head' often happens especially felicitously when it is supported by construction of a more public sort 'in the world' (Papert, 1993, p.142), social learning theory prioritises world over mind. Thus, for Wenger, distraction-free, classroom-based (Wenger, 1998, p.3) learning is suboptimal, because natural learning and the application of what we learn take place in social situations and situations in the 'outside world' (*ibid.*) Teachers should therefore avoid artificially separating learning from 'the world' (*ibid.*), and instead learn from how learning happens in society, with techniques that encourage practice and active engagement of learners.

But where does that leave reading, a practice which after all relies on an act of mental concentration which temporarily neglects 'the world' in favour of the text? Must we assume that reading and learning are incompatible? If so, how do we learn how to read? And does this mean that the lecture – where, supposedly, the student body silently attends to the lecturer (itself a poor approximation of what actually happens in lectures) – must also be regarded as divorced from community and that, therefore, whatever it offers will fail to transfer to 'the outside world' (whatever or wherever that may be)?

In order to resolve these apparent impasses, it's worth thinking carefully about that boundary Wenger invokes, between 'outside world' and 'classroom'. Following the work of critical

theorists in the late-twentieth century – and especially in the still-unfolding aftermath of the electronic revolution – we may wish to be wary of such neat borders. Firstly, the hermetically sealed classroom or lecture hall or student room needs to be recognised as a straw man that never existed, since work by thinkers as diverse as Michel Foucault and Bruno Latour has made clear that social hierarchies, practices, dynamics and behaviours permeate inescapably into even the most sterile institutional and domestic environments (Foucault, 1991; Latour, 2005); the theories of Freud and those post-structuralist thinkers who have developed his work further suggest that the very subject (whether teacher or learner) is, to an extent, a social world in itself, a shifting amalgam of competing impulses and discourses constituted out of a wider (social) world of language and action (Lacan, 2001). Secondly, once we introduce technology into the learning space, the border between inside and out becomes still more uncertain and permeable. Perhaps the lecture hall and the student reading room are not so un- or anti-social after all.

With these qualifications in mind, a helpful term found elsewhere in social learning theory is that of learning 'contexts'. In her introduction to *Understanding Practice*, the anthropologist Jean Lave writes that

if context is viewed as a social world constituted in relation with persons acting, both context and activity seem inescapably flexible and changing. And thus characterized, changing participation and understanding in practice – the problem of learning – cannot help but become central as well (Lave, 1993, p.5)

Social worlds are made up of people acting and relating in particular, ever-changing situations. As such, learning (defined as a process that 'changes' the way people act and relate) must also be socially 'situated'.

How might that work for teaching and learning English Literature? If we now recognise that 'social worlds' may include those constituted by electronic social media, it's worth remembering similarly that discourse itself – in printed or electronic form – should also be considered as a kind of social world, 'a multi-dimensional space', where, as Roland Barthes has argued, 'a variety of writings...blend and clash' (Barthes, 2009, p.146). When students are enabled to enter the world of a literary text, they don't find there an arid, authoritarian voice, but a teeming polyphony. The difficulty is learning to recognise, comprehend and then interact with that polyphonic discourse as a special type of social setting, to acquire and practise a set of skills relating to knowledge-acquisition and interpretation *in that situation*.

Conclusion

With these demands in mind and recognising that lecture-attendance is not – any more than is solitary reading – an 'unsocial' or 'unworldly' experience, lectures may perhaps best be seen as offering a valuable bridge between student and text, shaping communities of practice by creating an intermediate social space. In this way, they can both stimulate critical thinking and promote reflective engagement.

Lectures, seen through this modified social-learning lens, share both the apparent monovocality and density of a literary text and the interpersonal setting and informal discourse which we normally regard as typical of the 'outside world'. The interpersonal nature of the lecture becomes clearer still if we see live lectures as social events, where both lecturer and

students may be considered as actors. Students in such a setting continuously perform their attention and engagement (or lack thereof) and their continuing professionalisation, feeding this back to both lecturer and peers and thereby inhabiting a posture of scholarship in ways that can shape their sense of identity and thus their ability to act as scholarly learners. This potential for lecturers to be subtly but powerfully interactive is intensified further still if student-engagement applications such as Mentimeter are used to foster a sense of real-time community and investment and, by that means, to enrich the 'schemata' acquired by students working separately.

Moreover, one of the things that a lecture might achieve is to perform the process of reading itself, by means of narrative structures that dramatise the readerly progress from unfamiliarity to understanding. In this sense, then, understood as community-building performance, lectures offer the opportunity both to communicate ideas, facts and codes that may be deployed as a shared resource by the student group and to introduce students to unfamiliar 'situations'. Lectures, in short, might constitute an experiential process that would successfully and meaningfully shape responses, transform attitudes, and, thereby, 'change behaviours' (Lave, *op.cit*.).

This potential naturally relies on lectures' having been carefully designed to achieve these different outcomes. In order to provide a more systematic study of strategies for achieving these outcomes, the author aims to conduct a longitudinal study to trial design principles and monitor outcomes.

Reference list

Barthes, R. (1977) 'Death of the Author.' In: *Image, Music, Text*. New York: Polity Press. ISBN: 9780006861355.

Biggs, J. and Tang, C. (2009) *Teaching for Quality Learning at University*. 3rd edn. Maidenhead: Open University Press. ISBN: 9780335201716.

Bligh, D. (1998) What's the Use of Lectures? 5th edn. Exeter: Intellect. ISBN: 9781871516791.

Bloom, B. (1956) *Taxonomy of Educational Objectives. Handbook I: The Cognitive Domain.* New York, NY: David Mc Kay. ISBN: 9780582323865.

Brown, S. and Race, P. (2002) *Lecturing: A Practical Guide.* Location: Kogan Page. ISBN: 9780749436711.

Chambers, E. and Marshall, G. (2006) *Teaching and Learning English Literature*. London: Sage Publications. ISBN: 9780761941729.

Fry, H., Ketteridge, S., Marshall, S. (2015) *A Handbook for Teaching and Learning in Higher Education*. 4th edn. Abingdon: Routledge. ISBN: 9780415709965.

French, S. and Kennedy, G. (2017) 'Reassessing the Value of University Lectures.' *Teaching in Higher Education*, 22(6), 639-654. Available at: https://doi.org/10.1080/13562517.2016.1273213 (Accessed: 12 December 2019).

Foucault, M. (1991) *Discipline and Punish: The Birth of the Prison.* Harmondsworth: Penguin. ISBN: 9780140137224.

Graff, G. (1987) *Professing Literature: An Institutional History*. Chicago: University of Chicago Press. ISBN: 9780226305592

Lacan, J. (2001) Écrits: A Selection. Abingdon, Oxon: Routledge. ISBN: 9780415253925.

Latour, B. (2005) Reassembling the Social: An Introduction to Actor-Network-Theory. Oxford: Oxford University Press. ISBN: 9780199256044.

Lave, J. (1993) 'The Practice of Learning.' In: Chaiklin, S. and Lave, J. (eds.), *Understanding Practice: Perspectives on Activity and Context.* Cambridge: Cambridge University Press, 3-32. ISBN 9780511625510. Available at: https://doi.org/10.1017/CBO9780511625510. (Accessed: 13 December 2019).

Light, G., Cox, R. and Calkins, S. (2009) *Learning and Teaching in Higher Education: The Reflective Professional.* London: Sage. ISBN: 9781446243763.

Lloyd, D.H. (1968) 'A Concept of Improvement of Learning Response in the Taught Lesson.' *Visual Education*, October, 23-25.

Papert, S. (1993) *The Children's Machine: Rethinking Schools in the Age of the Computer.* New York: Basic Books. ISBN: 9780465018307.

Piaget, J. (1950, repr. 2001) *The Pyschology of Intelligence*, trans.d Piercy M. and Berlyne, E. London: Routledge and Kegan Paul. ISBN: 9780415254014.

Race, P. (2007) The Lecturer's Toolkit. 3rd edn. London: Routledge. ISBN: 978041540383.

Scholes, R. (1998) *The Rise and Fall of English: Reconstructing English as a Discipline.* New Haven: Yale University Press. ISBN: 9780300080841.

Steen-Utheim, A.T. and Foldnes, N. (2018) 'A Qualitative Investigation of Student Engagement in a Flipped Classroom.' *Teaching in Higher Education*, 23(3), 307-324. Available at: https://doi.org/10.1080/13562517.2017.1379481(Accessed: 12 December 2019).

Wenger, E. (1998) *Communities of Practice: Learning, Meaning, and Identity*. Cambridge: Cambridge University Press. ISBN: 9789521663632.

Wenger, E., McDermott, R. and Synder, W. (2002) *Cultivating Communities of Practice: a Guide to Managing Knowledge*. Boston, MA: Harvard Business School Press. ISBN: 9781422131107.

Case Studies

Wilson, K., Korn, J. (2007) 'Attention During Lectures: Beyond Ten Minutes', *Teaching in Psychology*, 34 (2), 85-89. Available at: https://doi.org/10.1080/00986280701291291 (Accessed: 12 December 2019).

Appendix

The claims of this case study refer to data from unpublished sources. See below for details

1) Sally Alsford, third party observation (TPO) report on K. Stenke, 2-hour combined lecture and seminar for University of Greenwich Level 6 module 'School for Scandal: Literature of the Long Eighteenth Century', undertaken in January 2018.

This observation was one of the required elements of a PGCert in Higher Education at the University of Greenwich, undertaken by the author. Ms Sally Alsford was at that time the programme director as well as one of the programme tutors.

Excerpts relevant to this study:

'[The students] were clearly listening and learning in the more teacher-led/lecture parts of the session'.

'[The observee was] very good at engaging students'.

'I really liked [the observee's] use of images, and the lists/skeleton activity, and students responded well to this, also to working in pairs where they were clearly learning collaboratively'.

'I think [the seminar] should perhaps be stretching them further to develop their critical evaluation and analysis (especially at level 6), eliciting analytical points and examples from them, asking them more questions to help them develop their analysis and argument.'

2) John Morton, third party observation report on K. Stenke, 1-hour lecture for University of Greenwich Level 4 module 'The Canon: A Short History of Western Literature', undertaken in December 2017.

This observation was one of the required elements of a PGCert in Higher Education at the University of Greenwich, undertaken by the author. Dr John Morton is Associate Professor in English Literature at the University of Greenwich. He undertook the observation in the capacity of PGCert mentor to the author.

Excerpts relevant to this study:

'The communication of ideas was clear, informal, and precise. Students were asked questions (and not given answers) on knowledge [...] and [on their reading] response [...] which encouraged active learning and engagement.'

'There were [...] links back to other texts and topics from the course, encouraging a community of knowledge.'

'Students clearly felt comfortable and there were some nice nods to their own lives [...]. The introduction through shared knowledge helped to build confidence.'

3) Feedback from student evaluation surveys on level 4 English Literature module 'The Canon: A Short History of Western Literature', University of Greenwich, 2017-2018 and level 6 English Literature module 'School for Scandal: Literature of the Long Eighteenth Century', 2017-18 and 2018-19. The survey data are collected and compiled via EvaSys (https://evasys.co.uk/)

Excerpts relevant to this study:

- 'the lecture[r]s were great' ('The Canon', 2017-18)
- "I like the format of lectures where a lecture is given and then activities are discussed in groups and later discussed as a class" ('School for Scandal', 2017-18)
- [the author] 'deliver[ed] the lecture so that you understand everything' ('School for Scandal', 2018-19)

Cinematic reproduction as multimodal composition in first-year composition

Rachel McCabe
Department of English, La Salle University

Abstract

This case study introduces an assignment from a large midwestern university first-year composition (FYC) program, which emphasizes analytical writing by introducing students to a series of increasingly layered texts, including film. Teaching multiperspective, evidence-based visual and textual analysis has many advantages for student writers. For students to see textual constructedness, the instructor requires they remake film scenes using their cellphones, employing and then articulating their use of generic conventions. This article details the original assignment and tracks its evolution, brought about by students' innovations. One group's project, a scene from *The Shining* (1980), highlights multimodal re-creation's capacity to help students reenvision and more fully analyze cinematic elements, adding depth and specificity to their analytical writing.

Keywords: multimodal production, video, film, recreation, first-year composition

Introduction

During my time teaching first-year composition at a large midwestern university,⁹ my syllabi asked students to write about a variety of texts.¹⁰ These syllabi, organized in large part by the required assignments of the English Department's Composition Program and the standards set by the Council of Writing Program Administrators,¹¹ focused on reading traditional texts¹² early on in the semester and built outward to visual analysis. In exploring how to get students to turn their pre-developed visual literacy into academic analysis and writing, film production became an optional component in the assignment sequence. This

⁹

⁹ Indiana University is a public four-year university located in Bloomington, Indiana. It averages 33,000 undergraduate students and 10,000 graduate students each academic year. According to the university's website, the predominant demographic of the university's undergraduate population is white students from the midwestern United States, with 25% of students identifying as part of a minority and international students making up 6% of the student body. Most first-year college students have completed high school the semester before they begin ("Student Diversity").

¹⁰ First-Year Composition is a required writing course in most American universities. It acclimates students to academic writing while teaching rhetorical strategies and reading skills required not only for writing courses, but also for any writing in their university coursework. At some universities it is a one-semester course, but in others it is part of a larger writing course sequence.

¹¹ The Council of Writing Program Administrators suggests in their "WPA Outcomes Statement for First-Year Composition" that first-year writing courses focus on building rhetorical awareness and critical thinking, reading, and writing skills through a process-oriented model of writing instruction" ("WPA").

¹² Examples include chapters from John Berger's *Ways of Seeing*, Michel Foucault's *Discipline and Punish*, and Gloria Anzaldúa's *Borderlands*. All of these readings are meant to be introductions to academic reading and are written by, and for, a variety of academic and non-academic audiences.

case study outlines how I shifted a visual production assignment toward visual reproduction, as well as the benefits this shift had on the student writing process.

By examining the changes to this assignment and the impact of film reproduction in my writing courses, I demonstrate the benefits of assignment flexibility, for it leaves room for student creativity and innovation. I also argue for the benefits of multimodal production in the composition classroom and show how recreation can reduce time while maximizing student engagement within film genre exploration. The included final product, while showing the outcome of the assignment's final iteration, also reveals the fascinating ways that scene recreation can generate sophisticated analysis of films. In the process, the analytical skills developed in the exercise led students to more detailed observations, which were then reflected in their writing about film. This multimodal exercise highlights the benefits of flexible assignment design and the potentially exciting impact of visual production on student analysis and writing.

Research and practice: a brief review

During my time teaching at Indiana University, I had the privilege of both being trained by, and working with, a team of composition instructors devoted to exploring the capability of film in the writing classroom.¹³ The benefits of writing about film have, for decades, been examined in composition studies. Ellen Bishop (1999), Daniel Wild (1999), and Henry Giroux (2001) have written about the complex relationship between film and student writing. In "Breaking into the Movies: Pedagogy and the Politics of Film," Giroux claims: "As a form of public pedagogy, film combines entertainment and politics, and, as I have attempted to argue, lays claim to public memory (though in contested ways given the existence of distinctly varied social and cultural formations)" (p.588).¹⁴ This meeting place of high and low art within a structured narrative makes film feel culturally significant, not only to broader audiences, but also to students. Its unique combination of visual text, narrative, and cultural representation make it a powerful medium for student writing.

Filmmaking and the use of film analysis are critical to the development of skills that I see as parallel to the traditional writing heuristics we teach to students in our first-year curriculum. Daniel Wild (*op.cit*) explains in his essay "Writing Images: Some Notes on Film in the Composition Classroom" that, while revision helps students to see their work from a new perspective, film literally asks students to see and think in different ways, a difference they can then articulate in their writing (p.23). Unlike other forms of multimodal production, film facilitates this "act of seeing," which proves serviceable when we ask students, in their writing, to see the world through a perspective other than their own. This production assignment became a touchstone in our classroom discussion about how a director's cinematic choices shape our viewing experience.

¹³ This primarily took the form of written analysis of film, developed and revised over time by Composition Directors Christine Farris, John Schilb, and Dana Anderson.

¹⁴ In the process, this public memory comes from two sources: "Mining the twin operations of desire and nostalgia, they are also sites of educated hopes and hyper-mediated experiences that connect the personal and the social by bridging the contradictory and overlapping relations between private discourses and public life" (Giroux 588).

This assignment also demonstrates the benefits of the experiential challenges that come with the multimodal production process explored by Jody Shipka. As Shipka states in *Composition Made Whole* (2011), the now famous ballet shoes "...allowed [Shipka] to see, and so to understand, the final product *in relation* to the complex and highly rigorous decision-making processes the student employed while producing this text" (p.3). In the same way, this video assignment allowed me to see the complexity of my students' visual literacy. Their careful analysis of the original text was reflected in the project they made, even if they couldn't necessarily move to the metacognitive step of explaining *why* they had made the choices they did.

Context

One of the central obstacles was integrating the complex visual knowledge students bring to their writing courses with the vocabulary necessary to talk about visual analysis effectively. ¹⁵ While the majority of my students were adept at filming content with their smartphones, most students thought of films as polished products which existed outside of the process-oriented work of other creative processes like writing. Similarly, while most students could list film genres and knew some of the conventions of genres, they gave little thought to the specific choices and details that constructed these tropes. I implemented an assignment in which students were assigned cinema genres and asked them to film short scenes that they would expect to find within that genre. This assignment was an optional part of the curriculum, but I saw value in involving students in the cinematic production process.

The goal was to help students make connections between the composing process of writing and the composing/directing of film. Rather than see films or visual media as polished products, having students write, stage, and edit a short production would allow them to experience all of the steps and choices that go into film scenes. Once these choices became visible to them, students would be able to articulate more clearly in their writing the rhetorical impacts of these choices.

Once assigned a genre (such as 'action' or 'horror'), students were given a worksheet that asked them to choose their role in the group project and to map out the characteristics of their assigned genre, their characters and their setting. After the scene had been filmed on one group member's phone, students answered questions on the same worksheet asking them to summarize the scene they had created and to analyze the details they had chosen to feature. After one class period devoted to filming the assignment, the next class meeting began with a 'class screening'. The members of each group stood at the front of the class and played their scene for us on the classroom's screen projector; afterward, they explained

_

¹⁵ Building on the analytical skills required for visual analysis, former Graduate Assistant Director of FYC Jennifer Juszkiewicz designed an optional assignment that asked students to create a series of photo stills from an imagined film within an assigned genre. This assignment was meant to get students thinking about the ways in which generic expectations help us to analyze and interpret films. Students were given different toys and asked to take a series of photos that, when shown together, represented a possible scene from a romantic comedy. The accompanying worksheet asked students to designate their different roles in the creation process, including director, cinematographer, set designer and casting director. It also asked students to explain how the choices they made represented the generic conventions of the type of film they were exploring. This assignment was a starting point to think about how production could get students to demonstrate visually their knowledge of these generic conventions.

their choices and why they felt their scene represented the conventions of their assigned genre.

This assignment helped students see the components of a film scene and led into the next assignment, in which students would watch a film and choose a specific scene to write about. ¹⁶ Once they located an interesting scene, they would analyze the visual details and draw a claim about the director's goals. Asking students formatively to plan and film short scenes beforehand exposed the complex processes that go into the creation of the films, television shows, and YouTube videos they watch on a regular basis, illustrating how these (often) seamless final products are the result of innumerable rhetorically-driven decisions. Owing to the dramatic shifts in student access to smartphones, it seemed feasible to divide students into small groups, making sure that at least one student was willing to use her/his phone to film the project, and ask each group to create a film scene. ¹⁷ The assessment of this assignment came in three spaces: the final cinematic product, the group's description of its work, and the subsequent written analysis of a film scene. While the final product and presentation weren't graded, subsequent writing was evaluated and graded on the basis of the student's written argument and ability to draw connections between the details of the scene and the director's overall goal.

Implementation

After teaching this assignment for two semesters, I began to notice several patterns develop:

- Students often couldn't necessarily articulate the reasons why they executed specific cinematic decisions other than to focus on the technical limitations of the production process.
- 2) The drafting phase of the project was very time-consuming and often took up far more time than the filming stage.
- 3) In many cases, even though students couldn't clearly articulate the cinematic choices that went into their own projects, their subsequent written cinematic analyses of the films we watched in class often included more cinematic details and devoted more time to explaining how these details had led them to the conclusions of their analysis.

¹⁶ The required assignment in the 'Film Unit' of the curriculum was an essay in which students applied the heuristic of "using a source as a lens" from *Writing Analytically* (63-68) to synthesize a central concept from the reading and then use this concept to see a film scene in a new light. For example, students who read Michel Foucault's "Panopticism" could apply the idea of the panopticon to Alfred Hitchcock's *Rear Window* to read the film's voyeurism and visual power in Foucault's terms.

¹⁷ As Steve Wheeler and Richard Gerver describe in *Learning with 'E's : Educational Theory and Practice in the Digital Age*, the technological landscape of the composition classroom has shifted dramatically with the seeming ubiquity of personal technology and internet access. In both formal and informal settings, "students are taking greater responsibility for their own learning, creating their own learning and discussion spaces online outside of the auspices of the parent institution. They are engaged in unprecedented levels of peer learning, supporting each other through a variety of new technologies and personal tools" (p.33). Allowing students to use their smartphones to film short scenes was not only a possibility (since each group had access to at least three phones with filming capability), but also an activity that students were deeply engaged in. By 2014, most students were arriving to class with at least some technological literacy on how to film content with their smartphones and then upload it to their computer.

While the benefits of the production process seemed clear, I continued to look for ways to help students get as much value out of the assignment as possible.

Step 1: Limiting assignment questions to maximize planning time

I limited the questions on the worksheet and focused more on the planning stages to help students structure this time more effectively. I also asked them fewer response questions and instead had all the members of each group present any information they wanted to share when they showed their video to the class. The flexibility of this presentation component allowed the class to point out aspects of each group's video that worked well for their assigned genre. This conversation helped foster a communal spirit around the film creations.¹⁸

Step 2: Ensuring flexibility within the assignment

Because of the flexible nature of the assignment (and assignment sheet), students began asking if they could alter the assignment: in some cases, making short films so they could follow a full narrative arc rather than segmenting the content. Groups asked if they could make trailers for their film genres, which proved to be extremely effective, since they allowed us to discuss both genre conventions and how they are emphasized in film advertising. Originally, I cut up paper figures so that students wouldn't need to act in the films if they didn't want to perform on camera. However, as their projects became more and more elaborate, some students asked to forgo the paper figures and act in their videos themselves.

Step 3: Supporting student investment and facilitating 'bring your own device' (BYOD)

In addition, by allowing them to use whatever software and cinematic tools with which they were comfortable, little technological instruction was necessary. As Steve Wheeler and Richard Gerver (2015) note, "Those who do support BYOD for students will need to invest significant time and resources into ensuring cross-platform operability and seamless delivery to students' personal technologies" (pp.37-38). I deliberately avoided any explicit expectation of technological literacy or access and, instead, structured groups loosely, allowing for students to self-select the tasks of the assignment they wanted to complete. Groups quickly determined who had the most cinematic experience or interest and divided the different levels of cinematic creation accordingly. As a result, students were able to showcase different skill sets that might not have been shared in more traditional writing assignments.

elements of their work.

¹⁸ According to Eileen Carnell's 2007 article "Characteristics of Effective Teaching and Learning," the central characteristics of effective teaching and learning are that the learning process is transparent, brought about through dialogue, and built by a community of learners in order to generate knowledge (pp.30-33). This project encapsulated these elements by exposing the unknown composition elements of film-making, creating a dialogue between the students, their texts and the class as a whole and building a sense of community around the creative

¹⁹ It should be noted that this self-selection process occurred not only for the technologically savvy students, but also for those with artistic talent and other skill sets that became highlighted during the creation process.

Step 4: Supporting different group needs to maximize creativity

Over time, I noticed that, while some groups struggled with the lack of directions, other groups thrived under less specific guidance. As I continued to think through this difference in the final products students generated, I noticed a parallel to Lars von Trier's (2003) documentary *The Five Obstructions*. In the documentary, Jørgen Leth must recreate his film *The Perfect Human* (1968) with different limitations set by von Trier. Leth thrives under the rules of the documentary, specifically because each project has only one obstruction he must work within. The limited directions allow for maximum creative potential. The film's projects parallel the assignment I designed, in which students had unlimited potential within their assigned film genre. While all groups could speak to valuable production-related lessons they had learned, the final product of groups of students with a stronger belief in their own creative ability was often more nuanced than the final product of groups of students who vocalized concerns that film production was something outside of their skill set. To mitigate this difference, I spent more time helping students who described themselves as feeling "less creative" to brainstorm their scenes, while I let more confident students explore their ideas in whatever ways they were excited to try.

Step 5: Rewriting reproductions

After multiple rounds of revision, the assignment's parameters continued to shift, but its focus on genre reconstruction remained the same. In 2017, I assigned one group the 'horror' genre and asked that they compose a scene or trailer (since I had expanded the assignment on the basis of the work of previous groups). When we reconvened to watch the films, the 'horror' group presented its work: the group had brought a bicycle into our building and recreated the famous scene from Stanley Kubrick's *The Shining* (1980), in which Danny rides down the hotel's hallway and sees the ghosts of two murdered girls. Because the video showed our adult classmate covering his eyes as two paper girls were shredded with a pair of scissors, the class roared with laughter.²⁰

When I asked the group how many times they had to watch the scene in order to execute this project, they said they'd watched the clip at least eight times and talked about how difficult it was to match the camera angles and cuts that Kubrick chose to use in his film. They also talked about which cinematic elements they manipulated to adjust to the limited resources they had, which led into a fruitful discussion about the ways that re-creation can often have a comedic effect. Students laughed because they were familiar with the original scene and seeing their classmate imitate the actions of a little boy, along with the substitution of cut-up paper dolls for murdered children, made the content much lighter. In addition to the pleasure experienced by watching this comedic remake of Kubrick's horror scene, they were also able to identify *why* the re-creation made them laugh. In our discussion, they talked about the original scene as well as the re-creation by pointing to specific cinematic details that led to both the horrifying impact of Kubrick's scene and the comedic results of their classmates' reproduction.

Evaluation

²⁰ The student work can be viewed here: [https://www.youtube.com/watch?v=eTsMnRmvKC0&feature=emb_title [Accessed: 18 November 2020].

The central success of this assignment was the re-watching of the film scene. In order to think through the choices Kubrick made, the group watched the scene many times. This is exactly the type of work visual analysis asks for in writing: the careful review of a specific moment to break down and expand upon the cinematic elements at play. In turn, I adjusted the assignment and, in subsequent courses, I asked for the reconstruction of a well-known film scene. This cut down on the prep time and allowed students to think specifically about the production techniques they would utilize, rather than spending time inventing a film. Bringing multimodal composition into the writing classroom may well feel like time away from other necessary reading and writing skills, so balancing time constraints while maximizing room for innovation can be challenging. Imitation allowed for creative re-imagining of the film scene, but also limited the most time-consuming part of the original assignment: the imagining of a scene from a genre. It also facilitated student innovation within the rhetorical borders of the assigned film scene.

Methods

The three points of feedback for this assignment were the final product of the videos, subsequent class discussion, and the following written assignment on cinematic analysis. As the assignment became more flexible and allowed students to create a short film or trailer, the 'creativity gap' began to develop between groups: while the final products of some groups were more detailed and more visually advanced, other groups struggled to capture their genre's conventions using the available resources. That said, all groups still generally showed more detailed responses in their subsequent writing on film. There was also a consistent disconnect between final products and group presentations of their work. Some groups were better at explaining the ways their final product developed (regardless of how the video actually looked), while other groups had phenomenal final products and couldn't explain the choices they made. Class discussion was necessary to push all students to see some of the rhetorical impacts they didn't anticipate.

When these three methods were used to evaluate the reproduction assignment, several changes were immediately evident. First, the creativity gap was dramatically reduced because no group had to invent a scene, trailer, or short film from scratch. By watching the assigned scenes together, each group started at the same 'creativity level'. While students were still not necessarily able to explain clearly all of their choices during the presentations of their videos, the discussions between presenters and the larger class were more detailed because every member had seen the starting point for each project. By watching the original film scenes together, every student saw the starting material for each group's video and they were able to ask about the specific interpretation methods used by the students presenting. This shift in the assignment allowed students to derive the same benefits for their subsequent writing assignments (using specific cinematic details as evidence, drawing claims about the film's rhetorical impact, etc.) while reducing the time spent trying to invent a film genre from scratch.

Limitations

The success of my students' reproduction assignment was, in some ways, a result of their economic and educational demographics. Each semester at Indiana University, I taught students who were generally middle-class, white, and with some previous experience of multimodal or creative assignments. While one or two students even had experience with video editing or production software, the majority were familiar with recording content on their smartphones (and almost all had these). I structured the groups in a way that would divide up students who self-identified as creative or artistic, but this didn't always evenly disperse the 'creative' students – having even one group member with filming experience could greatly influence that group's final product.

In addition, my feedback from students encompassed a small data set. I worked with about 100 students in all between the start of my experiments with scene-creation projects and my second time teaching the re-creation assignment. While I was able to see patterns within student presentations and writing over these semesters, the limited data set and consistency of student demographics should be considered when reviewing these findings.

The Four Conclusions

Conclusion 1:

In addition to shaping our classroom community, this assignment helped students conceptualize the larger academic community with which they were in conversation. In Joseph Harris's textbook *Rewriting: How to Do Things with Texts* (2006) the second chapter on 'forwarding' academic writing suggests that students should resist the pressure to invent something new out of thin air. Instead, he suggests they see their writing as part of a larger academic conversation. He explains that the metaphor of "writing as conversation" is beneficial because "[i]t highlights the social aspects of intellectual work, the ways in which academic writing responds to the texts and ideas of others" (p.35). Specifically, the reproduction of film served as an example of extending the cinematic and cultural conversation produced by Kubrick's original text. This allowed me again to connect the filmmaking process to the traditional writing process for student essays: this assignment was a way of visually quoting Kubrick's work by adding a comedic lens.

In von Trier's *The Five Obstructions* (2003), Leth demonstrates the creative potential of thinking through an idea under new circumstances. This act of *re-*creation allows him to focus more on *how* he's constructing each new version of his film than any other creative factor. Similarly, students who recreated Kubrick's famous scene focused more on the camera angle, framing and editing than any other group that semester, primarily because the original film provided them with a different starting point from that of their peers.

In the process, attention to these editing techniques and their relationship to the film's genre helped students to articulate the specific details that led to their analysis of the scene in their writing. Students went from making generalizations about visual texts to drawing specific claims from visual details. For example, students writing about Alfred Hitchcock's *Vertigo* (1958) went from using phrases such as "*The green lighting in the hotel room gives the room an eerie look*" to detailed paragraphs that explain the rhetorical impact of these cinematic effects:

The green lighting in the room pours in from the neon sign outside, making the otherwise neutral room glow. This green haze, (green being a color associated with rebirth) fills the frame as Judy is seemingly reborn as Madeline when she reenters the room. Judy also appears hazy and translucent, creating the feeling that the ghost of Madeline is walking through the doorway. Hitchcock uses the lighting to show how Scottie's desire of bringing back Madeline has been fulfilled.²¹

This level of detail increased once students saw visual texts as the result of rhetorical choices rather than texts that exist as finished products. For me, this was evidence of improved student analysis of visual texts that then appeared in their writing. This was accomplished both by practicing visual analysis as a class and through this multimodal assignment.

Conclusion 2:

Re-creating an existing film scene helped level the 'creativity curve'. As was noted in previous iterations of this assignment, some students thrived under the lack of structure when assigned to create a scene they would expect to find within a specific film genre. However, others found this task difficult, particularly students who described themselves as not being 'creative types'. While film production had a consistently positive impact on student thinking and writing, the differences in the final product showed that groups with students describing themselves as 'artistic' often found it easier to capture their ideas on video.

Asking students to recreate a famous film scene leveled this 'creativity curve'. To begin the assignment, I began by screening the assigned scenes for the class. Each group was then given a worksheet to help them divide tasks to recreate the assigned scene. Some students were excited by the idea of making significant changes in their scene, while others were interested in executing a reproduction that modelled itself as much as possible on the original scene. All groups had to consider resource limitations and the limited amount of time with which they had to work, but ultimately could be as creative as they wanted to be in their final product. Reproduction was a mode all students could access. Students experienced the benefits of cinematic production: they paid close attention to the original scene and tried to capture the elements of this original work by thinking about the rhetorical impact of lighting, sound, casting, set design, and editing.

-

²¹ These two sentences are paraphrased from student work on the 'film scene analysis' assignment that followed the scene recreation assignment in Spring 2018.

Conclusion 3:

Throughout the evolution of this assignment, my flexibility as an instructor was rewarded. Particularly in my initial years as an instructor, I saw it as my job to make sure students were following the directions I wrote out in assignments. However, the more creative structure of this assignment showed me the ways in which students can potentially exceed expectations when given the space to do so. Just as *The Five Obstructions* (2003) demonstrated the benefits of reproduction, so this approach reveals the ways in which creative work thrives with limited obstacles and maximum flexibility of interpretation.

This flexibility was balanced with clearer directions for the assignment. Rather than setting students free to create a film or film scene, the reproduction assignment included more specific expectations. Specificity is what then enabled creativity, as long as students produced a final product that met the assignment's goals. This model of flexibility could be beneficial, not only to writing instructors, but also to any faculty looking to incorporate multimodal assignments into their curriculum.

While not all FYC curriculums have the flexibility to include assignments such as these, the basic heuristics around reproduction and multimodality are fairly accessible and can be built into classroom activities in small ways. These could include recreating Instagram posts, YouTube videos, or photographs. Willingness to include the visual and technological literacy students bring with them to the composition classroom paid off in dividends, not only in the visual analysis they were able to produce, but in the development of a classroom community in which multiple skills and viewpoints were considered valuable.

Conclusion 4:

My students, like Shipka's student, exposed their visual literacy through the details of their videos. The careful editing, filming, and acting all stress their close viewing of the original product. According to Shipka (*op.cit.*), "Having gained a greater appreciation of the contextual or situational aspects of communicative practice...students would prove themselves to be more flexible and reflected communications than students enrolled in traditional freshman courses" (p.26). While this assignment wasn't a required one in the standardized first-year curriculum at my university, I recommended – and continued to recommend – this assignment to instructors as a way to develop, showcase, and reward students for the visual literacy they bring with them to their writing classes.

Many of the benefits, then, came not only from the creation of student videos but also their presentation to the rest of the class. When considering the benefits of film analysis in the writing classroom, Wild (*op.cit*) claims that the goal of writing courses should move beyond teaching students grammar and rhetorical writing skills. In the process, "[t]he primary focus thus becomes the production of writing that moves toward a self-reflexive understanding of its discursive functions, an understanding of the student writers' role within this discourse and an emerging sense of the scope of intellectual practices in writing" (pp. 22-23). In my classroom, this reflexivity came both in the production of the multimodal product and in its delivery to the rest of the class: students may not have been able to vocalize why the changes they made in adapting a scene helped them achieve a particular rhetorical effect, so their classmates helped them come to these realizations by explaining the impact the videos had on them as viewers.

Reference list

Anzaldúa, Gloria. (1987) *Borderlands = La Frontera: The New Mestiza.* San Francisco: Spinsters/Aunt Lute Publishing. ISBN: 978-0933216259.

Berger, J., Blomberg, S., Fox, C., Dibb, M., and Hollis, R. (1973) *Ways of Seeing*. London: British Broadcasting Company and Penguin Books. ISBN: 978-0140135152.

Bishop, E. (1999) *Cinema-(to)-Graphy: Film and Writing in Contemporary Composition Courses*. Portsmouth, NH: Boynton/Cook Publishing. ISBN: 978-0867094589.

Carnell, E. (2007) 'Conceptions of Effective Teaching in Higher Education: Extending the Boundaries.' *Teaching in Higher Education*, 12(1), 25-40. Available at: https://doi.org/10.1080/13562510601102081 (Accessed: 18 May 2020).

Council of Writing Program Administrators. (2014, revised 2019) *Outcomes Statement for First-Year Composition (3.0)*. Available at: wpacouncil.org/aws/CWPA/pt/sd/news_article/243055/_PARENT/layout_details/false (Accessed: 15 October 2020).

Foucault, M. (1977) *Discipline and Punish.* Translated by Alan Sheridan. New York: Pantheon Publishing. ISBN: 978-0679752554.

Giroux, H. (2001) 'Breaking into the Movies: Pedagogy and the Politics of Film.' *JAC: A Journal of Composition Theory*, 21(3) 583-598. Available at: https://www.jstor.org/stable/20866426 (Accessed: 18 May 2020).

Harris, J. (2017) *Rewriting: How to Do Things with Texts*. Boulder, CO: University Press of Colorado. ISBN: 978-0874216424.

Indiana University. (2020) 'Student Diversity.' *University Institutional Research and Reporting*. Available at: https://uirr.iu.edu/facts-figures/enrollment/diversity/index.html (Accessed: 15 October 2020).

Kubrick, S. (1980) The Shining. Los Angeles, CA: Warner Brothers.

Rosenwasser, D. and Stephen, J. (2011). *Writing Analytically*, 8th edition. Boston, MA: Cengage Learning, ISBN: 978-1337559461.

Shipka, J. (2011) *Toward a Composition Made Whole*. Pittsburgh, PA: University of Pittsburgh Press. ISBN: 978-0822961505.

Von Trier, L. and Leth, J. (2003) *The Five Obstructions*. Hvidovre, Denmark: Zentropa Entertainments.

Wheeler, S. and Gerver, R. (2015) *Learning with 'E's: Educational Theory and Practice in the Digital Age*. Carmarthen, United Kingdom: Crown House Publishing. ISBN: 978-1845909390.

Wild, D.H. (1999) 'Writing Images: Some Notes on Film in the Composition Classroom.'

Case Studies

Cinema-(to)-graphy: Film and Writing in Contemporary Composition Courses, 22-31. Portsmouth, NH: Boynton/Cook Publishing. ISBN: 978-0867094589.

Case study: Using a codesign process as an opportunity and to increase assessment literacy

Professor Debbie Bartlett Faculty of Engineering and Science, University of Greenwich, London, UK

Abstract

This is a case study, based on experience of working with Level 5 BSc Environmental Science and Geography students taking the Environmental Management module to demonstrate the value of involving them directly in curriculum and assessment design. The students chose to use the Sustainable Development Goals (SDGs) as the focus for the module content and as the basis for the assessment tasks, a group presentation and an individual report. The benefits of co-design for student engagement and assessment literacy are evaluated with reference to the literature and the impact of the co-design process on student confidence and understanding of the role of assessment in their learning. The approach was successful with this small class, with students providing positive feedback, although it is unlikely to be practical with very large cohorts.

The appendix – summarising the importance of the SDGs to learning and teaching and emphasising the relevance of SDG 4 Quality Education to all seventeen SDGs across subject areas – provides the context for this case study.

Keywords: Sustainable Development Goals; Co-design; Assessment literacy; Feedback; Student Engagement

The rationale for using a co-design approach

For several years, I have been interested in how we use assessment and, particularly, in how to increase students' engagement with feedback, by helping them to understand that this latter is for reflection and learning. Too often, the focus is on summative assessment and feedback may be received only after the module has finished. In the case of exams, little or no feedback is given other than the final mark. Is this the best we can do to support learning? The literature certainly suggests we could – and should – do better. Mueller (2005) raised the need for 'authentic assessment' to measure the knowledge and skills students' have acquired during the learning process. Fook and Sidhu (2010, p.153) have argued that, while the purpose of assessment is to evaluate students' performance, "institutions of higher education have to revisit their purpose of assessment if they hope to equip their learners with skills and competencies needed to succeed in today's workplace". Feedback should increase and develop learning (not simply measure it), stimulating reflection and improvement (Carless and Boud, 2018). Winstone et al. (2017) systematically reviewed learner engagement and concluded that formative feedback is required to achieve transformative learning and is closer to the 'real world', where work goes to a superior and is returned for reworking. It is not just the nature of the feedback but the way in which it is given that makes it effective (O'Donovan et al., 2019). It is a two-way process, with students

responding to feedback and appreciating it as an opportunity for reflection and improvement, but only if they are 'assessment literate' – recognising the purpose of the assessment and how it supports their learning process (QAA, 2018, Guiding Principle 6). A recent Times Higher Education feature entitled 'Does university assessment still pass muster?' suggested that, for both employability and student satisfaction, exams and essays should be replaced with real-world tasks (Mckie, 2019).

This is the context in which I have been developing authentic assessment strategies for the MSc Environmental Conservation students at the University of Greenwich, explaining in detail the purpose of each assignment and its relationship to professional competency and ensuring that students see formative submissions as a learning opportunity rather than additional work. These MSc students are focused on a specific career and so are not so hard to engage but taking this approach with undergraduates is more challenging. My research (usually focusing on finding solutions to some kind of environmental 'problem') has indicated that to adopt a participatory approach which involves stakeholders in any decision-making process is fundamental for success (Bartlett, 2020). I therefore wondered if in order to increase undergraduates' engagement, it might be effective to ask them to design their own module content (obviously keeping within the scope of the topic) and assessments. There is, as highlighted by Brooman *et al.* (2015), little literature on application in higher education (HE), but co-design has been used with good results for both staff and students (Bovill, 2014).

The case study

Two years ago, I inherited a fifteen-credit Level 5 module with the title 'Environmental Management'. The descriptors and the learning outcomes (LOs), although expressed in appropriate academic language, are vague. The students were a mixed cohort from the BSc Environmental Science and BSc Geography programmes. I have found that students at this level tend not to submit formative assignments but focus on the summative, being more interested in the mark than the feedback and thereby missing the opportunity for transformative learning and future improvement. As the number of assignments per module has decreased, this has become a real concern. This module is typically a small cohort, rarely reaching double figures, and so manageable for research into co-design, where the curriculum and assessment are negotiated between staff and students. Co-design has been found beneficial for increasing engagement – for example, the 'Design2Learn' project, which found that giving students control increased their reflection, so enabling them to become more aware of the process of their learning and to see themselves directly involved as 'learning co-designers' (Garcia *et al.*, 2018).

In accordance with this basic strategy, I began by introducing the scope of and common themes encountered in environmental management (see figure 1) before asking the students what they were interested in and what they hoped to achieve during the module.



Figure 1: What is environmental management?

The 2018-19 cohort was small and all the students, after perusing job advertisements and comparing the wages offered by the range of environmental employment options, wanted to focus on corporate social responsibility and the skills required for the role of environmental – or sustainability – manager in a company. The focus was therefore on standard systems, with students undertaking auditor training and gaining real experience by contributing to the University's ISO14001 submission – a definite win-win! They were simply delighted to have completed audit reports as evidence of their experience, which helped one get a paid summer placement and which was the topic of her final-year research project. The 2019-20 group was more diverse, with eight students, but they worked together to produce the list of topics that they wanted to cover (figure 2).



Figure 2: The students' list of environmental management topics

The Sustainable Development Goals (SDGs) had been promoted across the campus, with posters illustrating how research and teaching were contributing to achieving specific goals so that students were well aware of these as an international policy framework (box 1; more information on the SDGs is provided as an appendix). It did not take long for the students to make the connection between the issues they had identified as priorities and the SDGs, and they decided these would provide the basis for the module content.

BOX 1: The Universities at Medway Sustainable Development Goals Pilot

At the start of the 2019-20 academic year a collaboration was set up between the University of Kent, University of Greenwich and Canterbury Christchurch University, all based on the Medway campus, to raise awareness of the SDGs and promote their incorporation into teaching and research.

The objectives were to:

- make the SDGs relevant to learning, research and day-to-day behaviours
- ensure that the scope of sustainability was understood to include social and economic issues as well as environmental ones
- highlight the way, in terms of the SDGs, staff and students are delivering
- develop partnership to enable interdisciplinary and interagency collaborations

This was promoted via social media, staff and student posters, exhibitions and talks and engaged with all faculties, directorates, and contractors. This was a pilot with the intention of rolling implementation out to the Avery Hill and Greenwich campuses (London) as well as the Canterbury Campuses of University of Kent and Canterbury Christ Church University.

The University of Greenwich aim was to increase integration of the SDGs in teaching, to sign up to the SDG Accord (EAUC the Alliance for Sustainability Leadership in Education https://www.eauc.org.uk/the_sdg_accord) and to submit evidence to the Times Higher Education SDG Dashboard.

The next step was to consider the two assessment tasks. The first was a group presentation. This was discussed, separating out the transferable skills (research, communication, teamwork) from the technical ones (content) and increasing understanding of the rationale for the task. We looked back at the list of topics, reminded ourselves about the SDGs and agreed that the students should all bring their thoughts the following week. They concluded unanimously that the biggest challenge with the SDGs is that they are interdependent, making it difficult to consider any of them in isolation. For me, this was interesting evidence of inquiry-based learning and showed that they really had reflected, both individually and in collaboration, between classes. Students were organised into small groups and the selected topics (figure 2) randomly allocated between them, the brief being to research the environmental management topic and which specific SDGs were related to it. In all cases, complex interactions were revealed, with multiple links between SDGs so that management action on any of the topics would (or could) contribute to achieving several simultaneously. These were presented in class as formative assignments, receiving peer and teacher comments. Examples of summary slides from the final, summative, presentations are included as figure 3.



Figure 3. Example summary slides showing graphic representation of the links

The second assignment was an individual report. Options were discussed and it was decided to stick with the SDG theme and to focus on environmental management activities taking place on the campus, identifying how these contributed to achieving SDGs and – importantly – suggesting how this could be improved. The formative assignment submissions provided further opportunity for discussion, bringing in national, regional and University-level policies and direct observation, with the practicality of recommendations evaluated ('options appraisal'). Sharing these in a supportive context is important for learning as well as building students' confidence in their own work (Carless and Boud, 2018). It is particularly important for this to be built into the formative feedback process, as there is no mechanism for peer review of and dialogue about each other's final assignments, particularly when hand-in is at the end of the module.

Evaluation

Getting feedback on modules seems increasingly challenging, with the online system often failing to attract enough engagement to produce an output, let alone anything that can be used as the basis for reflection on teaching and lead to improvement. The 2019-2020 students were asked if they would like to be involved in a presentation at the SHIFT conference, January 2020. They greeted this suggestion enthusiastically as an addition to their curricula vitae (CV), despite its not being credit bearing. With very little guidance, they worked together in class and independently, planning slides and narrative, and this became the focus for reflecting on the benefits and disadvantages of the approach. The consensus was positive about the following aspects:

- being involved in the process
- feeling more engaged
- having the chance to reflect on and develop personal interests
- gaining professional development as well as achieving academically
- appreciating reduced pressure
- being exposed to others' interests leading to changes in their views
- benefiting from wider perspectives
- realising how everything is connected

The second assignment, the individual report on environmental management in the context of the campus, evaluating the contribution to the SDGs and suggesting enhancements, was recognised as something which an environmental consultant might well be commissioned to do with students and which therefore had potential for their CV; for me, it was authentic assessment, with students demonstrating assessment literacy and active engagement.

Although reduced pressure was considered a benefit of co-design, a different kind of pressure was highlighted: having more responsibility. This was very different from the predictability they were used to, with a handbook outlining what would be covered and with reading material specified, thus reducing the need for them to be proactive in personal research and to decide for themselves what background reading would be appropriate. One student was initially very uncomfortable about the lack of certainty. He was one of two in the cohort who had contacted me in the summer, asking for a module reading list. My response was that I preferred not to provide this in advance, citing the breadth of the topic area and

suggesting that any reading on environmental issues would be useful. He was ultimately supportive of the process and felt he had developed as a result of taking part.

Only three of the students were able to attend and present at SHIFT (figure 4). The timing, in the school holidays, was a difficulty for students with childcare responsibilities; one returned home to Kazakhstan for the md-winter break and two were unwell. This led to a last-minute rearrangement of presenters for each slide, but it was made clear that the views expressed were those of the whole class and, despite nerves, those who did attend enjoyed the experience of presenting at a large event.



Figure 4: Sabana Khanom presenting the students view at the SHIFT conference

Limitations and conclusions

From my perspective, this co-design approach has successfully increased student assessment literacy and engagement with feedback and, in the 2019-20 cohort, had the additional benefit of successfully integrating the SDGs into learning and teaching. The effectiveness of co-design is clearly demonstrated by the student-led evaluation (figure 4) but capturing quantifiable data was impossible as the students did not engage with the online end-of-module evaluation. It would be interesting to investigate whether this positive effect on engagement carried over into learning in subsequent modules. However, this would be difficult to evidence, particularly as formative assignments with detailed feedback are not universally used. In both years, it has been challenging to gain approval for this approach from the programme leader; this resonates with the finding of Bovill (2014), that staff involved in co-design found it "risky and nerve-wracking". Concerns have been raised that by giving students choice and an element of control they could become polarised and that trying to please all could lead to satisfaction for none. While I can see the logic behind this, I can provide the reassurance that the gradual introduction to the co-design process taken with each of these two cohorts would have enabled backtracking to a more traditional approach had that been necessary.

Each group of students is different and, although this has worked well for this module for two years, it would be significantly more challenging with large cohorts and/or with a more specific curriculum – and also if the module were a pre-requisite for another. I have found that it requires constant adaptation and an active response to the students all the way through the process. I would recommend it for modules on wide-ranging topics and without prescriptive learning outcomes. It requires more thought than rolling out than rolling out the same material year after year, but it is far more interesting! I enjoy the challenge of adapting

my teaching in response to student interests and career ambitions. The idea of repeatedly delivering the same material fills me with dread – fortunately, as my subject is highly dynamic, even modules with specific content requirements require significant and continuous updating.

Reference list

Bartlett, D. (2020) 'Landscape Character Assessment: A method to include community perspectives and ecosystem services.' Chapter 5. In: Dhyani, S., Gupta, A.K. and Karki, M. (eds.) Landuse planning in Nature based Solutions: Science, Innovations and Strategies in South Asia. (Volume 1 in the Nature series Disaster Resilience and Green Growth). Springer Open. ISBN:978-981-15-4711-9.

Bovill, C. (2014) 'An investigation of co-created curricula within higher education in the UK, Ireland and the USA.' *Innovations in Education and Teaching International*, 51(1), 15-25. Available at: url https://doi: 10.1080/14703297.2013.770264 (Accessed: 24/6/2020).

Brooman, S., Darwent, S. and Pimor, A. (2015) 'The student voice in higher education curriculum design: is there value in listening?' *Innovations in Education and Teaching International*, 52(6), 663-674. Available at: url https://doi: 10.1080/14703297.2014.910128 (Accessed: 24/6/2020).

Carless, D. and Boud, D. (2018) 'The development of student feedback literacy: enabling uptake of feedback.' *Assessment & Evaluation in Higher Education.* 43(8), 1315-1325. Available at: url https://doi: 10.1080/02602938.2018.1463354 (Accessed: 24/6/2020).

Fook, C.Y. and Sidhu, G.K. (2010) 'Authentic Assessment and Pedagogical Strategies.' *Higher Education Journal of Social Sciences* 6(2), 153-161. Available at: url https:// https://doi.org/10.3844/jssp.2010.153.161 (Accessed: 24/6/2020).

Garcia, I., Noguera, I. and Cortada-Pujol, M. (2018) 'Students' perspective on participation in a co-design process of learning scenarios.' *Journal of Educational Innovation, Partnership and Change*, 4(1). Available at:

https://journals.studentengagement.org.uk/index.php/studentchangeagents/article/view/760 (Accessed: 24/6/2020).

Mckie, A. (2019) 'Does university assessment still pass muster?' Available at: https://www.timeshighereducation.com/features/does-university-assessment-still-pass-muster (Accessed: 24/6/2020).

Mueller, J, (2005) 'The authentic assessment toolbox: Enhancing student learning through online faculty development.' Journal of Online Learning and Teaching, 1. 1-7. Available at: https://jolt.merlot.org/documents/vol1_no1_mueller_001.pdf (Accessed: 21/11/2020).

O'Donovan, B.M., den Outer, B., Price, M. and Lloyd, A. (2019) 'What makes good feedback good?' *Studies in Higher Education*. doi: 10.1080/03075079.2019.1630812.

Case Studies

QAA (2018) 'UK Quality Code for Higher Education Advice and Guidance Assessment.' Available at: https://www.qaa.ac.uk/docs/qaa/quality-code/advice-and-guidance-assessment.pdf?sfvrsn=ca29c181_4 (Accessed: 24/6/2020).

Winstone, N.E., Nash, R.A., Parker, M. and Rowntree, J. (2017) 'Supporting Learners' Agentic Engagement with Feedback: a Systematic Review and a Taxonomy of Recipience Processes.' *Educational Psychologist* 52(1), 17-37. Available at: url https://www.tandfonline.com/doi/full/10.1080/00461520.2016.1207538 (Accessed: 21/11/2020).

Appendix

The Sustainable Development Goals and Education for Sustainability

The seventeen interconnected Sustainable Development Goals (SDGs) were set by United Nations (UN) General Assembly in 2015 and have been adopted by 193 countries. Each goal has set of targets (169 in total) and measured indicators (232 in total) and the aim is that these will be delivered by 2030. SDG 4, Quality Education, explicitly recognises Education for Sustainable Development (ESD) in Target 4.7, but this is of integral importance for all the other sixteen SDGs as well (see box 2).

Box 2 SDG 4 Quality Education

Target 4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development

4.7.1 Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies, (b) curricula, (c) teacher education and (d) student assessment

(https://sustainabledevelopment.un.org/sdg4)

While environmental education – focused on developing knowledge, skills, values, attitudes and behaviours to encourage people to care for their environment – has long been recognised as a discipline, ESD came to the fore at the UN World Summit in Johannesburg in 2002. The reorientation of the then education system to the promotion of the knowledge, skills, understanding, values, actions and behaviours necessary to create a sustainable world succeeded in ensuring protection of the environmental, social equity and economic sustainability. The UN Decade of Education for Sustainable Development (DESD), 2005-2014, was adopted by the UN General Assembly and the UN Educational, Scientific and Cultural Organisation (UNESCO) was the lead organisation to promote the vision 'of a world where everyone has the opportunity to benefit from quality education and learn the values, behaviour and lifestyles required for a sustainable future and for positive societal transformation' (www.unesco.org/education/desd). The themes in ESD include poverty alleviation, citizenship, peace, ethics, responsibility in local and global contexts, democracy and governance, justice, human rights, gender equality, corporate responsibility, natural resource management and biological diversity (Nevin, 2008).

There is a clear need for ESD to be embedded in the higher education curriculum in a holistic, interdisciplinary way and in policy and strategies across the whole institution; the SDGs have become a mechanism to achieve this. This concept has been led by Students Organising for Sustainability-UK, a subsection of the National Union of Students (NUS) (https://sustainability.nus.org.uk/) and part of an international alliance involving over 100 student-led groups in forty countries working on sustainability. In late 2017, NUS/SOS launched the 'SDG Teach In', aiming to put the Global Goals for Sustainable Development

at the heart of further and higher education (https://sustainability.nus.org.uk/sdgteachin), promoting existing examples. The author was asked to submit a photo and poster statement in the run-up to the first 'Teach In' event, 19-23 February 2018. This has since been repeated annually, with higher education institutions (HEIs) asked to pledge and leader boards posted online.

'Teach SDGs', the official UN resource for all levels, has the same aim, using an apple logo set within the circular arrangement of the SDGs and providing a free *SDGs in Action* app (http://www.teachsdgs.org/). The Times Higher Education University Impact Rankings currently measure the societal impact of HEIs based on achievement of SDGs, the first set of performance metrics having been developed in 2019, with the University of Auckland ranked highest on the basis of it social and economic impact; in 2020, the University of Greenwich maintained its position at 101, out of a total of over 800, and based on contribution to all seventeen SDGs. This is focusing the minds of those in the upper levels of management and currently driving initiatives to promote the SDGs.

Nevin E (2008) Education for Sustainable Development Issue 6 Policy & Practice: A Development Education Review.

https://www.developmenteducationreview.com/issue/issue-6/education-and-sustainable-development accessed 21/4/20

Improving written communication using a blended-learning approach and selfregulated learning dimensions

Agnieszka Herdan¹, Lorenzo Neri², Antonella Russo¹, Elizabeth Warren¹ University of Greenwich, ² Birkbeck University, London, UK

Abstract

This study analyses the effectiveness of a blended-learning strategy, designed to improve the written communication skills of a cohort of accounting and finance students. Moore and Morton (2017) stressed that the written communication gap arises mainly owing to students' inability to utilise their writing skills in a dynamic process. This paper therefore explores whether a blended-learning approach can improve the written communication skills, on the basis of the students' ability to become 'independent learners' by using the self-regulation learning (SRL) strategy.

The findings reveal that SRL dimensions play a significant role in the successful application of the blended-learning strategy. The dimensions also support the blended approach to enhancing written communications skills among accounting students. The study has relevant and practical suggestions for promoting the application of a blended-learning strategy using SRL successfully. Additionally, our findings offer a learning strategy to address the unresolved skills gap, affecting written communication within business schools and beyond.

Keywords: blended learning; self-regulated learning, written communication skills gap.

1. Introduction

The quantitative skills gap of students leaving higher education (HE) and its impact on the transition into the work environment has been examined extensively (Cook, Watson and Vougas, 2019). A growing body of literature also details how adequate levels of written communication can help new graduates find their first jobs (Finch, Nadeau and O'Reilly, 2013; Nickson *et al.*, 2012; Remedios, 2012). Over the last decade, both academics and practitioners agreed that written communication is one of the most important skills for students to have, because communication competence strongly supports high-performance outcomes (Russ, 2009). Although higher education institutions (HEIs) have for some time now been working on preparing students for the world of work, the United Kingdom (UK) Commission's Employer Skills Survey still identified written communication skills in graduates as lacking (Davies *et al.*, 2012).

Business schools have been criticised for failing to develop students' writing skills effectively (Pittenger, Miller and Allison, 2006) and there is an argument that we need more active teaching strategies to enhance the writing skills of business students (Kermis and Kermis, 2010). Therefore, drawing on the literature highlighting the benefits of the blended-learning approach (Gonzalez-Gomez *et al.*, 2016; Pellas and Kazandis, 2015), this research

investigates how blended learning can enhance the writing skills of business school students.

The written communication skills gap investigated by Moore and Morton (2017) found that written communication requirements are often unique to specific professional areas or workplace roles. The reported lack of basic skills in the area of written communication requires a rethink about how HE can reduce the gap by developing the students' writing ability sufficiently for them to identify the distinctiveness of all communicative situations (Moore and Morton, *op.cit.*), an approach which requires the conceptualisation of writing as a process (Dyson and Freedman, 1990). The critical literacy approach (Luke, 2000) describes a cognitive view of writing and explains the conscious use of language in context and how it can be developed in a collaborative, learner-centred environment. To enable the learner to achieve this, writing skills need to be connected with a self-regulated learning (SRL) strategy (Lienenmann and Reid, 2008).

SRL is grounded in the social cognitive theory of Bandura (2001); it is a dynamic, constructive process, whereby students are responsible for setting their own individual learning goals, monitoring their learning progress and controlling their motivation, behaviour and cognition (Pintrich, 2004). According to Zimmerman and Schunk (2001), intrinsic and extrinsic learning goals, as significant drivers for the success of the SRL strategy, appear to be an important factor in developing and enhancing writing skills. Accounting and finance students, who are the subject of this study, typically assume that having good numeracy abilities guarantees a successful professional career (Riley and Simons, 2013). It is indeed unfortunate that many of them are unaware of the current expectations of the job market. Furthermore, Kavanagh and Drennan (2008) argue that accounting education has been overly focused on technical skills at the expense of soft skills and generic skills, including communication skills. Accounting educators now find themselves expected to develop not only the technical skills that industry requires, but also soft skills – and in particular written communication skills – which is why this study is important.

This study evaluates the value of a blended-learning approach and, in particular, the online platform used for improving written communication skills according to the dimensions of SRL. The most cited benefit of a blended-learning approach is based on the fact that it can cater to the needs of the individual learner, offering autonomy and flexibility, so that the student can choose her/his own study pace (Bernard *et al.*, 2014; Chen, Wang and Chen, 2014; Means *et al.*, 2013; Potter, 2015). The study evaluates how the student experience with the blended-learning approach improves confidence in personal writing skills in the context of the SRL dimensions. Thus, the aims of the current study are threefold: 1) to assess the SRL dimensions implicated in the blended learning strategy; 2) to examine the relationships between SRL dimensions and students' performance; 3) to explore whether students' perception of writing skills have been changed after the use of a blended-learning approach.

First, we examine the literature related to SRL and blended learning. After that, we provide the research context, methods and findings, before culminating with discussion and a conclusion.

2. Literature review

2.1 The writing communication as a self-regulated learning process

The conceptualisation of 'writing as a process' is drawn from the early cognitive model proposed by Flower and Hayes (1981). 'Writing as a process' is categorised into three phases: first, the generation and organisation of information (planning); second, the physical writing of the text; third, the revision of the written product. This model was developed further by theorists in terms of both research and pedagogy, incorporating the analysis and inclusion of 'writing development in practice' and the 'social and political dimensions' of the writing process (Kelly, Soundranayagam and Grief, 2004 offer a complete review of the literature on the topic).

The core concept of how students develop their writing competence (Eves-Bowden, 2001) focuses on learning activities that allow students to transition gradually from 'knowledge telling' to 'knowledge transforming', where there is a dynamic interaction between the students with essential writing skills and a reflective process (Luke, 2000). The findings of Moore and Morton (*op.cit.*) suggest that, for a business student, the main goal in the area of writing is not to achieve just an adequate level of the basic skills (i.e. a skills approach), but rather to use those skills in a dynamic process. Although Moore and Morton (*op.cit.*) acknowledge the existence of a written communication skills gap, they do not indicate ways to bridge that gap; this research will address that aspect.

Learning strategies suggest the need for developing student skills in planning, creation of ideas, self-evaluation, self-monitoring and reflection. Students should have an in-depth understanding of what they are writing about, determining whether or not the task has a purpose. To achieve this level of understanding, they may need to research further, so that they become more motivated about the content of the task and plan and organise their thoughts. Any learning strategy involving writing skills should therefore be based on a 'student–centred strategy', which will create the simultaneous interplay of learning approaches and SRL in the writing process (Lienenmann and Reid, 2008). Consequently, the role of the learner is a fundamental factor in the SRL strategies model (Efklides, 2011; Greene and Azevedo, 2010). When students set specific goals, according to a metacognitive awareness of their needs (Cao and Nietfeld, 2007), then they can establish an effective study strategy (Schunk, 2005). Although the application of SRL is well documented in the educational context (Cassidy, 2011; Dresel *et al.*, 2015; Broadbent, 2017), there is a gap in the area of writing capabilities, which this study sets out to address.

2.2 Blended-learning approach

During the last decade, technology has made it possible for universities to provide an individualised support system (Prinsloo and Van Rooyen, 2007). Furthermore, studies by Gonzalez-Gomez *et al.* (2016) and Westermann (2014) report that engaging in online activities can help students to develop essential skills. Blended learning is becoming an essential educational approach and embedding various aspects of e-learning into university programmes offers several benefits. Although it may be defined in a variety of ways (Driscoll and Carliner, 2005; Means *et al.*, 2013), blended learning in the present study is defined as the adoption of educational web-based technology (e.g. a learning management system) for

the purpose of online learning, in combination with face-to-face tools and including direct instruction from educators.

It has been argued that, for the current generation of students, blended learning can be a good way of delivering academic programmes and improving students' skills (Gonzalez-Gomez et al., 2016; Pellas and Kazandis, 2015). It has been suggested that, in blended learning courses, students achieve better results (Bernard et al., 2014; Gonzalez-Gomez et al., 2016; Ryan et al., 2016). Adapting support for basic knowledge and skills outside the classroom means the time spent together in lectures and tutorials can be focused on higherlevel activities (Thornton and Yoong, 2011). The features of the blended-learning method can then expose the full impact of what SRL aims to achieve. In fact, as found by Warren et al. (2020), the blended-learning approach creates an environment in which students feel responsible for their learning, as autonomy and flexibility of method give them the opportunity to select their preferred study pace, as well as a place and time for learning that is suitable for them (Chen et al., 2014; Potter, 2015). Moreover, when blended learning allows students to set their own pace, this can increase satisfaction and reduce stress (Klein and Ware, 2003). In addition, this learning environment can aid self-efficacy by building students' confidence as independent learners (Venkatesh, Croteau and Rabah, 2014). Ryan et al. (2016) therefore suggest a combination of online self-learning and classroom teaching to increase satisfaction and motivation in learning and improve results.

Love and Fry (2006), in their analysis of accounting students, found that the blended approach added value to the learning process. Furthermore, Basioudis and De Lange (2009) examined the impact of blended learning activities on the teaching and learning effectiveness of undergraduate accounting students and reported a positive impact on engagement and motivation. However, neither of these studies investigated a platform that can enhance students' learning, nor any specific skills that students can develop. This study also addresses this aspect. Despite growing interest concerning the use and effect of blended learning, most of the literature investigates the effects of this strategy and students' perception of it in technical modules (Warren *et al.*, 2020). There is a gap in the literature in relation to examining the use of blended learning for different learning objectives, such as written communication skills.

2.3 Self-regulated learning and blended-learning strategies

According to the literature discussed so far, the approaches to both learning written communication skills and the blended-learning method are well documented. However, there remains a gap in terms of understanding how students use blended learning with regard to the dimensions of the SRL strategy. This study applies the SRL model described by Pintrich (2004), the metacognitive strategy and its main dimensions, in order to understand how the students' confidence and performance function within a blended-learning environment (Means *et al.*, 2009). Metacognitive strategies can help to regulate and control cognition to accomplish a goal and include such strategies as goal-setting, planning, self-monitoring, self-regulation, time management, and help-seeking (O'Hara, Bourner and Webber, 2004).

This study focuses on how the use of a dedicated online platform for writing skills, in combination with other learning activities, can help students to understand what they know, discover what they do not know, and address the gap (Cao and Nietfeld, 2007). The combination of online learning technology with structure and the social aspects of face-to-

face time can enrich students' experience, providing an environment in which SRL dimensions can affect their performance by customising their learning process through self-monitoring and time management (Aldhafeeri, 2015).

3. Research context and method

3.1 Research context

There were several drivers for introducing technology-based resources within a blended approach in the year one programmes in the area of accounting and finance. Through feedback from educators, our observation of the difficulties observed on industrial placements and the employers' emphasis upon the necessity of improving written communication skills, the programme team recognised the importance of developing those skills in particular. In this study, students who join accounting and finance programmes come from a diverse range of backgrounds, including having different qualifications and countries of origin. The students have distinct cohort needs, though a variety of support and a traditional teaching approach did not allow the teaching team to provide an individualised learning plan. It was found that the limited time provided in tutorials was often insufficient to develop good writing skills and the large cohorts made it impossible to provide individualised feedback and help. It is also important to note that, typically, accounting and finance educators are not trained to develop writing skills to the requisite extent. In addition, in-class activities in areas of accounting and finance consist largely of number-crunching exercises and data analysis, with, owing to the professional accreditation that is sought on these programmes, limited emphasis on developing writing skills. As part of a blended-learning approach, three online platforms were introduced: 1) MyWritingLab; 2) MyAccountingLab; 3) MyMathLab.

To address these issues and support students more effectively, the programme team searched for online resources to give students unrestricted access to interactive study materials and to provide opportunities to practise and obtain regular feedback. Although there are several possible solutions available, MyWritingLab, was our preferred option, because it allows you to customise the content to the specific needs of students. MyWritingLab is an online system intended to help students work on grammar, mechanics, writing and research skills. It allows students to practise persuasive, logical and effective writing. It starts with diagnostic pre-tests and allows students to assess their current level of writing skills, indicating the areas that they need to work on. It can be used to design individualised learning paths for each student and to support individual needs. In addition, students are able to access their grades and this encourages them to feel accountable for their academic success.

We introduced MyWritingLab to first-year accounting and finance students in 2014. From the twelve areas of study offered via the online platform, seven topics have been assigned to students as compulsory activities, carrying a thirty per cent weighting of the final summative assessment. We offer the rest of the topics to students on a formative basis. The following topics have also been selected as compulsory activities:

- 1. Types of academic writing
- 2. Writing in a UK academic context
- Understanding the task

Articles

- 4. Planning and writing an assignment
- 5. Critical thinking in academic writing
- 6. Referencing
- 7. Academic writing: avoiding plagiarism and synthesising

The MyWritingLab learning tool is introduced to the students in term one, in the third teaching week. The assessments are assigned to students between November and the middle of February and are usually separated by three-week intervals. Students are able to complete diagnostic checks to evaluate the progress they have made. The lab provides students with unlimited practice and constant feedback, which is extremely beneficial for students.

3.2 Research method

We employed a mixed-methods research approach, the chief characteristics of which are that it provides an in-depth and systematic analysis of the research problem and minimises the intrinsic issues associated with purely qualitative and quantitative research methods. The participants in this study were students on three undergraduate programmes, all within the Accounting and Finance department who had completed a core module called Personal Professional Development (PPD). The group consisted of 164 students, and 34% (56) volunteered to be part of the project, all of whom had studied PPD together in 2017-18 (the study did not separate the students into the three programmes because they all study a common first year). A larger sample size would have improved the validity of the study.

3.3 Instruments and analysis

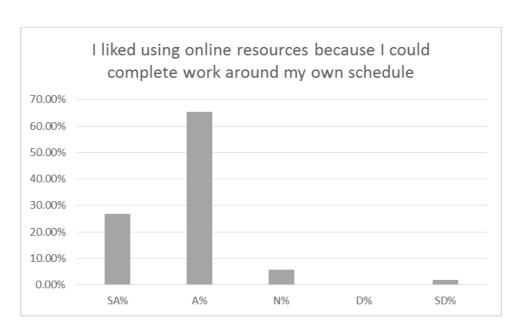
We designed a survey with closed and open questions as a way to obtain quantitative and qualitative data and investigate students' behaviour. The survey was used to explore the students' perceived use of an online lab after prolonged use. The first online survey link was sent in the first few weeks of the programme and the questions related to the MyWritingLab were emailed to students two-thirds of the way through the second teaching term. The timing of the second survey was based on the students' completion of all five compulsory tests. The students were encouraged to participate in the survey and express their opinions, but this was not compulsory. From the survey, we were able to collect useful data relating to the students' socio-cultural characteristics – e.g. gender, UK/non-UK, previous studies, work experience, experience of blended learning. The students' answers were coded so that their responses were anonymised once all the data had been checked for accuracy. For the coding, each participant was allocated a number, so that the responses could be analysed and information from both suverys could be linked. Additionally, the performance of the participants was collected via the online platform and coded to anonymise the data. The data included details of performance, time spent using the platform, the number of assigned tasks completed and the number of tasks outstanding.

The time spent on using the platform, the number of assigned tasks completed and the number of tasks outstanding were selected as explicative variables associated with the main SRL dimensions applied in this specific blended-learning experience. The time spent in completing their tasks on the platform is a useful proxy for how the students managed their resources (time management); the number of assigned tasks completed was linked to the students' self-regulating and planning ability, as were tasks outstanding and capacity for

self-monitoring and goal-setting. Using these variables, we could test possible correlations among key SRL dimensions.

4. Findings and discussion

The collection of data from our survey and from the MyWritingLab platform allowed us to evaluate the different factors and dimensions of the online platform part of the blended-learning experience in the context of soft skills. The number of students who participated in both surveys was 56, of whom 53% were male and 47% female. Among this population, circa 36% of the cohort had previous job experience and 66% had previous experience with blended-learning method. The most relevant SRL dimensions in the use of a blended-learning strategy were investigated via closed questions and responses given in table 1.



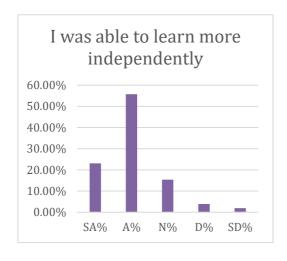
Table²² 1: Students' preference for using online resources

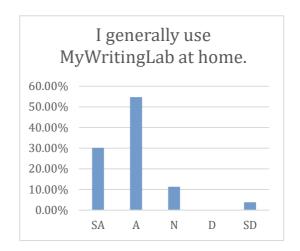
This question as reported in table 1 was used to assess the 'self-regulated' and 'time-management' dimensions that are considered essential to a successful blended-learning experience. Almost all the students agreed or strongly agreed that the flexibility of the blended-learning method enhanced their learning experience. This is in line with the findings of Warren *et al.* (2020) on the students' appreciation of the flexibility of the learning and teaching activities. The SRL dimensions most relevant for the students are shown in tables 2 and 3.

 $^{^{\}rm 22}$ Key: SA is strongly agree, A is agree, N is neither, D is disagree and SD is strongly disagree

all charts have the Y axis providing the % response and X axis providing the way in which the students responded.

Table 2: Ability to learn independently and Table 3: Where students use MyWritingLab

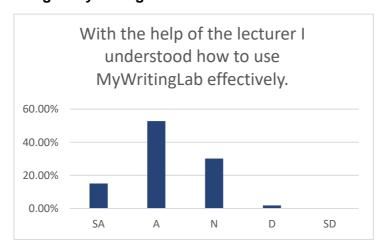




The students suggested that the independent learning process (self-regulated and planning dimensions) played an important role in enhancing their experiences with the blended-learning approach. As for Chen *et al.* (2014) and Potter (2015), the option of using the platform from home helped them to manage their own time (for working or studying) more efficiently. From the data, it is evident that the students successfully applied their SRL strategies within their blended experience.

To investigate the specific feature of blended-learning methods that combine the independent learning experience with face-to-face activities, we tested the SRL dimensions in terms of how students sought help with the online platform, as shown in table 4. Since using MyWritingLab effectively can be challenging at the beginning, to blend the support can help to address student concerns. Once students establish some confidence with the platform, they can work independently and boost their SRL.

Table 4: Understanding of MyWritingLab



The results reveal how the interaction, engagement and assistance (help-seeking dimension) still play a significant role in the students' experience. This result supports the

successful application of a blended-learning strategy and, as Ryan *et al.* (2016) suggest, students still need a combination of online self-learning and classroom teaching to enhance their motivation and obtain satisfactory results.

Regarding the self-monitoring dimension, we used two questions (see tables 5 and 6) to determine whether the students had been able to monitor and evaluate their experience within the blended-learning approach. In MyWritingLab, students can check their grades at the end of the task and have feedback on their mistakes. Additionally, many of the tasks in their personalised study plan can be retaken in order to give students the opportunity to monitor their progress and evaluate their improvement in term of performance. Furthermore, they can monitor their progress in terms of academic writing (see table 6) based on the tasks related to 'critical thinking' and 'academic writing'.

Tables 5 and 6: Use of the online resources and the ability to monitor progress





The students demonstrated a good level of control of their learning activities and were able to observe the improvements achieved in their writing skills while they were using MyWritingLab. With SRL, the students actively construct their knowledge and take responsibility for their performance. The data in this study suggests that students appreciate how the blended-learning online platform helps with confidence and time management. This is supported by the responses to the open questions in the survey, with students explaining that the online platform made the work "easy", both in terms of flexibility and accessibility. This perception of the blended learning experience implies that the students were able to work with it 'independently'. One of the answers, for example, pointed out this aspect clearly:

"The detailed practice questions followed by the test helped me to clarify how to improve grammar and the way I've been writing. I'm very confident after using MyWritingLab"

Moreover, it was interesting that a proportion of the students was finally able to realise how important written skills are for their academic success (identify an intrinsic goal-setting), as shown in the following answers:

"Gives me a bit more knowledge of the information I may not already be aware of."

"Helps in understanding how to write an essay."

"It taught me what critical thinking is, and I feel that I can apply that to my other respective courses."

"It goes through some of the things that are necessary when doing coursework, e.g. referencing. It tells you the importance of referencing and the consequences of not using Harvard referencing and how it would affect your work".

The results and the students' discussions demonstrate how the new learning environment aids self-efficacy by building students' confidence as independent learners (Venkatesh, Croteau and Rabah, 2014).

The analysis shows how the SRL dimensions play a significant role in the blended-learning approach, and this was reflected in the students' performance, as shown in table 7. The average results achieved by the students on different tasks (modules) are provided in table 7. Students were tested on referencing, planning and writing an assignment, academic writing, critical thinking and types of academic writing, and their results have been used to examine their performance.

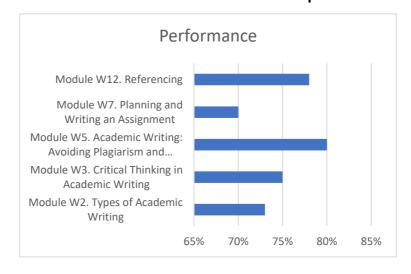


Table 7: Performance on different tasks within the online platform

The use of SRL within a blended-learning environment helped the students to achieve good results (Bernard *et al.*, 2014; Gonzalez-Gomez *et al.*, 2016; Ryan *et al.*, 2016). Coaching students through the importance of improving their writing skills in the face-to-face sessions and integrating this with an online platform that improved their confidence and gave them the flexibility to study when it suited them has worked in our programmes. Additionally, we tested the correlation between the performance and SRL dimensions collected from the online platform as reported in table 8.

Table 8: Performance analysis

	Performance	Time spent	Assigned as needs study	Still needs study
Performance	1			
Time spent	-0.004187192	1		
Assigned as Needs study	0.059703294	-0.485091374	1	
Still needs study	0.06653368	-0.514849303	0.993809122	1

In table 8:

- 1) 'Performance' is the overall grade achieved by students in MyWritingLab.
- 2) 'Time spent' is a variable capturing the amount of time each student spent on the practice;
- 3) 'Assigned as needs study' includes the items to be studied by students according to their initial performance, that can vary in relation with the students' personalised path created by MyWritingLab after the first assessment of students' knowledge.
- 4) 'Still needs study' is the variable showing the items the students have not covered in their personalised learning path.

The data shows a correlation between the two SRL dimensions, 'assigned as needs study' and 'still needs study' (0.99). The positive correlation demonstrates how it is important for the students to have a clear understanding of their own writing skills, for with this they may set their goals and achieve commensurate improvement in their writing. Therefore, 'still needs study' is a is a good proxy for the level of self-regulated and self-monitoring dimensions of SRL. The negative relationship between 'time spent' and the other variables highlights that students with a higher preparation in terms of writing skills took less time to obtain a better performance level.

In accordance with McKenzie *et al.* (2013) and Ryan *et al.* (2016), this analysis shows that a combination of online self-learning and classroom teaching increases satisfaction and motivation for learning and also improves results. The tables reveal how the blended-learning experience has been able to influence the confidence of learners' writing skills and develop independent learning. It is argued that independent learning is one of the most important dimensions and results of the SRL strategy, goal-setting and achievement and is at the core of the SRL experience. The data also supports the conclusion by Love and Fry (2006), in their analysis of accounting students, that students consider this learning strategy to be a value-adding exercise in their learning journey.

5. Conclusion

The findings of this study reveal that SRL dimensions play a significant role in the successful application of the blended-learning strategy. The effectiveness of the blended-learning approach in enhancing written communications skills among accounting students has been evident, suggesting that this approach would be useful for other programmes of a technical nature. Additionally, our findings offer a learning strategy to address the unresolved skills gap, affecting written communication within business schools (Boyce *et al.*, 2001; Datar, Garvin and Cullen, 2010).

The study has relevant and practical implications for promoting the application of a blendedlearning strategy using SRL. The analysis in this paper and the quotes from students support the idea that students applying SRL are able to set specific goals which relate to their metacognitive awareness of their needs (Cao and Nietfeld, 2007). In this learning approach, the students were able to establish an effective study strategy and evaluate when they needed to change their approach to meet their goals (Schunk, 2005). Additionally, our findings confirm how blended learning can be a successful strategy, permitting students to work autonomously and with a high level of flexibility, in keeping with findings by Chen et al. (2014) and Potter (2015). In particular, this study found that self-regulation and time management are key advantages to the blended approach. An interesting aspect of introducing the online platform was that students actively engaged in seeking help in the classroom, which strengthened the blended approach, which in turn improved the SRL. To strengthen the findings of this survey, we call for further studies in this area to increase the population size of those surveyed. Also, it would be useful for future studies, by means of the online platform, to capture students' respective levels of ability with written communication at the beginning of the study.

Reference list

Aldhafeeri, F.M. (2015) 'Blended Learning in Higher Education.' *International Handbook of E-Learning Volume 2: Implementation and Case Studies*, 2, 93. Available at: 20https://www.taylorfrancis.com/books/e/9781315760902 (Accessed: 20 April 2018).

Bandura, A. (2001) 'Social cognitive theory: An agentic perspective.' *Annual Review Psychology*, 52, 1-26. Available at:

https://www.annualreviews.org/doi/abs/10.1146/annurev.psych.52.1.1 (Accessed: 18 September 2017).

Basioudis, I. and De Lange, P. (2009) 'An assessment of the learning benefits of using a web-based learning environment when teaching accounting.' *Advances in Accounting*, 25, 13-19. Available at:

https://www.sciencedirect.com/science/article/abs/pii/S088261100900011X?via%3Dihub (Accessed: 15 March 2018).

Bernard, M.B., Borkhovski, E., Schmid, R.F., Tamin, R.M. and Abrami, Ph.C. (2014) 'A meta-analysis of blended learning and technology use in higher education: from general to

applied.' *Journal of Computing in Higher Education*, 26(1), 87-122. Available at: https://link.springer.com/article/10.1007%2Fs12528-013-9077-3 (Accessed: 20 May 2018).

Boyce, G., Williams, S., Kelly, A. and Yee, H. (2001) 'Fostering deep and elaborative learning and generic (soft) skill development: The strategic use of case studies in accounting education.' *Accounting Education*, 10(1), 37-60. Available at: https://www.tandfonline.com/doi/abs/10.1080/09639280121889 (Accessed: 20 October 2017).

Broadbent, J. and Poon, W.L. (2015) 'Self-regulated learning strategies & academic achievement in online higher education learning environments: A systematic review.' *Internet and Higher Education*, 27, 1-13. Available at: https://www.sciencedirect.com/science/article/abs/pii/S1096751615000251?via%3Dihub (Accessed: 19 September 2017).

Broadbent, J. (2017) 'Comparing online and blended learner's self-regulated learning strategies and academic performance.' *Internet and Higher Education*, 33, 24-32. Available at: https://www.sciencedirect.com/science/article/abs/pii/S1096751617300398?via%3Dihub (Accessed: 26 May 2019).

Cao J.L. and Nietfeld J.L. (2007) 'Examining the multiplicative relation among achievement goals, strategy use and class performance in educational psychology.' *Teaching Educational Psychology*, 2, 2-20. Available at:

https://www.westga.edu/share/documents/pubs/000302_197.pdf (Accessed: 26 May 2018).

Cassidy, S. (2011) 'Self-regulated learning in higher education: identifying key component processes.' Studies in Higher Education, 36(8), 989-1000. Available at: https://www.tandfonline.com/doi/abs/10.1080/03075079.2010.503269 (Accessed: 26 May 2018).

Chen, Y., Wang, Y. and Chen, N.S. (2014) 'Is FLIP enough? Or should we use the FLIPPED model instead?' *Computers and Education*, 79, 16-27. Available at: https://doi.org/10.1016/j.compedu.2014.07.004 (Accessed: 28 May 2018).

Cook, S., Watson, D. and Vougas, D. (2019) 'Solving the quantitative skills gap: a flexible learning call to arms!' *Higher Education Pedagogies*, 4(1), 17-31. Available at: https://www.tandfonline.com/doi/full/10.1080/23752696.2018.1564880?af=R (Accessed: 10 January 2020).

Datar, S.M., Garvin, D.A. and Cullen, P.G. (2010) *Rethinking the MBA: Business Education at a Crossroads*. Boston: Harvard Business School Publishing. ISBN: 978-1-4221-3161-0

Davies, B., Gore, K., Shury, J., Vivian, D., Winterbotham, M. and Constable, S. (2012) *UK Commission's Employer Skills Survey 2011: UK Results, Evidence Report 45.* Wath-upon-Dearne: UK Comission for Employment and Skills. ISBN: 978-1-908418-01-2

De Villiers, R. (2010) 'The incorporation of soft skills into accounting curricula: preparing accounting graduates for their unpredictable futures.' *Meditari Accountancy Research*, 18(2), 1-22. Available at:

https://www.emerald.com/insight/content/doi/10.1108/10222529201000007/full/html (Accessed: 20 March 2018).

Dresel, M., Schmitz, B., Schober, B., Spiel, C., Ziegler, A., Engelschalk, T., Jöstl, G., Klug, J.,Roth, A., Wimmer, B. and Steuer, G. (2015) 'Competencies for successful self-regulated learning in higher education: structural model and indications drawn from expert interviews.' *Studies in Higher Education*, 40(3), 454-470. Available at: https://www.tandfonline.com/doi/abs/10.1080/03075079.2015.1004236 (Accessed: 20 March 2018).

Driscoll, M. and Carliner, S. (2005) *Advanced Web-Based Training Strategies. Blended Learning as a Curriculum Design Strategy*. ASTD Press, New York. ISBN: 0-7879-6979-6

Dyson, A.H. and Freedman, S. (1990) 'On teaching writing: A review of the literature.' *Research in Teaching of English Language Arts*. Occasional paper 20, 1-49. Available at: https://eric.ed.gov/?id=ED324690 (Accessed: 22 March 2018).

Efklides, A. (2011) 'Interactions of metacognition with motivation and effect in self-regulated learning: The MASRL model.' *Educational Psychologist*, 46, 6-25. Available at: https://www.tandfonline.com/doi/abs/10.1080/00461520.2011.538645 (Accessed: 30 March

Eves-Bowden, A. (2001) 'What basic writers think about writing.' *Journal of Basic Writing*, 20(2), 71-87. Available at: https://wac.colostate.edu/jbw/v20n2/eves-bowden.pdf (Accessed: 30 March 2018).

Finch, D., Nadeau, J. and O'Reilly, N. (2013) 'The future of marketing education: A practitioner's perspective.' *Journal of Marketing Education*, 35(1), 54-67. Available at: https://journals.sagepub.com/doi/abs/10.1177/0273475312465091 (Accessed: 10 March 2018).

Gonzalez-Gomez, D., Jeong, J.S., Airado Rodríguez, D. and Canada-Canada, F. (2016) 'Performance and Perception in the Flipped Learning Model: An Initial Approach to Evaluate the Effectiveness of a New Teaching Methodology in a General Science Classroom.' *Journal of Science and Education Technology*, 25(3), 450-459. Available at: https://eric.ed.gov/?id=EJ1099496 (Accessed: 10 July 2019).

Greene, J. and Azevedo, R. (2010) 'The measurement of learners' self-regulated cognitive and metacognitive processes while using computer-based learning Environments.' *Educational Psychologist*, 45(4), 203-209. Available at: https://www.tandfonline.com/doi/abs/10.1080/00461520.2010.515935 (Accessed: 10 July 2019).

Jackling, B. and De Lange, P. (2009) 'Do accounting graduates' skills meet the expectations of employers? A matter of convergence or divergence.' *Accounting Education: an international journal*, 18(4), 369-385. Available at: https://www.tandfonline.com/doi/abs/10.1080/09639280902719341 (Accessed: 10 September 2017).

Jia, J., Chen, Y., Ding, Z. and Ruan, M. (2012) 'Effects of vocabulary acquisition and assessment system on students' performance in a blended learning class for English

subject.' *Computers & Education*, 58, 63-76. Available at: https://www.learntechlib.org/p/50715/ (Accessed: 15 September 2017).

Jones, K.T. and Chen, C.C. (2008) 'Blended learning in a graduate accounting course: student satisfaction and course design issues.' *The Accounting Educators' Journal*, 18, 15-28. Available at: http://www.aejournal.com/ojs/index.php/aej/article/view/60 (Accessed: 15 July 2019).

Kavanagh, M.H. and Drennan, L. (2008) 'What Skills and Attributes Does an Accounting Graduate Need? Evidence from Student Perceptions and Employer Expectations.' *Accounting & Finance*, 48(2), 279-300. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1467-629X.2007.00245.x (Accessed: 20 January 2019).

Kelly, S., Soundranayagam, L. and Grief, S. (2004) *Teaching and Learning Writing: a review of research and practice*. London: NRDC. ISBN: 1-905188-29-3

Kermis, G. and Kermis, M. (2010) 'Professional presence and soft skills: a role for accounting education.' *Journal of Instructional Pedagogies*, 3(2), 1-10. Available at: https://eric.ed.gov/?id=EJ1056346 (Accessed: 30 January 2019).

Klein, D. and Ware, M. (2003) 'E-learning: new opportunities in continuing professional development.' *Learned Publishing*, 16(1), 34-46. Available at: https://onlinelibrary.wiley.com/doi/abs/10.1087/095315103320995078 (Accessed: 5 February 2019).

Levy, Y. and Ramim, M.M. (2015) 'An assessment of competency-based simulations on elearners' management skills enhancements.' *Interdisciplinary Journal of e-Skills and Lifelong Learning*, 11, 179-190. Available at: http://www.ijello.org/Volume11/IJELLv11p179-190Levy1958.pdf (Accessed: 27 January 2020).

Lienenmann, T.O. and Reid, R. (2008) 'Using self-regulated strategy development to improve expository writing with students with attention deficit hyperactivity disorder.' *Reston*, 74(4), 471-486. Available at:

https://journals.sagepub.com/doi/abs/10.1177/001440290807400404 (Accessed: 25 May 2018).

Love, N. and Fry, N. (2006) 'Accounting Students' Perceptions of a Virtual Learning Environment: Springboard or Safety Net?' *Accounting Education: An International Journal*, 15(2), 151-166. Available at:

https://www.tandfonline.com/doi/abs/10.1080/06939280600609201 (Accessed: 29 May 2018).

Luke, C. (2000) 'Cyber-schooling and technological change: Multiliteraices for new times.' In: Cope, B. and Kalantzis, M. (eds.), *Multiliteracies: Literacy Learning and Design of Social Futures*. London: Routledge, 69-91. ISBN: 0-7329-59-047

McKenzie, W.A., Perini, E., Rohlf, V., Toukhasti, S. and Conduit, R. (2013) 'A blended learning lecture delivery model for large and diverse undergraduate cohorts.' *Computers and*

Education, 64, 116-126. Available at: https://www.altmetric.com/details/1618829 (Accessed: 25 November 2018).

Means, B., Toyama, Y., Murphy, R. and Baki, M. (2013) 'The Effectiveness of Online and Blended Learning: A Meta-Analysis of the Empirical Literature.' *Teachers College Records*, 115(3), 1-47. Available at: https://psycnet.apa.org/record/2013-11078-005 (Accessed: 27 October 2018).

Montalvo, F.T. and Torres, M.C.G. (2004) 'Self-regulated learning: Current and future directions.' *Electronic Journal of Research in Educational Psychology*, 2(1), 1-34. Available at: https://eric.ed.gov/?id=EJ802298 (Accessed: 24 September 2018).

Moore, T. and Morton, J. (2017) 'The myth of job readiness? Written communication, employability and the "skills gap" in higher education.' *Studies in Higher Education*, 42(3), 591-609. Available at:

https://www.tandfonline.com/doi/abs/10.1080/03075079.2015.1067602 (Accessed: 4 March 2018).

Nickson, D.P., Warhurst, C., Commander, J., Hurrell, S.A. and Cullen, A.M. (2012) 'Soft skills and employability: evidence from UK retail.' *Economic and Industrial Democracy*, 33(1), 65-84. Available at: https://journals.sagepub.com/doi/10.1177/0143831X11427589 (Accessed: 24 March 2018).

O'Hara, S., Bourner, T. and Webber, T. (2004) 'The practice of self-managed action learning.' *Action Learning: Research and Practice*, 1(1), 29-42. Available at: https://www.tandfonline.com/doi/abs/10.1080/1476733042000187600 (Accessed: 20 September 2018).

Pellas, N. and Kazandis, I. (2015) 'On the value of Second Life for students' engagement in blended and online courses: A comparative study from the Higher Education in Greece.' *Journal of Education and Information Technology*, 20(3), 445-466. Available at: https://link.springer.com/article/10.1007%2Fs10639-013-9294-4 (Accessed: 18 November 2018).

Pintrich, P.R. (2004) 'A conceptual framework for assessing motivation and self-regulated learning in college students.' *Educational Psychology Review*, 16(4), 385-408. Available at: https://link.springer.com/article/10.1007%2Fs10648-004-0006-x (Accessed: 26 January 2020).

Pittenger, K.K.S., Miller, M.C. and Allison, J. (2006) 'Can we succeed in teaching business students to write effectively?' *Business Communication Quarterly*, 69, 257-263. Available at: https://journals.sagepub.com/doi/abs/10.1177/1080569906291080 (Accessed: 22 October 2018).

Potter, J. (2015) 'Applying a hybrid model: Can it enhance students learning outcomes?' Journal of Institutional Pedagogies, 17(11), 1-11. Available at: https://eric.ed.gov/?id=EJ1102855 (Accessed: 10 March 2018).

Prinsloo, P. and Van Rooyen, A. (2007) 'Exploring a blended learning approach to improving student success in the teaching of second year accounting.' *Meditari Accountancy*

Research, 15(1), 51-69. Available at:

https://www.emerald.com/insight/content/doi/10.1108/10222529200700004/full/html (Accessed: 10 November 2018).

Remedios, R. (2012) 'The role of soft skills in employability.' *International Journal of Management Research and Review*, 2(7), 1291-1292. Available at: http://ijmrr.com/admin/upload_data/journal_Remedios%20%20%2017au12.pdf (Accessed: 5 April 2018).

Riley, T.J. and Simons K.A. (2013) 'Writing in the Accounting Curriculum: A Review of the Literature with Conclusions for Implementation and Future Research.' *Issues in Accounting Education*, 28(4), 823-871. Available at: https://aaapubs.org/doi/abs/10.2308/iace-50491?journalCode=iace (Accessed: 15 September 2018).

Russ, T.L. (2009) 'The status of the business communication course at US colleges and universities.' *Business Communication Quarterly*, 72(4), 395-413. Available at: https://www.learntechlib.org/p/106131/ (Accessed: 15 October 2018).

Ryan, S., Kaufman, J., Greenhouse, J., She, R. and Shi, J. (2016) 'The effectiveness of blended online learning courses at the community college level.' *Community College Journal of Research and Practice*, 40(4), 285-298. Available at: https://www.tandfonline.com/doi/abs/10.1080/10668926.2015.1044584 (Accessed: 15 March 2018).

Schunk, D.H. (2005) 'Self-regulated learning: The educational legacy of Paul R. Pintrich.' *Educational Psychologist*, 40, 85-94. Available at: https://www.tandfonline.com/doi/abs/10.1207/s15326985ep4002_3 (Accessed: 22 September 2018).

So, H. and Brush, T.A. (2008) 'Student perceptions of collaborative learning, social presence and satisfaction in a blended learning environment: relationships and critical factors.' *Computers and Education*, 51(1), 318-336. Available at: http://www.sciepub.com/reference/181225 (Accessed: 15 January 2020).

Tarasovich, B.M. and Boyer, B.N. (2013) 'Introducing a Writing Skills Intervention into an Undergraduate Financial Accounting, Course.' *Journal of the Academy of Business Education*, 14, 85-96. Available at:

https://digitalcommons.sacredheart.edu/cgi/viewcontent.cgi?article=1047&context=wcob_fac (Accessed: 12 October 2018).

Thornton, K. and Yoong, P. (2011) 'The role of the blended action learning facilitator: an enabler of learning and a trusted inquisitor.' *Action Learning: Research and Practice*, 8(2), 129-146. Available at: https://www.tandfonline.com/doi/abs/10.1080/14767333.2011.581021 (Accessed: 20 January 2020).

Venkatesh, V., Croteau, A.M. and Rabah, J. (2014) *Perceptions of effectiveness of instructional uses of technology in higher education in an era of Web 2.0.* Paper presented at the 47th Hawaii International Conference on System Sciences, Waikoloa, HI. Available at: https://dl.acm.org/doi/proceedings/10.5555/2584909 (Accessed: 12 October 2017).

Articles

Warren, L., Reilly, D., Herdan, A. and Lin, Y. (2020) 'Self-efficacy, performance and the role of blended learning.' *Journal of Applied Research in Higher Education*, forthcoming. Available at: https://www.emerald.com/insight/content/doi/10.1108/JARHE-08-2019-0210/full/html (Accessed:10 May 2020).

Westermann, E.B. (2014) 'A Half-Flipped Classroom or an Alternative Approach?: Primary Sources and Blended Learning.' *Educational Research Quarterly*, 32(2), 43-57. Available at: https://eric.ed.gov/?id=EJ1061950 (Accessed: 15 January 2020).

Zimmerman, B.J. and Schunk, D.H. (2001) Self-regulated learning and academic achievement: Theoretical perspective. Hillsdale, NJ: Erlbaum. ISBN: 0-8058-3560-1

Appendix

Questionnaire Blended learning and self-regulated learning dimension

SA	Α	N	D	SD
s able to wor	rk more independe	ntlv.		
SA	А	N N	D	SD
erally use M	/lyWritingLab at hor	ne.		
SA	Α	N	D	SD
o the help of	the lecturer Lunder	stood how to use N	N/Writing! ah effecti	velv
			lyWritingLab effecti	
the help of	the lecturer I under	stood how to use N	lyWritingLab effecti	vely.
SA	Α	N		SD
SA	Α	N	D	SD
SA ng online reso	A ources helped me b	N Duilding my confide	D nce during my studi	SD es.
SA ng online reso	A ources helped me b	N Duilding my confide	D nce during my studi	SD es.
SA ng online reso	A ources helped me b	N Duilding my confide	D nce during my studi	SD es.
sa ng online reso	A ources helped me t	N puilding my confide N	D nce during my studi D	es.
sa ng online reso	A ources helped me t	N puilding my confide N	D nce during my studi	es.
sa ng online reso	A ources helped me t	N puilding my confide N	D nce during my studi D	es.

An investigation into digital tools for lecture engagement: a feasibility study

Michael Detyna¹, Eleanor J. Dommett²

¹(Corresponding author), Centre for Technology Enhanced Learning, King's College London, UK. ²Dept of Psychology, Addison House Guy's Campus, King's College London, UK

Abstract

Evidence suggests that lectures are of most value in higher education when they are interactive and support active learning (Freeman *et al.*, 2014). Using novel approaches within lectures can help go beyond the traditional university experience. Educational technologies offer several options for supporting this, including audience response systems, backchannel communication, mirroring and use of video. However, given the range available and the cost of implementation, it is important to ensure that the right technologies are adopted. The aims of this study were 1) to investigate the feasibility of small group sessions to evaluate the use of specific technologies for lectures and 2) to understand better the potential uses of different technologies for lectures. Staff and students participated in a novel approach with hands-on interactive demonstration sessions before taking part in a focus group to give their views on a variety of technologies.

The current study found that these small-scale interactive demonstrations were an effective way to evaluate technologies and that several of the technologies presented could be used either 1) to enhance current lecture practice or 2) to support new practice, provided they did not overwhelm or distract students. However, they must also be simple for staff and students to use.

Keywords: Learning technology, lectures, pedagogy, audience response systems, backchannel communication, mirroring, video.

Introduction

The COVID-19 outbreak has affected the whole world (Saxena, 2020) and led to a move away from face-to-face teaching and towards online teaching (Sun *et al.*, 2020). However, once the pandemic is brought under control, lectures will continue to be – as they were before it – the dominant mode of instruction for university teaching. The research detailed here was conducted prior to the pandemic and aimed primarily at investigating digital tools available for those physically in lectures, although the work also has implications for blended learning and other approaches. Further, the three knowledge domains of pedagogy, content and technology should not be seen in isolation, but as part of a framework described eloquently by Mishra *et al.* (2009).

Lectures provide the most economical approach to teaching large classes and are ingrained in the culture of academia. Research shows that students value lectures highly, reporting that they feel involved in the learning process and can engage in independent thinking and problem solving during lectures (Covill, 2011). Problem-based learning is a strategy that can be used effectively, although it is not without its challenges as Huijser, H. *et al.* (2016) discuss. Furthermore, studies have found that lectures can result in effective learning in

interactive classrooms (Van Dijk, Van Der Berg and Van Keulen, 2001), provide an appropriate forum for modelling how experts approach tasks (Feldon, 2010), support time management and enable the development of affective learning (Titsworth, 2001). However, there is also research showing lectures to be unhelpful, resulting in higher failure rates, reduced engagement and increased boredom when compared with other teaching methods (Kelly *et al.*, 2005; Mann and Robinson, 2009; Schmidt *et al.*, 2015). In recent years, such research has, in part, resulted in the stigmatisation of lectures (DiPiro, 2009; Gross-Loh, 2016).

Despite this stigmatisation, increasing student numbers and limited classroom space in many universities mean it is likely that lectures are here to stay. It is therefore important to optimise the lecture by maximising student engagement and supporting active learning wherever possible (Freeman et al., 2014). An interactive lecture which provides opportunities for active learning could be a very powerful learning tool, allowing students to engage directly with material and build new knowledge into their existing frameworks (Bain, 2011; Mallin, 2017; Stacy, 2009). One way to support interactivity is by using educational technologies, the most prominent of which, used in lectures, is undoubtedly 'student response systems' (SRSs). Research into early SRSs has revealed positive attitudes towards them (Gaddis et al., 2006; Lin, Liu and Chu, 2011), beliefs that they support engagement and active learning (Kaleta and Joosten, 2007) and, consequently, improved performance (Hall et al., 2005; King and Joshi, 2006; Lyubartseva, 2013). There is less research into the web-based SRSs such as 'Poll Everywhere', which allows voting via text or online, but early evidence suggests similarly positive attitudes (Shon and Smith, 2011) and increased engagement (Gehlen-Baum et al., 2014; Kappers and Cutler, 2015). More gamified SRSs have also been found to have a positive effect on student engagement (Wang, 2015) and classroom dynamics (Licorish et al. 2018) in specific circumstances. Compton and Allen (2018) have provided a comprehensive review of different technlogies for SRSs.

Current SRSs make use of the students' personal mobile devices (smartphones, laptops) to engage with lecture-related activities, something which is thought to offset the potential distraction that they can create in a lecture (Fried, 2008; Kirschner and Karpinski, 2010). However, SRSs are not the only technology that can utilise these devices. Amongst many other uses, mobile devices can also be used for wireless mirroring and recording of a broadcast computer screen, so that students can view the lecturer's computer screen on their own devices. Additionally, interactivity can be achieved with backchannel communication, which can use technologies and skills that, as students report, they frequently use (Fiester and Green, 2016). Tools available for backchannel communication include Padlet, a free online technology – which acts like a bulletin board and can be integrated into the virtual learning environment (VLE) – and Skype, both of which show potential for application in other types of learning environment but have received little attention in the lecture setting to date (Dunbar, 2017; Gill *et al.*, 2014).

Of the various technologies that students report that they use to support their learning, the most frequent is YouTube (Gill *et al.*, 2014). Research also suggests that students value the inclusion of video clips in lectures (Eick and King Jr, 2012; Mitra *et al.*, 2010). Whilst YouTube does contain a range of resources, there are other services which may be of use, including an on-demand television broadcast video service, such as 'Box of Broadcast',

which can show clips in lectures. Though it is quite common for videos to be deployed within lectures, there has been little formal evaluation of their impact. Such videos are clearly popular, but the technology has advanced significantly and there is now the possibility of using immersive video, augmented or virtual reality in lectures, (Stojšić *et al.* 2018, Detyna *et al.* 2019).

From this brief review of the literature concerning educational technologies in lectures, it is apparent that they offer great potential for optimising interactivity in that context. However, the potentially high cost – both of implementation of these technologies and the training required to use them – makes it important to establish whether key stakeholders in the lecture consider them to be of any value before their application is rolled out more widely. The aims of this study were 1) to investigate the feasibility of small-scale demonstration sessions to evaluate the use of specific technologies for lectures and 2) to understand better what might be possible in deploying different technologies within lectures. For the latter, we were specifically interested in 3) how they could support teaching and learning and 4) any pros and cons of each technology.

Materials and methods

Ethical approval

Ethical approval was obtained from the Institutional Ethics Committee (MR/16/17-744). All participants were then given printed study information and they provided written consent to participate.

Participants

Participants (N=33), of whom seventy per cent were staff, were recruited via advertisements on posters and also the institutional VLE, where they could voluntarily sign up to attend a session – staff and student sessions being held separately. Here we report data only on technologies reviewed by both staff and students to allow comparison between them. Aware that the larger the group size we had, the less each individual participant would be involved in discussion, we aimed for smaller groups of between three and six to allow richer feedback; again, staff and student sessions were separate.

Research design and procedure

As it was anticipated that most of the participants would not be familiar with the technologies being examined, they were provided with a session intended to ensure that – just as students would – they would see and interact with available tools in an appropriate learning environment; the chosen context was an introductory lecture on the science of the stars, where learning about the physics and chemistry of stars and their elements could add an educational background to the session. The topic of this content (known as stellar nucleosynthesis) helps answer the questions 'How did the stars form?', and 'Where do the elements come from?' and would be new to most participants. Following the session, collection of qualitative data ensued, by means of small focus groups that allowed everyone the chance to speak.

Participants attended a two-hour session, divided into three parts:

- 1. Lecture demonstration, using five different technologies to provide direct experience of the technology in context (twenty minutes).
- 2. Interactive opportunity, during which participants were invited to interact with the individual technologies, including attempting to set them up (sixty minutes).
- 3. Feedback period, in which the participants evaluated each tool with answers to the question 'This tool could be useful for teaching' on a Likert scale ranging from 'strongly disagree' (1) 'to strongly agree' (5). They then took part in a focus group discussion, which revolved around the potential value of the tools, so as to understand 1) the learning goals that different technologies could support; 2) how they could be used in a teaching environment and 3) the perceived pros and cons of each technology. Discussion of each area was prompted by a question e.g. (for area 1) 'What learning goals could this tool help you achieve?'. Follow-up questions for each area concerned staff and student perceptions or asked participants to review more deeply their rationale e.g. 'Why do you think this?' or 'How might this work in your discipline?'. The focus group discussion was audio-recorded for later analysis.

Different technologies were demonstrated to both staff and students over a series of sessions, so that no one participant was exposed to all. These technologies were selected to include 1) SRS (Poll Everywhere and Kahoot!) 2) backchannel communication technologies (Padlet, Skype) 3) mirroring technologies (Mirroring 360) and 4) video technologies, including immersive video (Box of Broadcast, 360-degree video). A summary of the functionality of these technologies is provided in table 1.

Table 1: A description of the technologies evaluated by both staff and students

Technology	System	Description	
Audience	Poll	Enables staff to engage with a class via real-time	
response	Everywhere	online feedback. Students respond in real time to	
system		questions via mobile device.	
	Kahoot!	A game-based learning platform where students	
		are able to answer – in real time – a quiz, poll or	
		survey.	
Backchannel	Padlet	An application designed to create online bulletin	
communication		boards that allow students to share, via mobile	
		device, a variety of content, including questions,	
		discussion comments and multimedia.	
	Skype	Video chat platform. The case for proposed use	
		here is video chat to enhance lectures, through	
		dialogue, in a visual and interactive manner.	
Mirroring	Mirroring 360	Software that allows wireless mirroring and	
		recording of a broadcast computer screen so that	
		participants may view the lecturer's computer	
		screen on their own devices.	
Video	360-degree	360 videos take a series of video images from all	
	video	angles. This creates an immersive video	
		experience which can be seen from all angles.	

Box of	A web-based, on-demand television broadcast
Broadcasts	video service which can show clips at desktop or
	in lectures.

Some other tools, considered by staff only, include augmented and virtual reality; these will be considered in a separate paper.

Data analysis

Data from the Likert scale rating on usefulness was collated by technology and checked for normality using the Kolmogorov–Smirnov test, as well as a measure of skewness and kurtosis. Where a normal distribution was found, we compared individual technologies' ratings between staff and students, using independent sample t-tests. For technologies where ratings were not normally distributed, comparisons were made using the Mann Witney U non-parametric test. In both cases, mean and standard deviation data are displayed to allow comparison across all technologies.

The recordings of the focus groups were transcribed and analysed using a thematic analysis (Braun and Clarke, 2006) with a six-stage process (Clarke and Braun, 2013): familiarisation, coding, theme extraction, review, naming and narrative analysis. Quotes are provided as validity of evidence (Mays and Pope, 1995). Punctuation was added to unambiguous quotes, spelling mistakes were corrected and, where necessary, words were added in square brackets for clarification. Multiple quotes from one person were treated as a single comment to avoid over-representation of an individual. Initial coding was completed by one researcher and then reviewed by the second. Following the thematic analysis to understand staff and student perceptions of the tools and what considerations are important in selecting tools, transcripts were also reviewed to identify specific examples of use cases.

Results

Usefulness ratings

Table 2: Combined staff and student ratings for the usefulness of the different technologies on a scale of 1-5, where 5 indicates strong agreement that the technology would be useful in teaching and 1 indicates strong disagreement.

Technology	Rating (Mean ± SEM)	
Poll Everywhere	4.71 ± 0.18	
Skype	4.22 ± 0.15	
Box of Broadcast	4.00 ± 0.00	
Padlet	3.91 ± 0.29	
Mirroring 360	3.78 ± 0.22	
Kahoot!	3.5 ± 0.261	
360-degree video	3.22 ± 0.43	

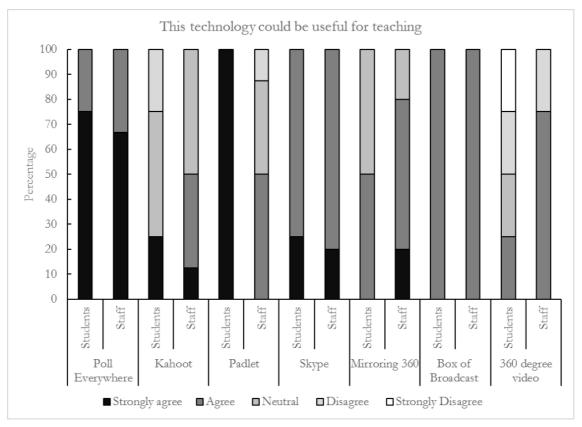


Figure 1: Staff and student responses to the question 'This technology could be useful for teaching' on a Likert scale.

Thematic analysis

Three different themes emerged from the dataset: Theme 1: Pedagogic benefit, which could further be divided into a) optimising existing practice and b) supporting new approaches; Theme 2: Ease of use for both the staff and students; Theme 3: Avoiding overload and distraction.

Theme 1: Pedagogic benefit

Pedagogic benefit was identified as key by both staff and students. One way in which this benefit could be realised was in optimising current practice. Both staff and students identified several ways by which this could arise.

Firstly, it was suggested that the technology could increase participation:

'There is more participation in the class – everyone gets a chance to participate, it's not just one person at a time." [Student, Padlet]

"It would be good for students who are nervous about talking up. I think it would be good for non-fact-based learning." [Staff, Padlet]

"I see it as enhancing engagement rather than delivering learning goals, but certainly could be used to reinforce key learning goals especially by high quality productions." [Staff, Box of Broadcasts]

Secondly, it was suggested that some of the different technologies could allow students to visualise key concepts:

"It gives students the ability to access related material to the lecture – could ask students to watch things after a lecture to learn more (e.g. a performance, video etc.)" [Staff, Box of Broadcasts]

"I would use it to visualise a difficult concept – used sparingly students would better recall the concept by taking a link to a high quality [broadcast] production" [Staff, Box of Broadcasts]

'Sometimes it can be difficult to talk about something in a simple and engaging way, and having it with short clips when you take a clip from a documentary with a high quality production team with text that has been well thought through would be useful. So long as it's not overused." [Staff, Box of Broadcasts]

"It can help visualize things more, and can help see another part of the world, and back up your points." [Student, Box of Broadcasts]

"It could be useful having students click and move around and experience an area." [Staff, 360-degree video]

"Content could be uploaded to [our VLE] and [students] asked to explore or answer relevant questions." [Staff, 360-degree video]

Thirdly, it was thought that a benefit to current practice could arise from using the tools to identify any misconceptions by testing the general level of understanding during the lecture:

"One of the most helpful parts is for understanding common misconceptions that the students have regarding key topics. The way I use it in a lecture is to focus on the closest correct answer to the question and explain why this is incorrect." [Staff, Poll Everywhere]

"I would use it for a recalibration of the room, to see 'what did we all learn today?', and it allows the instructor to check what we all learned today without guided learning. To see what some of the issues are if there are issues, if there are any misguided thoughts" [Staff, Padlet]

"[It would be] useful if there was a diagram and there could be a check

if we were paying attention" [student, Poll Everywhere]

Finally, it was raised that the technologies could overcome some physical barriers to learning.

"I think it would be good for visibility in the lecture room, if there was a pillar in the way, or if people are unable to see it clearly" [Staff, Mirroring360]

As well as its providing pedagogic benefit by optimising current practice, several participants suggested ways in which the technology could support a new practice. One example of this was through working and learning as a peer group using Padlet and Mirroring 360:

"I like that you could add and build on what other people have said, so it's like peer to peer feedback, and it's all instantaneous" [Student, Padlet]

'Several groups could have separate discussions, and could add and expand on what people have said" [Student, Padlet]

'Seeing the variety of responses allows opportunities for peer learning and self-assessment because students have immediate access to a wide spectrum of responses from classmates rather than a few responses from the vocal ones." [Staff, Padlet]

"I like it for this reason - it could be used for situations where you get students to present." [Staff, Mirroring360]

"I thought it would be good for group work...ok we've sat there and written down, rather than on paper onto a computer and then it can go up onto the main screen at the end and share it with the rest of the room...it depends, if you are in a lecture theatre with 400 students you do not end up with lots of discussion time and therefore that opportunity [for group work where you would want to share your thoughts]" [Student, Mirroring360]

A second example that emerged from the data was the use of backchannel communication technologies to bring in expertise, for example, that of guest speakers. Staff comment as follows:

"I definitely see a use case using it for bringing in an expert" [Staff, Skype]

"I like the idea of guest speakers. Because we have industry speakers come in to talk to our students." [Staff, Skype]

"[An expert] can skype in from their offices and they are calling from a tablet or a phone they can give you a tour of their office, and show you what say Google is like from the inside". [Staff, Skype]

"It's the idea of having an external speaker that doesn't have the time to come in house, but could give a short presentation with you and your students, would be useful and value added." [Student, Skype]

"Asking an expert" or "real life" on site reporting/interview could bring a topic to life." [Student, Skype]

Theme 2: Ease of use

Both staff and students commented on the ease of use of technologies, with several perceived positively because they were simple to use:

'simple and effective" [Student, Poll Everywhere]

"It was very quick as soon as you logged in to the website it was just on, which I think was very good." [Staff, Mirroring360]

By contrast, there were concerns where a technology was more complex to set up:

'There are a lot of steps to getting ready compared to say Poll Everywhere, so I'd be reluctant to do this if students are already used to Poll Everywhere." [Staff, Padlet]

'The only issue is the amount of preparation in advance. But I really like the idea of people putting ideas and putting more information up there." [Staff, Padlet]

"I think I'd [worry I'd] be standing there for half an hour pressing buttons. I don't think I could use it quickly." [Staff, general]

'I struggle to see the practicalities of using it., I can't see how it would slot in easily' [Student, general]

"Easy to use, when in a teaching environment you need to just get on." [Staff, general]

Related to this, staff also felt that having the same technology available to them in every teaching space made things easier for them:

"Having everything set up in a way that you're used to makes it easier to start the lecture" [Staff]

Theme 3: Avoiding overload and distraction

It became apparent that both staff and students were concerned about potentially overloading students or increasing distraction with technology:

"Not sure what it offers over Poll Everywhere and worry about student overload" [Staff, Kahoot]

"As long as it's short and to the point it then it makes sense to use it." [Student, Box of Broadcasts]

"I don't think it's actually it is that useful. I struggle to see the practicalities of using it. Stuff like this, I can't see how it would slot in easily [...] and it could seem disjointed" [Student, 360-degree video]

"I don't see that it adds a lot and it tends to break focus...the quality [of learning] can then drop because you are taking in so much information." [Student, 360-degree video]

Although, to counter this, the use of mobile devices for learning was seen as a way to reduce the distraction they might normally cause:

"I felt that it was a good idea to embrace the fact that many students have smartphones and tend to look at them relatively often. I thought that using this system would also be a way where students could use their phones constructively" and take part in the lecture." [Staff, Poll Everywhere]

Sample use cases

Following on from discussions with staff and students, several possible use cases were extracted from the transcripts (table 3). Note that this was only possible for technologies where comments were specific to the tool in question. In each case, an example use is supported by a quote from either staff or students.

Table 3: Example Use Cases for several technologies based on common suggestions from staff or students.

Technology	Use Cases				
Poll	Collaboration: Both tools allow students to share ideas e.g.		Checking understanding and gaining feedback: Both tools can be used to ask		
Everywhere	through a word cloud in Poll Everywhere or through sharing more		students questions and elicit their questions in a non-threatening way:		
& Padlet	extensive text and images in Padlet. This can be an open share or directed by a resource or idea put up by staff:		'some [students] like the ability to give opinions without necessarily having to		
	directed by a resource or idea put up by stair.		stick their heads above the parapet." [Staff]		
	"I really like the idea of people putting ideas, and putting more information up there." [Staff]				
			"I would use it for a recalibration of the room, to see 'what did we all learn today?" [Staff]		
Skype	Increasing expertise: This tool can be used for	Virtual Field Trips	: Skype could be used to have a	Collaboration & communication: Small	
	guest lecturers but also for smaller segments tour of a space by an expert e.g		an expert e.g. a researcher	groups of students can work together on	
	such as panel discussions after a lecture:	doing a lab tour: "[An expert] can skype in from their offices and they are calling from a tablet or a phone they can		projects using skype:	
	"It's the idea of having an external speaker that			"I know some people at another university	
	doesn't have the time to come in house, but			that teach collaboratively, and students can	
	could give a short presentation with you and		their office, and show you what	be on that module, and they teach that via	
	your students, would be useful and value	say [a company such as] Google is like from the		skype. Students have projects which are	
Box of	added." [Student] Flipped learning: Staff can select appropriate	inside" [Staff]		created collaboratively via Skype". [Staff] Students find own material: Staff choose	
Broadcasts	material for students to watch ahead of the	Supporting visualisation: Staff identify short video clip for use in lecture.		appropriate topic and learning goals.	
Disausasis	face-to-face learning experience, during which		u. U.	Students search tool for relevant material.	
	more active discursive learning can then occur:		be difficult to talk about	Students select relevant clips. Students	
			nple and engaging way, and	share clips via institutional virtual learning	
	'students could [] be asked to see a	having short clips when you take a clip from a documentary with a high-quality production team with text that have been well thought through would be useful." [Staff]		environment (VLE) or in small group	
	particular Shakespeare performance and consider specific aspects of that performance			teaching.	
	whether it was costume or the way a scene			"It gives students the ability to access	
	was performed. Then in class we can review			related material to the lecture - could ask	
	small chunks as a group after we have			students to watch and find out things after a	
	ruminated on it, and that can be really useful."			lecture to learn more (e.g. a performance,	
	[Student]			video etc.)" [Staff]	

Discussion

There were two distinct aims to this study. Firstly, we wanted to test the feasibility of a single session, in which staff and students are given demonstrations of technology and the opportunity to interact with it, as a means of gaining insight into staff and student views about new technologies. Secondly, we wanted to understand better the potential uses of different technologies for lectures.

As stated earlier, the three knowledge domains of pedagogy, content and technology should not be seen in isolation, but as part of a framework described eloquently by Mishra *et al.* (2009). This research attempted to consider digital technological tools in a specific pedagogical setting, with a similar level of content knowledge (relating to stars and stellar nucleosynthesis) that would provide a roughly equal benchmark for participants and draw together the three knowledge domains.

We'll begin by discussing the second aim, which will then contribute to our discussion of the first. The feedback on the different technologies was to some extent consistent with previous research. For example, Poll Everywhere was commented on generally positively by both staff and students (Gaddis et al., 2006; Lin et al., 2011; Pollock, 2005) and gained the highest ratings overall. Staff identified that this technology could be a way of putting mobile phones to good use rather than having them serve as a distraction (Fried, 2008; Kirschner and Karpinski, 2010). The second SRS, Kahoot!, was less well-received, seemingly suffering from comparison to Poll Everywhere because it was more complex to set up. Backchannel communication technologies were also well-received, with several different suggestions being made for their use. Interestingly, Padlet seemed to be grouped more closely with Poll Everywhere in terms of suggested uses and, although it was generally seen as positive, in line with previous literature (Dunbar, 2017), staff did raise concerns about the complex setup required. This was also the only technology for which staff and student usefulness ratings significantly differed, with students rating it more positively. Based on the focus group remarks, it seems likely that this was because they were not concerned with setting it up, but only responding to it. Skype was seen as offering a way to engage with individuals outside the university, e.g. guest lecturers. Previous studies from a range of disciplines indicates the value of guest lecturers (Rowe, 2004; van Hoek, Godsell and Harrison, 2011). The current study suggests that, where timing is appropriate, Skype can offer an appropriate means for guest lecturers to deliver material. It should be noted that, while the term 'backchannel communication' is used in the literature to describe Skype, the feedback and use cases derived from the current study suggest that it would not primarily be used for this type of communication. Interestingly, staff also raised the possibility of the expert joining the session via Skype and giving a tour of her/his own environment. This would be perfectly possible with 360-degree video, but this tool was less positively received. One possible explanation for this is the simplicity of the technology. Unlike Skype, Padlet divided staff and students slightly, with the latter viewing it more positively, which echoes the finding of Betts and Garnham (2018) – that it can help engagement.

The mirroring technology evaluated in the current study, Mirroring-360, has not previously been the focus of research in higher education and the current study shows that both staff and students could see a value in it. Both groups reported that it could be helpful for when students needed to feed back or engage with the whole room in some way. It was also deemed relatively simple to use. Given this feedback, it would be pertinent to conduct more

in-depth research into the potential uses in lectures of this technology, but also in small group work, which was identified as a possible use. The final two technologies evaluated were video technologies – and the two received quite different reviews. Box of Broadcasts was generally well received – perhaps not surprising given that the technology is centred on videos which are already known to be popular in teaching and learning, including lectures (Eick and King Jr, 2012; Gill *et al.*, 2014; Mitra *et al.*, 2010). Interestingly, both staff and students commented on the length of the video clip used and this is in line with previous research, with recognition that clips should be cut to show only appropriate material (Mitra *et al.*, 2010). Despite the positive reviews of Box of Broadcasts, feedback was less positive about the 360-degree video, in terms of ratings and qualitative remarks, with concern expressed that it could be overwhelming.

As indicated in the discussion above, staff and students recognised the significant pedagogic benefits that some technologies could offer and comments were balanced, suggesting that there is not a constant drive for new technology irrespective of its value. Critically, there was also a significant emphasis on the need to keep the technology easy to use. This need for simplicity suggests that one key focus in rolling out the use of any new technologies will be to ensure that adequate training, where appropriate, is made available for staff and students and that the simplest system possible is put in place. It is also apparent that any technologies must offer a clear pedagogic benefit. This can come through both optimising existing approaches in lectures and offering new opportunities, such as peer/group work. Overall, for most of the technologies examined, staff and students could see a pedagogic benefit to their use. However, it was also apparent that the tools needed to be straightforward to use. Furthermore, while students already possess a degree of digital literacy, as Fitzgerald *et al.* (2015) comment, it is important to build in mechanisms to increase their digital literacy to equip them for them for the future.

We return now to the feasibility of this approach to eliciting stakeholder views. The single sessions ran effectively and participants reported finding them useful. As demonstrated, a substantial amount of data was obtained from the feedback part of the session, indicating that this approach could be helpful in gaining insight about staff and student views of technology. With the technological landscape constantly shifting, and what is appropriate in one year being less appropriate in another, it is necessary to engage in a regular dialogue about different technologies with those who will use them. This study intended to start with a wide range of prior experience, from novices to those more confident, and then ensure a more standard benchmark by providing a recent experience of tools/approach through direct interaction in a relevant session. In the two-hour session, sixty minutes were allocated for direct experience, which gave participants, on average, fifteen to twenty minutes' direct experience of each tool, although in practice this varied as they spent time mainly on those they felt were of most value. While this experience per tool may not seem like a large amount of time, it should be seen in the broader context of the two hours they were spending looking at, discussing and considering all the tools. Further reflection in subsequent studies could establish whether this time should be increased, although the general consensus from participants was that they had sufficient time to experience the technologies, reflect on them and offer considered opinions about them.

The approach taken in the present study is a cost-effective way to gain useful insights on a relatively regular basis before investing significant resources into a particular technology.

Although the approach described worked well and yielded interesting data, some limitations of the study must be noted. Firstly, the sessions were open to any staff and student at the university and, as is the case with open sessions, those attending were self-selecting and therefore, in this case, may have been particularly keen to learn about new technologies, with consequent slight bias to the results. However, the fact that both negative and positive comments were made suggests that, even with a self-selecting group, this approach can yield valuable information. Secondly, the sample size was small. However, recent guidelines for thematic analysis (Braun and Clarke, 2006; Fugard and Potts, 2015) have suggested that studies using participant-generated text should include ten-fifty participants, indicating that this sample size is sufficient; furthermore, the total number of words generated from the transcribed text was well over 10⁴.

Conclusion

The present study has demonstrated a novel approach to showing that small group sessions allowing staff and students to receive a teaching demonstration together with the opportunity to explore and feed back on specific technologies can yield useful insights into the value of that technology for teaching. Data indicate that simple SRS and basic video tools such as Box of Broadcasts are well received. Backchannel communication technologies are also well-received (despite their suggested use not actually being for this kind of communication). Irrespective of the individual technologies, the evidence presented suggests that any technology implemented should have a clear pedagogic benefit, for example through increased engagement, the ability to test understanding or inclusion of peer interaction and quest lectures. For the future, a productive area of research could be evaluation of technologies which may be better suited for use in non-lecture teaching where the requirements may be slightly different. At present however, it is possible to conclude that specific technologies, when simple to use, are of benefit to large-scale teaching. This present study demonstrates that there are specific digital tools, particularly those most straightforward to use, that can increase engagement and are seen by both staff and students to have the potential to enhance learning.

Acknowledgments

We'd like to acknowledge James Toner, Phil Blake, Vaishnavi Gogu, Andre Crawford and Jerome Di Pietro and Dave Busson for support on this project.

Declaration of interest statement

No potential conflict of interest was reported by the authors.

Reference list

Bain, K. (2011) What the best college teachers do. Cambridge, Mass: Harvard University Press. ISBN. 9780674013254

Betts, T. and Garnham, W. (2018) 'The Padlet Project: Transforming student engagement in Foundation Year seminars.' *Compass: Journal of Learning and Teaching*, 11(2). Available at: https://journals.gre.ac.uk/index.php/compass/article/view/714 (Accessed: 4 May 2020).

Braun, V. and Clarke, V. (2006) 'Using thematic analysis in psychology.' *Qualitative research in psychology,* 3(2), 77-101. Available at:

https://www.tandfonline.com/doi/abs/10.1191/1478088706qp063oa (Accessed: 6 May 2020).

Clarke, V. and Braun, V. (2013) Successful Qualitative Research: A Practical Guide for Beginners. London: SAGE. ISBN. 9781847875815

Chin, C.K., Munip, H., Miyadera, R., Thoe, N.K., Ch'ng, Y.S. and Promsing, N. (2019) 'Promoting Education for Sustainable Development in Teacher Education integrating Blended Learning and Digital Tools: An Evaluation with Exemplary Cases.' *Eurasia Journal of Mathematics, Science and Technology Education*, 15(1), em1653. Available at: https://doi.org/10.29333/ejmste/99513 (Accessed: 1 May 2020).

Compton, M. and Allen, J. (2018) 'Student Response Systems: a rationale for their use and a comparison of some cloud-based tools.' *Compass: Journal of Learning and Teaching*, (11)1, 2018. Available at: https://journals.gre.ac.uk/index.php/compass/article/view/696 (Accessed: 2 November 2020).

Covill, A.E. (2011) 'College students' perceptions of the traditional lecture method.' *College Student Journal*, 45(1), 92-102. Available at: https://eric.ed.gov/?id=EJ996351 (Accessed: 8 July 2020).

Crouch, C.H and Mazur, E. (2001) 'Peer instruction: Ten years of experience and results.' *American Journal of Physics*, 69(9), 970-977. Available at: https://doi.org/10.1119/1.1374249 (Accessed: 8 July 2020).

Detyna, M. and Kadiri, M. (2019) 'Virtual reality in the HE classroom: feasibility and the potential to embed in the curriculum.' *Journal of Geography in Higher Education*, (44)3, 474. Available at: https://doi.org/10.1080/03098265.2019.1700486 (Accessed: 12 January 2020).

DiPiro, J.T. (2009) 'Why do we still lecture?' *American Journal of Pharmaceutical Education*, 73(8), 137. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2828296/ (Accessed: 4 February 2020).

Dunbar, L. (2017) 'Using Padlet to increase student interaction with music concepts.' *General Music Today,* 30(3), 26-29. Available at: https://doi.org/10.1177/1048371316687076 (Accessed: 6 March 2020).

Eick, C.J. and King Jr, D.T. (2012) 'Nonscience majors' perceptions on the use of YouTube video to support learning in an integrated science lecture.' *Journal*

of College Science Teaching, 42(1), 26. Available at: https://eric.ed.gov/?id=EJ988876 (Accessed: 5 March 2020).

Feldon, D.F. (2010) 'Why magic bullets don't work.' *Change: The Magazine of Higher Learning*, 42(2), 15-21. Available at: https://doi.org/10.1080/00091380903563043 (Accessed: 7 July 2020).

Fiester, H. and Green, T. (2016) 'Student use of backchannels.' *TechTrends*, 60(4), 404-408. Available at: https://link.springer.com/article/10.1007/s11528-016-0069-9 (Accessed: 9 March 2020).

Fitzgerald, R. and Henderson-Martin, H. (2015) 'Transforming the first year experience (HE) with digital literacy via techno-social engagement and evaluation.' In: Jefferies, A. and Cubric, M. (eds.) *Proceedings of the 14th European Conference on e-Learning*, ECEL 2015, University of Hertfordshire, Hatfield, UK, 29-30 October 2015. Reading, UK: Academic Conferences and Publishing International Limited. 2048-8645, 200-206. ISBN. 9781910810705

Freeman, S., Eddy, S.L., McDonough, M., Smith, M.K., Okoroafor, N., Jordt, H. and Wenderoth, M.P. (2014) 'Active learning increases student performance in science, engineering and mathematics.' *Proceedings of the National Academy of Sciences*, 111(23), 8410-8415. Available at: https://doi.org/10.1073/pnas.1319030111 (Accessed: 1 December 2019).

Fried, C.B. (2008) 'In-class laptop use and its effects on student learning.' *Computers and Education*, 50(3), 906–914. Available at: https://doi.org/10.1016/j.compedu.2006.09.006 (Accessed: 20 January 2020).

Fugard, A.J. and Potts, H.W. (2015) 'Supporting thinking on sample sizes for thematic analyses: a quantitative tool.' *International Journal of Social Research Methodology,* 18(6), 669-684. Available at: https://doi.org/10.1080/13645579.2015.1005453 (Accessed: 12 December 2019).

Gehlen-Baum, V., Weinberger, A., Pohl, A. and Bry, F. (2014) 'Technology use in lectures to enhance students' attention'. Paper presented at the European Conference on Technology Enhanced Learning. Available at: https://link.springer.com/chapter/10.1007/978-3-319-11200-8 10 (Accessed: 2 November 2020).

Gill, J., Harrison, B., Wood, T.J., Ramnanan, C.J. and Jalali, A. (2014) 'Investigating the Use of Social Networking Tools Among Medical Students.' *Education in Medicine Journal*, 6(4). Available at: https://www.researchgate.net/publication/279514916 (Accessed: 4 November 2020).

Gross-Loh, C. (2016) 'Should colleges really eliminate the college lecture?' *The Atlantic*. July 14, 2016. Available at: https://www.theatlantic.com/education/archive/2016/07/eliminating-the-lecture/491135/ (Accessed: 5 November 2020).

Hall, R.H., Collier, H.L., Thomas, M.L. and Hilgers, M.G. (2005) 'A student response system for increasing engagement, motivation and learning in high enrollment lectures.' *AMCIS*

2005 Proceedings, 255. Available at: https://www.researchgate.net/publication/220893650 (Accessed: 2 November 2020).

Huijser, H. and Kek, M.Y.C.A. (2016) 'PBL and technology-supported learning: Exploring the right blend.' In: *Problem-Based Learning: Perspectives, Methods and Challenges*, Hauppauge, New York: Nova Science Publishers, Inc., 149-164. ISBN. 9781634851831

Mishra, P. and Koehler, M.J. (2006) 'Technological Pedagogical Content Knowledge: A Framework for Teacher Knowledge.' *Teachers College Record,* 108(6), 1017-1054. Available at: https://doi.org/10.1111/j.1467-9620.2006.00684.x (Accessed: 11 October 2019).

Kaleta, R. and Joosten, T. (2007) 'Student response systems.' A University of Wisconsin System Study. *Research Bulletin*, 2007(10) Available at: http://www.westfield.ma.edu/cit/wpcontent/uploads/Study-of-Clickers.pdf (Accessed: 2 November 2020).

Kappers, W.M. and Cutler, S.L. (2015) 'Poll Everywhere! Even in the Classroom: An Investigation into the Impact of Using PollEverwhere in a Large-Lecture Classroom.' *Computers in Education Journal*, 6(20), 21. Available at: https://core.ac.uk/download/pdf/217173455.pdf (Accessed: 4 November 2020).

Kelly, P.A., Haidet, P., Schneider, V., Searle, N., Seidel, C.L. and Richards, B.F. (2005) 'A comparison of in-class learner engagement across lecture, problem-based learning and team learning using the STROBE classroom observation tool.' *Teaching and learning in medicine*, 17(2), 112-118. Available at: https://pubmed.ncbi.nlm.nih.gov/15833720/ (Accessed: 4 November 2020).

Koehler, M.J. and Mishra, P. (2009) 'What is technological pedagogical content knowledge?' *Contemporary Issues in Technology and Teacher Education* 9(1), 60-70. Available at: https://doi.org/10.1177/002205741319300303 (Accessed: 3 November 2020).

King, D.B. and Joshi, S. (2006) *Quantitative measures of personal response device effectiveness*. Philadelphia: Drexel University Libraries. Available at: https://www.researchgate.net/publication/28674625 (Accessed: 7 March 2020).

Kirschner, P.A. and Karpinski, A.C. (2010) 'Facebook and academic performance.' *Computers in human behavior,* 26(6), 1237-1245. Available at: https://www.sciencedirect.com/science/article/abs/pii/S0747563210000646 (Accessed: 9 March 2020).

Licorish, S.A., Owen, H.E., Daniel, B. and George, J. (2018) 'Students' perception of Kahoot!'s influence on teaching and learning.' *Research and Practice in Technology Enhanced Learning*, 13(9). Available at: https://doi.org/10.1186/s41039-018-0078-8 (Accessed: 7 March 2020).

Lin, Y.-C., Liu, T.-C. and Chu, C.-C. (2011) 'Implementing clickers to assist learning in science lectures: The Clicker-Assisted Conceptual Change model.' *Australasian Journal of Educational Technology*, 27(6) Available at: https://doi.org/10.14742/ajet.924 (Accessed: 4 December 2019).

Lyubartseva, G. (2013) 'Influence of Audience Response System Technology on Student Performance in Organic Chemistry Lecture Class.' *Education*, 133(4), 439-443. Available at: https://www.learntechlib.org/p/155372/ (Accessed: 3 November 2020).

Mallin, I. (2017) 'Lecture and active learning as a dialectical tension.' *Communication Education*, 66(2), 242-243. Available at: https://doi.org/10.1080/03634523.2016.1275720 (Accessed: 3 November 2020).

Mann, S. and Robinson, A. (2009) 'Boredom in the lecture theatre: An investigation into the contributors, moderators and outcomes of boredom amongst university students.' *British Educational Research Journal*, 35(2), 243-258. Available at: https://doi.org/10.1080/01411920802042911 (Accessed: 2 November 2020).

Mitra, B., Lewin-Jones, J., Barrett, H. and Williamson, S. (2010) 'The use of video to enable deep learning.' *Research in Post-Compulsory Education*, 15(4), 405-414. Available at: http://dx.doi.org/10.1080/13596748.2010.526802 (Accessed: 3 October 2020).

Mays, N. and Pope, C. (1995) 'Rigor and qualitative research.' *British Medical Journal* 311(1), 109-12. Available at: https://doi.org/10.1136/bmj.311.6997.109 (Accessed: 4 October 2020).

Pollock, S.J. (2005) 'No single cause: learning gains, student attitudes and the impacts of multiple effective reforms.' 790(1), 137. Paper presented at the *AIP Conference Proceedings*. Available at: https://doi.org/10.1063/1.2084720 (Accessed: 2 November 2020).

Poulis, J., Massen, C., Robens, E. and Gilbert, M. (1998) 'Physics lecturing with audience paced feedback.' *American Journal of Physics*, 66(5), 439-441. Available at: https://doi.org/10.1119/1.18883 (Accessed: 2 November 2020).

Rowe, S. (2004) 'A case for virtual guest lecturers: the experience of using practitioners in asynchronous discussion forums with an undergraduate auditing class.' Available at: https://www.researchgate.net/publication/49403595 (Accessed: 8 September 2020).

Saxena, S.K., Kumar, S., Maurya, V.K., Sharma, R., Dandu, H.R. and Bhatt, M. (2020) 'Current Insight into the Novel Coronavirus Disease 2019 (COVID-19).' *Epidemiology, Pathogenesis, Diagnosis and Therapeutics*', 1-8. Available at: https://doi.org/10.1007/978-981-15-4814-7 (Accessed: 4 November 2020).

Salmon, G. (2014) 'Learning Innovation: A Framework For Transformation.' *European Journal of Open, Distance and e-Learning,* 17(2),220. Available at: https://doi.org/10.2478/eurodl-2014-0031 (Accessed: 2 November 2020).

Schmidt, H.G., Wagener, S.L., Smeets, G.A., Keemink, L.M. and van der Molen, H.T. (2015) 'On the use and misuse of lectures in higher education.' *Health Professions Education*, 1(1), 12-18. Available at: https://cyberleninka.org/article/n/623972.pdf (Accessed: 6 November 2020).

Shon, H. and Smith, L. (2011) 'A review of Poll Everywhere audience response system.' Journal of Technology in Human Services, 29(3), 236-245. Available at: https://doi.org/10.1080/15228835.2011.616475 (Accessed: 4 November 2020). Stacy, J. (2009) 'The guide on the stage: In defense of good lecturing in the history classroom.' *Social Education*, 73(6), 275-278. Available at: history-classroom (Accessed: 4 November 2020).

Sun, L., Tang, Y. and Zuo, W. (2020) 'Coronavirus pushes education online.' *Nature Materials* 19(1) 687. Available at: https://doi.org/10.1038/s41563-020-0678-8 (Accessed: 4 November 2020).

Stojšić I., Ivkov-Džigurski A. and Maričić O. (2019) 'Virtual Reality as a Learning Tool: How and Where to Start with Immersive Teaching.' In: Daniela, L. (ed.) *Didactics of Smart Pedagogy*. Cham, Switzerland: Springer. ISBN. 3030015505

Sundt, M (2019) 'Professors, Ask Hard Questions of Your Online Providers.' *Inside Higher Ed*; January 30, 2019. Available at: https://www.insidehighered.com/digital-learning/views/2019/01/30/professors-should-ask-hard-questions-their-corporate-online (Accessed: 5 September 2020).

Titsworth, B.S. (2001) 'Immediate and delayed effects of interest cues and engagement cues on students' affective learning.' *Communication Studies*, 52(3), 169-179. Available at: https://www.tandfonline.com/doi/abs/10.1080/10510970109388552 (Accessed: 6 November 2020).

Van Dijk, L., Van Der Berg, G. and Van Keulen, H. (2001) 'Interactive lectures in engineering education.' *European Journal of Engineering Education*, 26(1), 15-28. Available at: https://doi.org/10.1080/03043790123124 (Accessed: 6 November 2020).

van Hoek, R., Godsell, J. and Harrison, A. (2011) 'Embedding "insights from industry" in supply chain programmes: the role of guest lecturers.' *Supply Chain Management: An International Journal*, 16(2), 142-147. Available at: https://doi.org/10.1108/13598541111115383 (Accessed: 6 November 2020).

Wang, A.I. (2015) The wear out effect of a game-based student response system. *Computers and Education*, 82(1), 217-227. Available at: https://doi.org/10.1016/j.compedu.2014.11.004 (Accessed: 2 November 2020).

The impact of camera angles in learning videos on the perception of teaching excellence and emotional connectedness of students in the creative industries

Dennis A Olsen University of West London, UK

Abstract

With the use of learning videos in higher education (HE) on the rise, and an increased importance assigned to the perception of teaching excellence by students in the United Kingdom (UK) and worldwide, this paper considers the impact of camera angles on students' perception of teaching excellence and students' emotional connectedness. Two focus groups comprising undergraduate students studying full time in subjects of the creative industries watched and discussed two videos with identical content (a presenter, presenting) but different camera angles – low-shot versus eye-level. The videos were provided as part of the course materials. The responses elicited in the focus groups suggest that an eye-level camera shot positively affects student perception of the presenter's credibility, goodwill and professionalism in learning videos. At the same time, findings call into question the suitability of presenter-focused learning videos altogether for the teaching of creative industries subjects in HE, since students perceive that they lack sufficient presenter sparkle to enthuse, motivate and engage their audience.

Keywords: learning design, learning videos, camera angle, teaching excellence, creative industries

The Teaching Excellence and Student Outcome Framework in England, and in parts of Wales and Scotland, has put an increased emphasis on the importance of students' perception of teaching quality in higher education (HE) within the United Kingdom (UK) (Ashwin, 2017). This appears to have resulted in a disparity between disciplines within higher education institutions (HEIs), with subjects associated with the creative industries, such as Design and Communication Studies, traditionally scoring – in the National Student Survey (NSS) – worse for teaching and learning than other disciplines (Burgess, Senior and Moores, 2018). Possible explanations for this range from the pedagogic culture in creative subjects to personality traits emphasised in the creative industries (Vaughan and Yorke, 2009). Irrespective of precisely what causes the disparity between disciplines, the reality is that the comparably lower score in terms of student perception of teaching and learning excellence has put additional pressure on educators within creative industries subjects to identify and apply novel teaching and learning approaches in order to boost levels of perception of teaching quality.

Generation Z, those born during or after 1995, currently makes up the majority of undergraduate students in HEIs. This socio-demographic cohort exhibits a distinct desire for "educational opportunities that use technology and visual media" (Mohr and Mohr, 2017, p.92), thus furthering the continuous production of video content and its integration into HE as part of online, hybrid and collaborative learning environments (Greenberg and Zanetis, 2012; Johnson *et al.*, 2014). From a student's point of view, the advantages associated with

the use of video content are manifold and include – to name just a couple of examples – the "thinning of classroom walls" (Siemens, Gašević and Dawson, 2015, p.205) – that is, the decreasing importance of gathering in the same physical learning space – and the ability to revisit and re-view classroom material more independently.

Depending on their motivation and available time, students, for self-paced learning, employ different video-consumption strategies, ranging from rather structured approaches – such as watching videos from beginning to end in a single sitting – to zapping or skipping through video content (Boer, 2013). Notwithstanding these individual consumption approaches, Yousef, Chatti and Schroeder's (2014) meta-analysis of research, that considers video-based learning, concluded that the implementation of video content appears to have a positive impact on both the achievement of learning outcomes and learner satisfaction. Gorissen, van Bruggen and Jochems (2012) specify that video content, such as recorded lectures, appears to support students' learning, particularly during periods of exam preparation, when it becomes an effective tool for revision.

According to Hansch and colleagues (2015, p.4), "talking head videos" – that is, videos featuring one or more presenters talking at the camera – are among the most widely used audio-visual content in online learning settings. This presenter-centred content can facilitate a connection between the presenter and the audience, something that adds "nurturing value" (Koumi, 2006, p.46) to the educational environment, enhancing the student-staff relationship and improving student engagement and motivation (Guo, Kim and Rubin, 2014; Hansch *et al.*, 2015). All of these aspects have been identified as playing a key role in students' evaluation of teaching quality (Su and Wood, 2012).

When it comes to the creation of video content, it appears to be the exception for presenter-centred videos to be produced in a professional film studio environment. The production at brick-and-mortar educational institutions within the UK, as in most other countries, rarely falls within the responsibility of a centralised department and is often subsumed into the responsibilities of individuals or course teams without specialist equipment or training. The use of built-in cameras in laptops and desktop computers to record videos for educational purposes is, therefore, commonplace (Hansch *et al.*, 2015; Berger, 2019). This, however, might have unintended consequences for student perception of teaching quality, for media research has repeatedly shown that the camera angle has a distinct impact on how audiences perceive video content and on how emotional connections between the audience and the people on screen are formed (Kuchenbuch, 2005; Schwender, 2006; Cao, 2013).

For their 2017 conference paper and subsequent journal article published in 2020, Ramlatchan and Watson investigated, *inter alia*, camera angles in learning videos, comparing the impact on instructor credibility and immediacy of high-angle and eye-level shots. The authors concluded that videos featuring an eye-level shot were significantly better received by students compared to those shot at a higher angle. The study did not include lower camera angles, which might seem surprising, as the established use of laptops and desktop computers for the recordings of learning videos is likely to result in such shots. Low-shot angles often trigger feelings of inferiority and powerlessness in audiences (Schwender, 2006). In the context of students' perception of teaching excellence, this might be particularly concerning, as the establishment of effective learning partnerships, with mutual respect between learners and teachers, is of paramount importance (Fried, 2001).

Given that teaching is a profoundly emotional practice (Liston and Garrison, 2004) and that it is essential for excellent teaching to have "a capacity to forge meaningful connectedness" (Su and Wood, 2012, p.151), it may be that certain camera angles in learning videos do improve or hinder staff connection with students. Connectedness refers to a 'felt concern' for students, which is apparent to learners and inspires and enthuses them, thus creating an environment in which learning is perceived as pleasurable (Barnett, 2007; Pring *et al.*, 2009; Su and Wood, 2012). For the present study, therefore, successful connectedness would mean that learning videos actively contribute to the creation of such an environment during self-paced learning. This paper contributes to the continuing discussion by examining the impact of low-shot and eye-level camera angles in learning videos on students' perceptions of teaching excellence and emotional connectedness. Owing to the specific challenges arising from the introduction of the Teaching Excellence and Student Outcome Framework within the UK, the focus of this study is on the creative industries within HE.

In the context of the recent COVID-19 outbreak and the consequent accelerated shift towards online learning and teaching around the world, this research has become even more relevant. By April 2020, all HEIs in the UK and in most parts of Europe have moved their teaching and learning efforts online, with a large number of academic staff, mostly unfamiliar with the specifics of distance learning, now exploring alternative modes of audio-visual communication with students to ensure effective teaching in the absence of a face-to-face teaching environment. During these times of heightened stress and anxiety for both students and academics (Lui, 2020; Venema, 2020), forging meaningful connectedness with students and keeping them engaged with their learning to create a sense of 'normality' seem of the utmost importance. The present paper has therefore a broad appeal to any educator who aims for effective and excellent teaching in HE via digital audio-visual channels. The strategic use of camera angles in both pre-recorded and live video communication might positively contribute to this objective.

Research design

Two short learning videos were produced, using two identical cameras for one low-shot version and one eye-level version of otherwise identical talking-head videos (figure 1). Each video lasted four minutes and fifty-five seconds and discussed the 'Unique Selling Proposition (USP)' concept; it included a selection of definitions, application strategies, advantages and limitations of the concept and also current industry examples. Whilst the eye-level camera was adjusted according to the presenter's real-life eye level, the height of the low shot was selected to replicate an in-built camera in a fourteen-inch laptop.

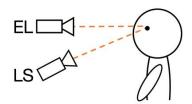






Figure 1: The investigation material consisted of two learning videos, identical except for the camera angle

After their creation, the two videos were shown to and discussed with two academic colleagues – from the London School of Film, Media and Design at the University of West London – who regularly produce learning videos as part of their own teaching practice. The purpose of this pre-test was to confirm the appropriateness of the investigation material as a representation typical of a short learning video within the creative industries. Both colleagues independently verified the suitability of the investigation material, so that there were no changes to the videos for the final data collection.

Based on Schwender's (2006) investigation into audience perception and Reysen's (2005) Likability Scale, a question guide featuring thirteen open-ended questions was created, addressing aspects related to likeability, credibility, goodwill, communication immediacy and feeling of distance. Before the final data collection, a user question-comprehension pre-test (with two undergraduate students - not part of the final sample) took place and led to the minor rewording of just one question in order to improve its clarity. Subsequently, two focus groups with full-time, second-year undergraduate students (FHEQ level 5) from the University at West London were conducted on 20 March and 12 April 2019 at the University's St Mary's Road campus, London, UK. Participants were recruited via an open call in the London School of Film, Media and Design and were subsequently selected on the basis of comparable previous learning experiences - for example, level of study and previous exposure to learning videos as part of their studies. The first focus group comprised N = 6 Advertising and Public Relations students (four female and two male), with a mean age of 21.7 years, σ = 2.1. The second focus group comprised N = 8 Media and Communications students (four female and four male), with a mean age of 21.3 years, σ = 1.3. Both courses typically feature face-to-face learning environments, but occasionally incorporate learning videos in their virtual learning environment (VLE), enabling students to revisit and re-view content outside their weekly classes.

Focus group: Ad and PR (N = 6)Focus group: Media and Communications (N =watch video watch video watch video watch video LS(N=4)EL(N = 3)LS(N = 3)EL(N=4)brief group brief group brief group brief group discussion discussion discussion discussion watch watch watch watch video LS video EL video LS video EL merger merger \geq aroup group discussion (N = 6)(N = 8)8)

Figure 2: Flowcharts illustrating the two independent focus groups

As set out in figure 2, each of the two focus groups was initially split evenly but randomly into two sub-groups. Each sub-group was shown either the eye-level (EL) or the low-shot (LS) video first and then discussed it, before merging back into their two focus groups for extended discussions. The advantage of this staged approach was to gather initial, independent reactions to and opinions about each video, and thus camera angle, before moving to a more comparison-driven discussion. All parts of the focus groups were audio-recorded and the data subsequently analysed using qualitative content analysis (Mayring, 2014).

Findings

During the analysis of the qualitative data, three key themes emerged. The findings below are presented according to these key themes: (i) credibility and engagement; (ii) format and setting of the video; and (iii) quality, value for money and appropriateness of the learning artefact. To ensure anonymity, each participant was assigned a letter from A to N. The corresponding participant letter is indicated after each comment.

Credibility and engagement

In the eyes of the participants, a good lecturer, irrespective of whether s/he is in a face-to-face or online learning environment, must be a dual expert with both "knowledge about the industry [and] about how to teach" (E), while at the same time "not [being] patronising" (C), viz., interacting with students in a respectful manner. A sense of humour was also repeatedly pointed out as "very important to keep (...) engaged during a class" (G) and the ability to build a good rapport with students.

Regarding the learning videos, the groups unanimously agreed that the low-angle shot "looked patronising" (I) and felt "more informal" (B) compared to the eye-level shot, which was perceived as "more professional" (A). Although the presenter's body position was

pointed out as appearing more relaxed in the video featuring a low angle, this was not seen as a positive by students, but amplified the perception of unprofessionalism, with several participants in both groups characterising the video as "too relaxed" (F), "unserious" (A) and "sloppier" (L).

Despite being more critical overall of the low-angle shot, some students acknowledged that this reflected what they were familiar with from traditional face-to-face learning environments; however, participants' responses indicated that their reception of learning videos might be influenced less by their knowledge of classroom settings than by the consumption of other video content in their spare time. "Our generation watches a lot of YouTube and videos like that, it's always on [eye level], whereas in the class (...) the teacher stands in the front and we are sat (...) But this is different. We've learned so much with video content and it is more on our level; when it's a lower angle, it's not necessarily on our level" (C).

Neither of the camera angles was found to convey enthusiasm or motivate viewers to engage further with the content; both aspects, however, were pointed out as "definitely important" (M) for a good lecture. "If I was doing a course and I was watching those sort of videos every single week, I'd lose interest in the course" (L). "I'd click on it, watch it for ten seconds and then completely off-click it" (N). "You're facing a screen and you're watching someone talk directly at you. And obviously, you get that in real life experience when you go to a lecture, but that's more engaging than this" (B).

Format and setting of the video

Overall, participants from both groups seemed to question the use of presenters in learning videos, finding the experience "a bit unsettling, staring at someone who is staring back at you (...); I felt uncomfortable" (I). "Why do you need to show your face? Just show some visuals" (F). It also seemed that there was an additional level of scrutiny of both the presenter and the content in learning videos compared to face-to-face learning environments. "It's the small things that bug me here (...) and in all videos that I see online, to be fair. In class with a lecturer, I'd probably not even notice" (K). "In videos, these things are more obvious" (B). In terms of consumption situations, students agreed that the implementation of presenter-centred learning videos within a face-to-face learning environment was not desirable, but implementation as part of a VLE might be beneficial for their learning experience. "I would not want this as part of a lecture (...) but maybe on Blackboard for when I am at home" (H). "This could be good for when I revise things between classes, but definitely not in class" (A).

Inspiration for possible improvements was primarily drawn from social media, particularly YouTube tutorials. "YouTubers are better at this" (F). Participants unanimously agreed that what makes social media tutorials more successful than the presented learning videos was the fact that they were "more like a conversation" (D), involving interaction and movement on the presenter's part. Participants emphasise the importance of using visuals beyond the depiction of presenters, including "visual examples" and "subtitles" (A). All agreed that for them, it was crucial "to make [the video] more of an interesting visual (...), because we have short attention spans anyway" (B).

Quality, value for money and appropriateness of the learning artefact

There seemed to be an expectation from students in both groups that the creative approach and production quality for learning videos in subjects of the creative industries should apply and reflect the skills that are purportedly being taught to the viewers. "It's kind of ironic that we're talking about a Unique Selling Point, when the video is completely un-unique and completely not very well designed" (N). "Talking about something that is creative in the least creative way possible, I'd think I wasted my time and money" (E).

Several participants in one of the focus groups also questioned the use of videos as a suitable mode of delivery for content outside classroom settings overall, criticising the sequential nature of learning videos and the difficulties arising from navigating and searching for specific information. "Even though short, I don't like that I can't just jump in and out easily of a video (...) I'd always have to start again or search for the right stuff for ages" (G). "Maybe it would need to be broken down more? So, I can navigate (...); like maybe one-minute soundbites or something" (M). "I don't feel [a video] can replace reading a book. It is just way too difficult to go back and forth when I need to hear something again because I didn't get it the first time, or when I am looking for something specific" (K).

Discussion and implications

Between the two camera angles examined, the findings indicate that an eye-level shot might be more appropriate for presenter-centred learning videos. As in Ramlatchan and Watson (2017; 2020), the eye-level shot appears to affect positively the presenter's credibility and goodwill, in accordance with expectations derived from media theory (Schwender, 2006). An increase in perceived professionalism and decrease in the feeling of inferiority with an eye-level angle corresponds to Fried's (2001) call for a learning partnership and mutual respect between learners and teachers.

However, the findings call into question the use of presenter-centred learning videos as a format, with both videos perceived as lacking presenter enthusiasm, as well as being unable to motivate and engage, all of which were described by participants – and Su and Wood (2012) – as key to students' perception of teaching excellence. Further, the perception that presenters talking into the camera was an eerie experience, irrespective of angles, indicates decreased approachability (a quality identified by Su and Wood (2012) as an important aspect, from a student's perspective, of a good lecture).

The desired emotional connectedness therefore might not be achieved by presenter-centred learning videos alone. A more visual-led approach, or at least enhancements that increase perceived quality, with an improved mechanism for navigation and use of interactive elements (Lui, 2020) could be a more effective way forward, chiming also with this age group's desire for "frequent educational opportunities that use technology and visual media" (Mohr and Mohr, 2017, p.92) and having positive impact upon students' levels of satisfaction (Yousef, Chatti and Schroeder, 2014).

Nevertheless, this study, in combination with Ramlatchan and Watson's (2017; 2020) insight, suggests to other HE practitioners that, when it comes to learning videos featuring presenters, an eye-level camera angle should be applied. Although likely not the default position of desktop computer or laptop cameras, the adjustment – that is, usually elevating the camera – might be worth the extra effort to facilitate effective teaching, particularly

considering the increase in emphasis on students' perception of teaching quality in UK HE, owing to the Teaching Excellence and Student Outcome Framework and the current shift towards online teaching. A more professional approach to the production also appears to be advisable, in the light of the added level of scrutiny by students when interacting with video content outside classroom settings. Creative industries departments within HEIs interested in supporting their teaching and learning experience with the help of learning videos might wish to consider additional support for academic staff involved in the production process.

Future research

The present study has underlined the importance of continuing research into learning videos and hopefully will inspire follow-up studies that expand on its findings. Future research might wish to build on the existing body of research in a meaningful way, by considering, *inter alia*, the following when recruiting participants:

Widening previous learning experiences. Students' level of study might influence their perception of learning videos. It could be that students who are exposed to talking-head videos early on during their studies regard these as the norm and thus view these videos more positively. Further exploration of whether student perception differs between those student populations more accustomed to distance learning and those primarily exposed to face-to-face learning environments seems also necessary for more generalisable conclusions to be drawn.

Including non-creative disciplines, such as law or economics, which often feature a more lecture-centred approach to teaching compared to the workshop-driven learning environments common in creative subjects. As a result, students' relative experience with classroom settings might have a bearing on the way they perceive presenter-centred videos.

Looking at different learning needs. The individual needs of students might also influence their perception of learning videos. For example, hearing-impaired students might find a presenter's facial cues helpful and thus would evaluate a talking-head video more positively. Students whose first language is not English might have a more pronounced appreciation of learning videos in general than would native speakers, as the medium allows for increased control – such as pausing, replaying, etc. – of spoken teaching content.

Lastly, future research might also consider whether the negative perception resulting from an additional level of scrutiny by student audiences can be counteracted by a meaningful choice of presenter background – for example, via background blurring, or 'screened interior' (Rossi, 2020).

Conflict of Interest

The author declares that there is no conflict of interest regarding the publication of this article.

Reference list

Ashwin, P. (2017) 'Making sense of the teaching excellence framework (TEF) results.' A Centre for Global Higher Education policy briefing by Paul Ashwin. *Times Higher Education*. Available at: https://www.timeshighereducation.com/news/teaching-excellence-framework-tef-results-2017 (Accessed: 1 April 2020).

Barnett, R. (2007) A Will to Learn: Being a Student in an Age of Uncertainty. Maidenhead, Berkshire: Open University Press. ISBN: 9780335223800

Boer, J.D. (2013) *Learning from video: viewing behavior of students*. Enchede: University of Groningen. ISBN: 9789461917683

Burgess, A., Senior, C. and Moores, E. (2018) 'A 10-year case study on the changing determinants of university student satisfaction in the UK.' *PLoS ONE*, 13(2), e0192976. Available at: https://doi.org/10.1371/journal.pone.0192976 (Accessed: 1 April 2020).

Cao, X. (2013) 'The Effects of Facial Close-Ups and Viewers' Sex on Empathy and Intentions to Help People in Need.' *Mass Communication and Society*, 16(2), 161-178. Available at: https://doi.org/10.1080/15205436.2012.683928 (Accessed: 1 April 2020).

Fried, R. (2001) The Passionate Teacher. Boston: Beacon Press. ISBN: 0807031437

Gorissen, P., van Bruggen, J. and Jochems, W. (2012) 'Students and recorded lectures: Survey on current use and demands for higher education.' *Research in Learning Technology*, 20(1063519), 297-311. Available at: https://doi.org/10.3402/rlt.v20i0.17299 (Accessed: 1 April 2020).

Greenberg, A.D. and Zanetis, J. (2012) *The Impact of Broadcast and Streaming Video in Education*. Available at: http://www.cisco.com/web/strategy/docs/education/ciscovideowp.pdf (Accessed: 1 April 2020).

Guo, P.J., Kim, J. and Rubin, R. (2014) 'How Video Production Affects Student Engagement: An Empirical Study of MOOC Videos.' *ACM*, 14, 41-50. Available at: https://doi.org/10.1145/2556325.2566239 (Accessed: 1 April 2020).

Hansch, A., Newman, C., Hillers, L., Schildhauer, T., McConachie, K. and Schmidt. P. (2015) *Video and Online Learning: Critical Reflections and Findings From the Field* (discussion paper 2015-02). Berlin: Alexander von Humboldt Institut für Internet und Gesellschaft. Available at: http://dx.doi.org/10.2139/ssrn.2577882 (Accessed: 1 April 2020).

Johnson, L., Adams Becker, S., Estrada, V. and Freeman, A. (2014) *The NMC horizon report: 2014 higher education edition*. Available at: http://cdn.nmc.org/media/2014-nmc-horizon-report-he-EN-SC.pdf (Accessed: 1 April 2020).

Koumi, J. (2006) *Designing video and multimedia for open and flexible learning*. Oxon: Routledge. ISBN: 9780415383035

Kuchenbuch, T. (2005) Filmanalyse. Theorien. Methoden. Kritik. Vienna: Böhlau Verlag.

ISBN: 9783825226480

Liston, D. and Garrison, J. (2004) *Teaching, Learning, and Loving*. New York: Routledge. ISBN: 9780415945158

Lui, K. (2020) "It's OK to feel anxious." How a professor in China faced coronavirus disruptions and fears. Science. Available at: https://www.sciencemag.org/careers/2020/03/its-ok-feel-anxious-how-professor-china-faced-coronavirus-disruptions-and-fears (Accessed: 1 April 2020).

Mayring, P. (2014) *Qualitative Content Analysis. Theoretical Foundation, Basic Procedures and Software Solution.* Klagenfurt: Beltz. Available at: https://nbn-resolving.org/urn:nbn:de:0168-ssoar-395173 (Accessed: 1 April 2020).

Mohr, K. and Mohr, E. (2017) Understanding Generation Z Students to Promote a Contemporary Learning Environment. *Journal on Empowering Teaching Excellence*, 1(1), 84-94. Available at: https://doi.org/10.15142/T3M05T (Accessed: 1 April 2020).

Pring, R. Hayward, G., Hodgson, A., Johnson, J., Keep, E., Oancea, A., Rees, G., Spours, K. and Wilde, S. (2009) *Education for All.* Oxon: Routledge. ISBN: 9780415547222

Ramlatchan, M. and Watson, G.S. (2017) 'Multimedia Video Resolution, Camera Angle, and the Impact on Instructor Credibility and Immediacy.' In: Simonson, M. and Seepersaud, D. (eds.), 40th Anual Proceeding. Selected Research and Development papers – Volume 1, 80-85. The Annual Convention of the Association for Educational Communications and Technology. Available at:

https://www.tresystems.com/proceedings/documents/2017_jacksonville_volume1.pdf (Accessed: 1 April 2020)

Ramlatchan, M. and Watson, G.S. (2020) 'Enhancing Instructor Credibility and Immediacy in the Design of Distance Learning Systems and Virtual Classroom Environments.' *The Journal of Applied Instructional Design*, 9(2). Available at: https://edtechbooks.org/jaid 9 2/enhancing instructor (Accessed: 29 July 2020).

Reysen, S. (2005) 'Construction of a new scale: The Reysen Likability Scale.' *Social Behavior and Personality*, 33(2), 201-208. Available at: https://doi.org/10.2224/sbp.2005.33.2.201 (Accessed: 1 April 2020).

Rossi, C. (2020) 'Screened Interiors: Researching Homes in Lockdown.' In: Midgelow V.L. (ed.), *Doing Arts Research in a Pandemic*. Location: The Culture Capital Exchange, 65-66. Available at: https://www.theculturecapitalexchange.co.uk/2020/06/02/doing-arts-research-in-a-pandemic-2/ (Accessed: 29 July 2020).

Schwender, C. (2006) *Medien und Emotionen. Evolutionspsychologische Bausteine einer Medientheorie.* Wiesbaden: Deutscher Universitätsverlag. ISBN: 978-3835060456

Siemens, G., Gašević, D. and Dawson, S. (2015) *Preparing for the digital university: a review of the history and current state of distance, blended, and online learning.* Edinburgh: MOOC Research Initiative. Available at:

https://www.research.ed.ac.uk/portal/en/publications/preparing-for-the-digital-university(585b85b0-74b2-4e31-8697-255c649183a6).html (Accessed: 1 April 2020).

Su, F. and Wood, M. (2012) 'What makes a good university lecturer? Students' perceptions on teaching excellence.' *Journal of Applied Research in Higher Education*, 4(2), 142-155. Available at: https://doi.org/10.1108/17581181211273110 (Accessed: 1 April 2020).

Vaughan, D. and Yorke, D. (2009) 'I can't believe it's not better': The Paradox of NSS scores for Art & Design. Available at: https://www.advance-he.ac.uk/knowledge-hub/i-cant-believe-its-not-better-paradox-nss-scores-art-design?PageSpeed=noscript (Accessed: 1 April 2020).

Venema, V. (2020) 'Coronavirus: "It's just anxiety, anxiety, anxiety".' *BBC News Stories*. Available at: https://www.bbc.co.uk/news/stories-52110460 (Accessed: 1 April 2020).

Yousef, A., Chatti, M. and Schroeder, U. (2014) 'Video-Based Learning: A Critical Analysis of The Research Published in 2003-2013 and Future Visions.' In: eLmL 2014, *The Sixth International Conference on Mobile, Hybrid and On-line Learning* 112-119. Available at: http://www.thinkmind.org/download.php?articleid=elml_2014_5_30_50050 (Accessed: 1 April 2020).