Edited by Rachel Masika
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Advancing pedagogical research: researching education and the student experience

Dr Rachel Masika, Centre for Learning and Teaching

Abstract

Advancing pedagogical research has been a strategic goal for the University of Brighton for many years. In this publication, we present articles from the 2019 Pedagogic Research Conference and invited papers that consider: how to become an ‘extended’ pedagogical researcher drawing on Hoyle’s approach; a novel methodological approach to researching shifting policy and practice landscapes, that can inform curriculum design on partnership, public engagement and clinical leadership in the training of health professionals; why attendance is not necessarily a predictor of attainment; why assessment is a wicked problem; and how different approaches can make a difference to inclusivity. By engaging with different facets of pedagogical research, the contributors illustrate the value of pedagogical research in understanding the challenges and opportunities this presents for enhancing education and the student experience.

Introduction

Advancing pedagogical research ‘focused on the education of students’ (Yorke, 2000) has been a strategic goal for the University of Brighton for many years. A renewed strategic focus is to: enable all students to succeed and achieve their goals; empower them in terms of their employability, confidence and capacity to make a difference; strengthen their engagement in their own learning and in shaping their wider experience and; develop and value staff in terms of learning, teaching excellence and innovation (University of Brighton, 2019). These are all areas for which pedagogical research presents prospects for turning challenges into opportunities. Pedagogical research has been described as research into processes and practices of learning, teaching and assessment that potentially involve systematic empirical research and contributions to pedagogical theory (Flint, 2018). Overlaps are noted with institutional research insofar as pedagogical research feeds into decision-making and planning; overlaps are also observed within the scholarship of learning and teaching (SoTL) because of its strong links to reflective practice and activities, such as peer-review of teaching and engaging with student assessment and feedback, and with the joined up nature of SoTL, pedagogical and institutional research (Flint, 2018; Shreeve, 2011). In effect, pedagogical-related research provides a rich tapestry of approaches to understanding and enhancing education and the student experience in higher education institutions.

Being concerned with problems of teaching and learning that include student thinking and experience, pedagogy, course and curriculum design, quality, system policy, institutional management, academic work, knowledge and research (le Roux et al., 2019), pedag...
Agogic research is best made use of when it is applied to deeply understand educational problems, and then using this analysis to develop solutions to educational processes and practices that present challenges. In this publication contributors seek to understand and present opportunities for addressing some of these problems. The articles are situated in the complex world of pedagogic research in higher education, in contexts where education and pedagogy are ever evolving (Seah and Wong, 2019) and where pedagogic research matters more in a period of ‘shifting sands’ of the higher education landscape (Lingwood et al., 2018). These articles present an opportunity for unpacking challenges and exploring solutions that enhance education. Each contributor explores a challenge that has the potential of being turned into an opportunity. The pedagogic research presented reflects challenges around the credibility of pedagogic research; overemphasis on seeing attendance as a linear straightforward predictor of attainment; understanding how decisions are socio-materially made that shape local health and care services; the wicked problem of assessment and; how innovative new approaches can make a difference to incusivity.

Keynote speaker for the Pedagogic Research Conference of 2019, Professor Linda Evans, highlights the importance of higher education teachers developing as ‘extended’ pedagogic researchers, working towards continuously producing higher quality research. This, she argues, is crucial if pedagogic researchers are to be taken seriously within the wider education research community. In her paper she focuses on how academics can develop as ‘extended’ pedagogic researchers by addressing the ‘three [interdependent] Rs’, ‘revelation’, ‘reading’ and ‘rigour’. Drawing on Hoyle’s models of an extended researcher as along a continuum of researcher professionality, she presents the ‘three Rs’ as a developmental process. In the continuum she conceptualises, she highlights typical indicative characteristics reflecting professionality in conducting and reporting research at two extremes of ‘restricted’ and ‘extended’ for which revelation, reading and rigour are key ingredients for moving from the ‘restricted’ to the ‘extended’ extreme. Revelation serves to attract attention to a piece of research by way of insight and new knowledge in a dynamic information landscape, taking the field forward and extending its boundaries. Reading helps develop a mental map of the field’s landscape as it appears currently and has evolved, in order to plot where one’s own work fits best and enhances the landscape. Rigour, which applies to empirical and non-empirical research is a measure with a breadth of application through/by which peer-reviewed journals and REF assessment judge the quality of the research. Encompassing critiquing ideas and theoretical perspectives, formulating one’s own theoretical perspectives, conceptual clarity and definitional precision are some of the details and foci to include in a paper to inject rigour. Linda concludes that the ‘restricted’-'extended’ continuum offers a pathway for professional development, and that developing ‘as ‘or ‘into ‘extended’ research professionals represents a sure-fire way to raise the status of pedagogic research.

A methodology for researching a shifting policy and practice landscape that influences working and learning is advanced by Dr Debbie Hatfield et al. They reflect on the concepts and methods applied to their study of how clinical commissioners, the public and service users make decisions that shape local health and care services that can inform curriculum design for the training of health professionals. Drawing on the practice theory lenses of communities and landscapes of practice, they demonstrate how real time snapshots of the practices of participants provide deeper understandings of patient and public engagement and involvement (PPEI) and help articulate the visible and
hidden practices that shape PPEI. The use of an ethnographic repertoire of methods: focus groups, observations, interviews and examination of artefacts aids rich descriptions of participants’ perspectives. The article presents a novel approach to researching that makes possible analysis and interpretation of partnership working. The ways in which practices are mapped in their approach to reveal the social dynamics in learning makes it a useful teaching tool in classrooms and practice settings.

Dr Vy Rajapillai et al. argue that the relationship between students’ attendance and attainment is far more complex than some existing studies suggest, particularly those analyses that present cause and effect models to suggest that there is a direct linear correlation. In their study, Dr Vy Rajapillai et al. use a quantitative approach applying statistical analysis to data on selected modules. Their results suggest that there is a weak correlation between attendance and attainment and furthermore, that the patterns of correlation vary depending on size of cohort, assessment type and content. This has important implications for attendance policies, particularly those that take on a coercive stance. The assumption that attendance in structured learning lessons directly impacts on students’ attainment is not that clear-cut. The multiple inter-related factors that result in attendance or non-attendance indicate that attendance is not a straightforward predictor of attainment. The research concludes that a focus on engagement may offer more promising avenues to predicting attainment.

Assessment and feedback are a recurring theme in students’ evaluation of their experiences of learning and teaching in many higher education institutions globally. Here Dr John Canning and Juliet Eve examine assessment through the lens of Rittel and Webber’s ‘wicked problems’ to reconceptualise assessment as a wicked problem rather than a solvable technical problem. Their anatomy of assessment and feedback as a wicked problem offers a thought-provoking dissection of it as a problem that is difficult to define precisely, pin down and fully resolve as it has no single solution, changes and is contradictory. Solving one problem can create other problems too. This slipperiness does not make addressing it a lost cause, but by recognising it as a wicked problem, this provides the space for developing thoughtful and nuanced perspectives that lead to improvements. A deeper understanding of assessment, its wickedness and the nuanced approaches to making it better can be liberating rather than being stifled by panaceas that are often presented.

Finally, also included in this book, is the keynote for the 2019 University of Brighton Learning and Teaching Conference by Professor Jackie Potter. Jackie discusses Oxford Brookes University’s journey towards transforming student experience through organisational changes grounded in evidence and theory with respect to inclusivity. She contends that inclusion can be improved and associated issues related to students’ attainment on account of specific characteristics addressed. Evidence and theory on inclusivity and attainment gaps informing responses and action is a promising direction. At Brookes University a curriculum development framework underpinned by universal design for learning and self-determination theory contributed to devising tools and approaches for a wide range of staff to reflect on practice and galvanise evidence-informed effective actions. Key learning points from subsequent policies and practices included the need to question what is taken for granted, and to be clear on how newly embedded inclusivity approaches fit within routine cycles and periodic activities. New ways of talking about difference and inclusion are crucial.
The papers in this publication cover topics as diverse as developing as a pedagogic researcher, partnership and clinical leadership in training health professionals, attendance and attainment, assessment and feedback and inclusivity. In considering the common theme, one connection runs throughout: the prospects that engagement with pedagogic research presents for turning educational challenges into opportunities for enhancing education and student experience. Conceptual, methodological or practical approaches to understanding and addressing the educational challenges are presented. As Lingwood et al. (2018) suggest, pedagogic research contributes to collective understandings of teaching and learning, engagement with one’s practice and discipline, advancements of pedagogic theories and body of knowledge, enables a better understanding of policies and practices, reflections on potential and possible future benefits and ensures that students benefit from research informed teaching and differential learning opportunities.


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Biography

Dr Rachel Masika is a Senior Research Fellow at the Centre for Learning and Teaching (CLT). She chairs the organising committee of the annual pedagogic research conference, ‘Enhancing Higher Education through Research’ and is the editor for Research Matters. At the university, she co-leads the Higher Education Pedagogies and Policy Research and Enterprise group and chairs the CLT research ethics committee. Her research focuses on higher education learning, teaching, educational development and student experience.
Developing as an ‘extended’ pedagogic researcher: addressing the ‘three Rs’

**Professor Linda Evans, University of Manchester**

**Abstract**

Based on selected content from the keynote talk which opened the 2019 University of Brighton Pedagogic Research conference, in introducing what the author calls the ‘three Rs’ of pedagogic research: ‘revelation’, ‘reading’ and ‘rigour’, this article is intended as a highly readable and engaging outline starter guide for pedagogic researchers who want to improve the quality of their research and begin to make names for themselves as serious researchers. Framed within a broader message about the importance of developing as a researcher, the three Rs are identified as the key ingredients of pedagogic research that is taken seriously by the wider educational research community. Adapted from Eric Hoyle’s models, the notion of a continuum of researcher professionality, ranging from ‘restricted’ to ‘extended’, is introduced, and illustrated by indicative characteristics of the ‘restricted’ and of the ‘extended’ researcher. With its capacity to propel the researcher along the notional professionality continuum, towards the ‘extended’ end, mastery of the three Rs is presented as a developmental process, and specific ways of enhancing pedagogic research through revelation, reading and rigour are outlined.

**Background: engaging students**

Which of the following quotes indicate(s) effective student engagement?

‘I gave a lecture last term which I know went down very well with the students. I was giving a lecture on *A Street Car Named Desire*, by Tennessee Williams, and I played the video of the film silently behind me as I lectured, so they could watch it, instead of having to look at me. And they were obviously knocked out by that - it obviously worked really well’. (Meryl, English and American studies lecturer).

‘I lecture by *only* writing on the blackboard ... which means that you précis the basic information. But if you write it down fairly quickly, the students can write it down maybe half as fast - which gives you a little bit of time to, sort of, talk over what you’ve just written on the board, and maybe illustrate some little bits and pieces with stories that they don’t have to write down. It adds to the interest’. (Ivan, physics lecturer).

‘The law students have to get to grips with a fairly complicated set of legal rules, and I want them to be able to use the statute - read the statutes. I actu-
ally developed a board game to take them through this stuff. So, rather than have a discussion or a lecture on it, I make them play a board game. It’s a way of taking them through the statute. It gets them to understand the stuff in the end, and when I look at their exams [I see that] they can handle that area’. (Avril, law professor).

Let’s briefly scrutinise each quote, all of which are derived from a research project that I carried out in the late 1990s (see Evans and Abbott, 1998). First, what of Meryl’s quote about her English and American studies students? They were, she tells us, ‘knocked out’ by her innovative lecture on *A Street Car Named Desire*, but does this necessarily mean that they were engaged? - and, if so, with which mode of communication: the silent film playing, or the information she presented to them audibly – or both? And then there’s Avril’s board game; did that engage her students? - if so, in what ways and what respects? And if we are inclined towards an affirmative response, are we basing it simply on conjecture and assumption that such a teaching aid is *bound* to engage students, or do we have evidence, in Avril’s quote, that it did so? She suggests that their exam results show students to have grasped the content she had taught them; does this information help us make a judgment about whether student engagement occurred - in other words, is engagement tied up with assessment, and its results, or does it have no such connection?

In his physics lectures, Ivan reports supplementing substantive information with interesting ‘asides’ and illustrations. Does this – being interested – constitute engagement? He implies, too, that students take notes as he lectures, so does note-taking equate to engagement, and does what constitutes engagement depend on the subject or discipline, so that what, in the field of physics, for example, might be considered representative of student engagement may be dismissed within other fields as un impressively pedestrian practice that does little to engage students? At this point it is worth considering the views of Louise, another English and American studies lecturer:

‘I think the problem with lectures is … they’re passive. Students sit there, they make notes, they go away, they don’t necessarily look at the notes again, they don’t reflect on them’.

And, of course, we must take into account the overarching issue that the quotes above all represent the perspectives of teachers as putative or potential student ‘engagers’, and it may be argued that only students themselves, as the potential ‘engagees’ are qualified to indicate whether they are or have been engaged. So let’s now take a look at a student perspective.

‘He was one of the best lecturers I’ve ever had. He was inspiring … he was interesting … he really, sort of, grabbed you and said, ‘Hey, look!’ [He] spoke to you … he communicated with you, individually … and, also, he used very good analogies as well - well, ‘analogy’ is probably the wrong word, but, in the case of when electrons make power down a cable … the higher the frequency of the electricity, the more loss you get, due to wastage … and he mentioned that that was because, the higher the frequency of the electricity, the more it travels on the outer surface of the wire, that’s why they use very thin strands of wire, because there’s a greater surface area. And I remember thinking, ‘Wow! really? That just makes so much sense!’” (Harold, physics student, cited in Evans and Abbott, 1998).
Based on the information he gives us, can we say that Harold was engaged in the lecture he is referring to, and can we also say that he was engaged generally by the lecturer? - who, incidentally, was Ivan, quoted above (all names are pseudonyms). And if we do think Harold’s recollection indicates his engagement, then what is the nature of such engagement? What exactly does it ‘look like’? Are we able to zoom in on the evidence in his quote to pinpoint its essence?

Enough now of engagement! My point in raising it is to highlight the importance and the complexity of conceptual clarity and definitional precision, and to show that we cannot throw around terms glibly and unproblematically if we want our research to incorporate rigour, and to be taken seriously. Here, I happened to select the concept of student engagement – a fairly popular topic among pedagogic researchers – but the message I hope to convey applies to any concept. Whatever it is that our research focuses on, we must define the key concepts that lie within that focus. We must consider what counts and what doesn’t count as the ‘epistemic object’ (Miettinen and Vurkkunen, 2005) or epistemic ‘thing’ (Rheinberger, 1977) that we are purporting to examine: what it looks like, how we may recognise it when we see it, who has the right to claim to identify it, etc. If we do not, we risk undermining our research’s construct validity.

Construct validity

Construct validity is concerned with consensual acceptance and understanding of specific terms. Elsewhere (Evans, 2002), in a chapter entitled ‘Taking conceptualisation seriously’, I cite part of a conversation from Lewis Carroll’s Through the Looking Glass to highlight the importance of conceptual clarity when researchers communicate with others. I supplement the Lewis Carroll quote with reference to an old joke that used to be popular when I was a child - ‘What’s the difference between an elephant and a postbox? When the inevitable reply, “I don’t know” was made, the response followed: Well, I must remember not to send you to post my letters’ (Evans, 2002, p. 49) - to illustrate the confusion that may arise when constructs are not shared; in other words, when construct validity is threatened or undermined:

‘The important point is that, unless researchers clarify key terms, they cannot be sure that they and their research subjects are on the same wave-length; they could be communicating at cross purposes in much the same way that Alice and Humpty Dumpty would have done if he had not explained his definition of ‘glory’. The danger of this is that the whole process of data collection, analysis and dissemination is flawed’ (Ibid. p. 53).

Taking measures to maximise construct validity, through making it clear what one means when using a particular word or term, is a feature of rigour – one of what I identified, in the keynote talk I delivered at Brighton University’s 2019 Pedagogic Research Conference, as the ‘three Rs’ of pedagogic research: ‘revelation’, ‘reading’ and ‘rigour’. All three are essential ingredients of pedagogic research that is taken seriously by the wider educational research community - seriously enough to avoid being denigrated as ‘pseudo’ research; seriously enough to be considered publishable in the most highly regarded, peer-reviewed, educational research journals. Before expanding on the nature of these three Rs, I introduce a concept that, in my keynote talk, I linked closely to them: researcher professionalism, and the notion of its ‘extended’ and ‘restricted’ extremes.
‘Extended’ and ‘restricted’ researcher professionality

The concept of ‘professionality’ was introduced over 40 years ago by Eric Hoyle (1975), who presented what is effectively a continuum of schoolteachers’ professionality ranging from ‘extended’ to ‘restricted’. Distinct from professionalism, which Hoyle associates with status-related elements of an occupation, ‘professionality’ is used to refer to the knowledge, skills and procedures that teachers use in their work; as Hoyle (1975) presents it, the notion seems to combine professional ideologies, job-related values and vision, and to reflect what the individual teacher believes education and teaching should involve. Incorporating individuals’ predispositions towards, and levels of, reflectivity, rationality and, to some extent, intellectualism - or, perhaps more precisely, intellectual curiosity - it influences perspectives.

Whilst, as Hoyle seems to interpret the two terms, professionalism principally (though not exclusively) relates to codes of behaviour, professionality fundamentally relates more - though again, not exclusively - to ways, and levels, of thinking that underpins behaviour. My own work has been greatly influenced by Hoyle’s - particularly his concept of professionality, which I have defined as: ‘an ideologically-, attitudinally-, intellectually-, and epistemologically-based stance, on the part of an individual, in relation to the practice of the profession to which s/he belongs, and which influences her/his professional practice’, and which I have suggested may be considered the notional ‘singular unit’ of professionalism (Evans, 2008, pp.25-26). (My most recent thinking deviates from this, my earlier, perspective; I now see professionality not as professionalism’s ‘singular unit’, but as a very similar notion to what I call ‘professionalism’, and which, within my radically originally conceptualisation of it (professionalism), incorporates what I currently identify as three overarching components - behavioural, attitudinal and intellectual - each of which incorporates sub-components, or dimensions, of which there are 11 collectively: the processual, procedural, competential, productive, motivational, perceptual, (e)valuative, epistemological, rationalistic, analytical, and comprehensive dimensions. See chapter 2 of Evans, 2018, for a detailed explanation of this conceptualisation of professionalism.)

By describing two extremes, Hoyle (1975) illustrates the range of professionality typically manifested by teachers: ‘For the sake of discussion we can hypothesise two models of professionality: restricted and extended’ (Hoyle, 1975, p.318). The characteristics used to illustrate these two hypothetical models create a continuum that has, at one end, a model of the ‘restricted’ professional, who is essentially reliant upon experience and intuition and is guided by a narrow, classroom-based perspective which values that which is related to the day-to-day practicalities of teaching. The characteristics of the model of ‘extended’ professionality, at the other end of the continuum, reflect: a much wider vision of what education involves, valuing of the theory underpinning pedagogy, and the adoption of a generally intellectual and rationally-based approach to the job. I use the term ‘professionality orientation’ to refer to individuals’ location on the ‘extended–restricted’ continuum. Empirical evidence (Evans, 1997, 1998, 1999, 2002; Nias, 1985, 1989) supports the existence of such a notional continuum within teacher culture, giving credence to Hoyle’s heuristic models. Allowing for specific contextual differences, it is a continuum that, I suggest, is applicable to all education professions; indeed, my own research has revealed evidence of it amongst academics (Evans, 2000; Evans and Abbott, 1998). Of particular relevance to this paper is my application of it to researchers.

Adapted from Hoyle’s (1975) models of ‘restricted’ and ‘extended’ schoolteacher professionality, I have formulated parallel models that are applicable to (educational)
researchers, and which I explain in detail elsewhere (for example, Evans, 2009, 2010). Each model comprises a list of indicative characteristics, as shown in Table 1 (below).

<table>
<thead>
<tr>
<th>The researcher located at the ‘restricted’ extreme of the professionality continuum typically:</th>
<th>The researcher located at the ‘extended’ extreme of the professionality continuum typically:</th>
</tr>
</thead>
<tbody>
<tr>
<td>conducts research that lacks rigour</td>
<td>conducts highly rigorous research</td>
</tr>
<tr>
<td>draws upon basic research skills</td>
<td>draws upon basic and advanced research skills</td>
</tr>
<tr>
<td>fails to develop or extend her/ his methodological and analytical competence</td>
<td>strives constantly to develop and extend her/his methodological and analytical competence</td>
</tr>
<tr>
<td>utilises only established research methods</td>
<td>adapts established research methods and develops methodology</td>
</tr>
<tr>
<td>fails to develop basic research findings</td>
<td>generates and develops theory and theoretical perspectives from research findings</td>
</tr>
<tr>
<td>perceives research methods as tools, and methodology as a task-directed, utilitarian process</td>
<td>perceives research methodology as a field of study in itself</td>
</tr>
<tr>
<td>applies low level analysis to research data</td>
<td>strives constantly to apply deep levels of analysis to research data</td>
</tr>
<tr>
<td>perceives individual research studies as independent and free-standing</td>
<td>recognises the value of - and utilises - comparative analysis, synthesis, meta-analysis, replication, etc.</td>
</tr>
<tr>
<td>perceives individual research studies as finite and complete</td>
<td>constantly reflects upon, and frequently revisits and refines, his/her own studies</td>
</tr>
<tr>
<td>struggles to criticise literature and others’ research effectively</td>
<td>has developed the skill of effective criticism and applies this to the formulation of his/her own arguments</td>
</tr>
<tr>
<td>publishes mainly in ‘lower grade’ academic journals and in professional journals/magazines</td>
<td>publishes frequently in ‘high ranking’ academic journals</td>
</tr>
<tr>
<td>is associated mainly with research findings that fall into the ‘tips for practitioners’ category of output</td>
<td>recognises research’s value to policy and practice, and engages with practitioners and policy-makers and disseminates her/his findings in ways that are comprehensible to them, whilst also disseminating ground-breaking theoretical issues and contributing to, and taking a lead in developing, discourse on theory</td>
</tr>
<tr>
<td>perceives research activity as separate and detached from wider contexts requiring interpersonal, organisational and cognitive skills</td>
<td>recognises the applicability to a range of Contexts (including, in particular, work contexts) of generic skills developed within and alongside research activity</td>
</tr>
</tbody>
</table>

*Table 1: Indicative characteristics illustrating the extremes of the ‘restricted’-‘extended’ researcher professionality continuum*
Developing as an ‘extended’ pedagogic researcher ...

It is important to emphasise that ‘restricted’-‘extended’ professionality is not a binary scale, with detached and dichotomised, ‘either-or’, categories; few people are likely to exhibit every single characteristic of either the ‘restricted’ or the ‘extended’ researcher; rather, individuals will typically exhibit some characteristics of either model fully, some partially or sporadically, and some hardly ever or never.

The characteristics are intended to be indicative, rather than exhaustive, lists of what I refer to above as the three components of professionalism, as I conceptualise it, and, more specifically, of researcher development (Evans, 2011). They indicate the behaviour, attitudes and intellectual capacity that any research community (for example, disciplinary; institutional) may reasonably be expected to manifest, insofar as its members will inevitably be spread along the length of the ‘restricted’-‘extended’ continuum. For pedagogic researchers who wish to be taken seriously within the wider educational research community, it is important to develop ‘extended’ researcher professionality, by gradually manifesting as many as possible of its indicative characteristics, as presented in Table 1. These characteristics are typical of researchers who are developing proficiency in relation to what I call the ‘three Rs’ of pedagogic research.

The ‘three Rs’ of pedagogic research

Below, I briefly outline the nature and importance of each of revelation, reading and rigour in conducting and reporting pedagogic research – and in doing so I highlight their interdependency.

Revelation

To attract attention to their work, pedagogic researchers must offer revelation, in the form of new insight or knowledge. This is not easy to achieve, for academe is a dynamic information landscape whose features and prominent highlights are continually changing and evolving. It is important for pedagogic researchers to understand that this constant shifting and reshaping of what counts as a field’s useful knowledge base demands agility and awareness to negotiate and to navigate one’s way through, rather like - to borrow the evocative skating-on-thin-ice metaphor that Barnett (2011) applies to his work on present-day professionals - their always needing to keep ahead of the ice cracking behind them. To avoid plunging into the frigid water, pedagogic researchers must keep up to date with their field’s current knowledge foci and outputs – its fads and fashions - rather than remain fixated on yesterday’s prominent issue or theoretical perspective. They must offer revelation through research findings that take the field forward, extending its boundaries by adding new items to its agenda, rather than revisiting old ones from which the wider educational researcher community has long since moved on.

As a reviewer for many educational research journals, I am frequently sent submitted papers that are simply out-of-date in their identification and treatment of the issues upon which they focus, the literature reviewed, or the theoretical perspectives within which they are framed. Often, they are 20 or more years out-of-date, with foci that perhaps reflect scholarship trends that were current when the submitting authors were students, or when they first started learning and reading about educational research, or when they once attended a workshop on this or that topic that stuck in their minds. These authors clearly have failed to grasp that the field has moved on – apace – in the
last two or more decades, and what they are writing about is now well and truly passé, offering no revelation.

Lack of revelation stems from, and reflects, researchers’ unfamiliarity with their chosen field or topic, and where it currently lies; failure to understand the complex relationship between ideas that cross field boundaries, and to map intersecting and overlapping fields and appreciate the insight which a field or sub-field may offer in researching a related one; failure to recognise who are the field’s or sub-field’s current key players, and what they contribute; failure to spot when a field or sub-field has moved on since they last engaged with it; and undiscerning evaluation of knowledge claims - that is, accepting published knowledge, discussion or theoretical propositions or perspectives uncritically. If only these researchers would leave their old textbooks on the shelf and turn to the most recent issues of relevant journals to get a sense of their field’s direction of travel, they might perhaps realise the crucial importance of reading.

Reading
There is one sure way to combat the failures outlined above, and that is to read. Educational researchers - pedagogic or otherwise - who wish to be taken seriously by producing valuable and valued research must read, and read, and read. Such reading should indicate who are the current ‘big’ names - the key players - in the field in question, and it should involve copious and careful reading of these key players’ work, and of selected work that they in turn refer to or cite. This extensive reading process is traditionally referred to as ‘mastering’ the field, but ‘mastering’ is a misleading term, for the publications proliferation that has occurred in the last half-century has resulted in no field’s being master-able; even seemingly small, niche, still-developing, sub-fields or topics that might appear master-able, will inevitably be linked to and overlap with several other fields or topics, that must themselves be read if sufficient light is to be shed on the related niche one.

The aim of such reading is to develop a mental map of the field’s landscape – as it appears today, and as it has developed and evolved over the years. By this process, researchers may plot where their own work best fits and enhances the landscape. As I emphasised in my keynote talk, it is a process that, from scratch, will take at least a year of frequent, sustained reading if it is to be done properly and effectively. There are absolutely no shortcuts to the process, yet many pedagogic researchers evidently think, or hope, that there are; they typically conduct research based upon highly selected reading that has taken them into one tiny, long-neglected, corner of a landscape that they should have explored much more determinedly and thoroughly than their writing suggests they have done. Dependence on such outdated and inadequate knowledge of their chosen field’s current epistemic landscape is probably the main reason why pedagogic researchers’ submissions are rejected by leading peer-reviewed journals.

Insufficient reading, like failure to offer revelation, is both symptomatic and a key feature of weaknesses in relation to the third R: rigour.

Rigour
It is a common misconception that rigour relates only to empirical research, and is tied up with features of the research design and method, such as sample size, amount and quality of data collected, appropriateness of data collection tools and analytical
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approaches, etc. Rigour is indeed related to such features of empirical research, but its reach extends beyond them. Rigour applies equally to empirical and non-empirical research; to the reporting and dissemination as much as to the planning and execution of research; to conceptual and theoretical papers as much as to the writing up of empirical studies; to argument and discussion as much as to accounts of what was done, when, where, with whom, why, and with what results. This breadth of application is implicit in how rigour is explained in official documentation relating to the UK’s research excellence framework (REF); in REF terms, ‘Rigour will be understood as the extent to which the work demonstrates intellectual coherence and integrity, and adopts robust and appropriate concepts, analyses, sources, theories and/or methodologies’ (REF 2019/02, para. 193).

All papers submitted to peer-reviewed journals therefore have a rigour ‘measure’: a location on a notional or hypothetical rigour continuum that ranges from high to low. This location is subjectively gauged by the paper’s reviewers and readers - and if it is submitted to the REF, by the REF panellists. Such gauging is by no means an exact science; in some respects it is impressionistic, not least because word limits imposed on most papers preclude the inclusion of details of every aspect of rigour that was applied to an empirical research project, or of every point that might strengthen an argument or conceptual analysis. Yet there are details and foci that may be included in a paper to inject rigour into it. Below, I repeat the small selection of ideas for such rigour-injection that I outlined in my keynote talk at Brighton.

**Critiquing ideas and theoretical perspectives**

Uncritical regurgitation of ideas and perspectives that appear in the literature is unrigorous. It demonstrates weak scholarship, because scholarship should involve discussion and debate, rather than unquestioning acceptance of (published) ideas, views and perspectives. A weak literature review is one that presents, parade-like (with one reference to a text following another, and then another, in linear fashion), an account of what has been read. A scholarly literature review, in contrast, presents an overview of the literature’s ‘messages’ organised coherently, grouped into ‘schools of thought’. A scholarly literature review uses the literature as a tool, not as an ornament that displays how much the author has read; it is used as a tool for lining up arguments and perspectives to support the article’s - the author’s - overarching argument (either by presenting perspectives that are aligned with, or by presenting those that are opposed to, the main argument and that, in the latter case, give the author the opportunity to dispute the perspectives presented). It is worth knowing, too, that the current trend is to avoid using ‘literature review’ as a section heading; this is considered out-moded; rather, headings most often refer to the focus of the discussion within the section.

**Formulating one’s own theoretical perspectives**

In my keynote talk I referred to ‘doing theory by numbers’. I am not the originator of this term; I recall reading it somewhere and being impressed with it, so I have adopted it to convey what I believe (though I cannot be certain) it was originally used to convey: the application of established theory or theoretical perspectives as an analytical frame, for the purpose of ascertaining - and reporting - the extent to which one’s own research findings, or arguments, corroborate or are aligned with the theory. This is the most common approach to using theory in educational research.
Such ‘theory by numbers’ is considered a scholarly approach - one that, applied carefully, injects rigour into research – and I do not dispute this view. Certainly, rigour is evident where research findings fail to corroborate the selected established theory, and where the researcher, rather than simply pointing out the discrepancy or lack of corroboration, develops and presents well-formulated suggestions and argument for why it is likely to have occurred. In REF terms, many such well formulated discussions and arguments are likely to merit 3* and in some cases even 4* gradings. But the path that leads to theory development and theory generation extends beyond such ‘doing theory by numbers’, and for my part, I have derived considerable professional satisfaction from having followed it as far as I have been able, developing my own original theoretical perspectives in the form of, for example, conceptual models and processual models - and even what I present as my own original theory: proximity theory, which posits that ‘job-related attitudes and affect are determined by the proximity of what is subjectively perceived as one’s current actual to one’s current ideal job situation’ (Evans, 2018, p.140). The important point is that theory is not simply an idea or a perspective that has been published in an article or a book; as I interpret the term, theory is a universally applicable explanation for how or why something occurs, or is as it is. Being universally applicable, theory is context-independent (see Evans 2002, chapter 9, for guidance on formulating theory and theoretical perspectives, by seeking context-free lowest common factors shared by research findings).

**Conceptual clarity and definitional precision**

I address this issue in the introduction to this paper, and in returning to it here I afford it the most coverage of my ideas for injecting rigour into pedagogic research because, of the three ideas, it is the easiest to apply. It perhaps also represents – and this is an anecdotally-based and impressionistic view derived from my extensive experience of reviewing research papers – one of the most common weaknesses of pedagogic research (along with evident lack of up-to-date knowledge of the field in question).

To repeat the message conveyed at the start of this paper: it is essential for pedagogic researchers who wish to be taken seriously by the wider educational research community to define the key terms or concepts that are the foci of their work. The most intellectually rigorous way to do so is to present a stipulative definition (ideally, as the culmination of a conceptual analysis), rather than merely describe the features or characteristics of the key issue being discussed, but the latter is acceptable, for the aim is to convey as precisely as possible what one (the researcher) means when using a particular term. Above all, it is important to recognise that researchers who do use a term – such as student engagement, as I illustrate in the opening paragraphs above – without clarifying how they interpret it, risk undermining their research’s construct validity, and thus significantly diluting the rigour of their work. (At this point I refer readers to chapter 3 of Evans 2002 for a step-by-step guide to formulating a stipulative definition, or critiquing and adapting a published definition.)

So, for example, if you refer to ‘effective’ something or other – teaching, or course delivery, or measures to increase student engagement - what precisely do you mean by ‘effective’? Effective to whom, by what standards, and in relation to what? For something to be effective, what does it have to have, or be, or do? And is it a question of a binary scale - effective-ineffective - or is effectiveness more nuanced, with gradations
that are perhaps better represented by a continuum? And, if so, are you able to identify examples of practice (or policy), from your own research or from the literature, that illustrate different points on such a notional continuum?

Similarly, if you are writing about people’s ‘identity’, what do you mean by ‘identity’? Is identity something that only the identity-holder is entitled to determine, or may a person’s identity be ascertained by on-lookers: by identity beholders? And if you are writing about innovation, what do you mean by ‘innovate’? Do you mean something radically new, that no one has ever done or thought of, or do you mean ‘new’ to the people involved, or within the standards that prevail within a disciplinary field? If you are writing about something being ‘student-centred’, again, what exactly do you mean by that? Who determines whether something is student-centred? – the ‘designers’ of the provision, or those for whom it is designed, and who use it: the students? And what features must educational provision incorporate to merit the descriptor?

Standards vary from journal to journal, and the peer review system is notoriously problematic and recognised as flawed. Some work that is weak on rigour does therefore slip through the net and get published. But its lack of rigour is often noticed by those sharp-eyed readers who are critically ‘pedantic’, or who themselves practise rigorous scholarship. So, it is certainly possible to be published even without incorporating conceptual clarity and definitional precision into one’s work, but there are people who will notice the shortcomings of such work and judge its authors accordingly, unconsciously placing them towards the ‘restricted’ end of the notional researcher professionality continuum.

**Concluding thoughts**

Whether it is applied to schoolteachers, academics, or specifically to pedagogic researchers, I see the ‘restricted’-‘extended’ professionality continuum as the pathway to professional development, for any movement – however slight, and however slowly or gradually it occurs – towards the ‘extended’ end represents professional development. Pedagogic research is often perceived as the Cinderella of educational research: as low-grade work that, based on outdated reading, lacks the rigour and the capacity to offer the kind of revelation that might qualify it as serious educational research. By extension, pedagogic researchers are susceptible (as are researchers in any field) to derision from scholars whose mastery of the three Rs is evident in their published work; as Chapman observes: ‘The academy judges by the theory and scholarship emerging from a particular field and discipline. Can’t be helped, that’s the nature of academic discourse and its self-construction. We stand or fall by the weight others attribute to our scholarship’ (Chapman, 2005, p. 310).

In the case of pedagogic research, it is its practitioners - its researchers - who have the capacity and the opportunity to overturn such negative assessments. Their scholarship will be judged by their familiarity with their chosen topic or sub-field, and by the rigour that they apply to their research and writing, which, in turn, will be informed by the reading they have evidently taken the time to do – or not. Developing as, or into, ‘extended’ professionals represents a sure-fire way to raise the status of pedagogic research and the esteem in which it, and its researchers, are held. This article offers a few pointers towards such progression.

References


Developing as an ‘extended’ pedagogic researcher ...


Biography

Having worked at the Universities of Warwick and Leeds, Linda Evans is Professor of Education at the University of Manchester and associate dean for academic and research staff development within the Faculty of Humanities. Her research focuses on professional working life, and she has particular expertise in the fields of researcher development, academic leadership and research leadership. Whilst the context of her work spans both the compulsory and the higher education sectors, her most recent funded projects have focused on university professors and professorship. Frequently in demand as an invited speaker, she has presented keynotes in France, Germany, Portugal, the Netherlands, Australia, Russia, Mauritius, the Republic of Ireland, and, of course, the UK. She has published over 70 papers or chapters and eight books, including Teaching and Learning in Higher Education (1998), and, more recently, Professors as academic leaders: Expectations, enacted professionalism and evolving roles, which was published in 2018 and has been translated into Spanish. She is the former editor of the International Journal for Researcher Development, and currently associate editor of the journal, Educational Management, Administration and Leadership.
Methods for researching socio-material perspectives of partnership working with service users and the public for clinical commissioning

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Abstract

Patient and public engagement and involvement (PPEI) is an integral component of course curricula development in medical and health care education. Professional regulatory bodies require PPEI for course design, delivery, review and even student selection. Furthermore, the work of health care practitioners intrinsically entails PPEI practices including within Clinical Commissioning Groups (CCGs) in the English National Health Service (NHS). CCGs are required to engage and involve service users (patients and carers) and the public in the commissioning of health and care services for local communities. This paper reflects on the methods used for researching a rapidly moving landscape embracing changes in policy and practice that affect working and learning. It centres on the management of focus groups and what can be learned to inform pedagogic research for PPEI in clinical commissioning.

Investigating how clinical commissioners, the public and service users make significant decisions shaping local health and care services provides deeper understandings that can inform curriculum design on partnership, public engagement and clinical leadership in the training of health professionals. A practice theory lens was used to provide new insights on the empirical findings of a qualitative research project conducted in two CCGs. Seminal work on ‘communities/landscapes of practice’ helped articulate the visible and hidden practices shaping PPEI with respect to the socio-material aspects of the situated learning. The initial findings were presented at the University of Brighton Pedagogic Research Conference in February 2018.

Keywords: Patient and public engagement and involvement (PPEI); clinical commissioning; research methods; focus groups; socio-material entities.

1. Introduction

The NHS Sustainability and Transformation Partnerships (STPs) were established as a strategic initiative to provide a health and care system that reflects the needs of patients and communities. STPs were challenged to break down organisational and hierarchical barriers and build networks across the local health economy (Vize, 2017). CCGs
and clinical commissioners, who are predominantly general practitioners (GPs), are therefore, well placed to better integrate their existing networks and partnerships with local government and the voluntary and community sectors, including service users and the public. CCGs are membership organisations, the members being GP practices within the defined CCG geographical area (NHS England, 2014). They have a statutory responsibility for the planning, purchasing and monitoring of health and care services in those areas under the Health and Social Care Act, 2012 (HASCA) (Wenzel, 2017).

This research explored the practice of service user engagement for commissioning and leading health and social care services with clinicians (GPs) involved in strategic clinical commissioning. A focused ethnography was conducted in two case study sites in South East England, comprising an urban CCG and a more rural CCG. Full ethical approval was obtained including proportionate review with the National Research Ethics Service. Although findings from qualitative research cannot be generalised, a sociological focused ethnography allows a pragmatic and efficient approach to exploring cultural perspectives (social practices) within practice-based professions (Cruz and Higginbottom, 2013; Wall, 2015). Real time ‘snapshots’ of the practice of participants provided a deeper examination of PPEI activity for clinical commissioning. The research methods included focus groups, observations, interviews and examination of artefacts, all of which are part of the ethnographer’s tool kit, with interviews providing scope for the ‘thick description’ of the participants’ perspective (Hammersley and Atkinson, 2007). The aims of the study were to identify how clinical commissioners, members of the public and service users make significant decisions shaping local health and social care services. In addition, it also considered how this could inform curriculum design on partnership, public engagement, and clinical leadership in the training of health professionals.

We examined how PPEI had been previously theorised and reported. This was limited with respect to commissioning and leading health and care services. Ideas about partnership and its importance as a goal for healthcare and healthcare improvement (Ocloo and Matthews, 2016), plus the concept of trust as a social practice, were used to inform the theoretical and conceptual framework of the study.

Here, we briefly explain socio-material perspectives and why this might be important for clinicians learning how to engage in PPEI for clinical commissioning. We then report some of the findings from the focus groups and how the data informed additional questions for the semi-structured interviews, as well as shaped some of the themes.

2. Socio-material perspectives

Wenger’s seminal work on ‘communities/landscapes of practice’ (Wenger, 1998; Wenger-Trayner et al., 2015) helped articulate the visible and hidden practices shaping PPEI in the two CCGs. Wenger’s theory of communities of practice (CoPs) primarily focuses on learning as social participation. Identities are constructed by our active participation in the practices of social communities and thereby create a sense of belonging (Wenger, 1998). The study envisaged a CCG as comprising numerous CoPs for PPEI for clinical commissioning.

CCGs in the English NHS formed the backdrop or ‘landscape of practice’ since all CCGs are affected by the HASCA in their day-to-day practices. Examples of CoPs are the various committees that reflect strategic clinical commissioning, such as the Governing Body (GB), the geographically-based GP locality member meetings and the CCG com-
communications and engagement committee. All the CoPs depicted were required to have patient and public representation for the functions they perform to comply with PPEI requirements of the HASCA legislation.

The concept of practice conveys a ‘doing activity’ in both a social and historical context. It includes the explicit and tacit as illustrated in Table 1 (below) which adapts Wenger’s explanations of a practice based on his seminal work (Wenger, 1998). The doing is separated into the social and material aspects. It is equally relevant to PPEI for clinical commissioning, however, the list is not exhaustive.

<table>
<thead>
<tr>
<th>Social</th>
<th>Material</th>
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<tbody>
<tr>
<td>What is said/unsaid</td>
<td>Language</td>
</tr>
<tr>
<td>What is represented/assumed</td>
<td>Tools</td>
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<tr>
<td>Subtle cues</td>
<td>Documents</td>
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<td>Untold rules of thumb</td>
<td>Images</td>
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<td>Recognisable intuitions</td>
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<td>Well-tuned sensitivities</td>
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<td>Specific perceptions</td>
<td>Specified criteria</td>
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<td>Underlying assumptions</td>
<td>Codified procedures</td>
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<tr>
<td>Embodied understandings</td>
<td>Regulations</td>
</tr>
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<td>Shared world views</td>
<td>Contracts</td>
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Table 1: Concept of practice including both the explicit and tacit. Adapted from Wenger (1998)

To develop the idea for a conceptual and theoretical framework to inform the methodology and analysis of the research data, we focused on five components or aspects: participation, materiality, competence, boundary encounters and meanings. Past, present and future boundary encounters are shaped by prior experiences of CoPs, other CoPs where we are active, and future ones that might influence our perception of the socio-material entities, for example, the experience of leading a work stream or taking minutes of meetings. Each of the five components was drawn from social learning theory and practice theories (Lave and Wenger, 1991; Fenwick and Nerland; 2014; Gherardi, 2015; Shove, Pantzar and Watson, 2012; Wenger, 1998; Wenger-Trayner et al., 2015). Insufficient space prevents further elaboration, but CoPs were instrumental to the conceptualisation. The study question was:

‘What does it mean to work in partnership as clinicians and service users to commission and lead services?’
Entry to the two case study sites was via the CCG Engagement Officers as the researcher (DH) did not have direct access to contact details of GP leads, service user and lay representatives.

3. Research methods

The research methods were consistent with the theoretical perspective of the study (social practice theory) and the epistemology (social construction). Focus groups were planned as the initial data-gathering method, followed by observations at CCG meetings where PPEI should be taking place. Interviews were then conducted as the third phase of the study and relevant artefacts collected along the way. Each method is now explained for the purposes of the research study.

3.1 Focus groups

O’Reilly (2009) prefers to think of focus groups as planned discussions, otherwise they can seem like market research with directed and purposeful questioning. However, they are not a ‘back door route’ to interview data (Barbour, 2014). Whilst one advantage of focus groups might be saving researcher time and costs, a strength is their opportunity to discover why people think the way they do (Ibid). They allow the researcher to listen and observe conversations between participants to obtain established knowledge (Remenyi, 2013). Thus, showing what people are prepared to share in their own words to provide ‘public accounts’ (Barbour, 2014). Discussion might be lively with views created or changed through the course of the group interaction (Ibid). It was therefore important to capture this dynamic within the transcripts and associated field notes.

Remenyi (2013) argues that the academic focus group for research purposes is an ancillary technique for obtaining contextual background data, and so is useful at the outset of a project. It can also be used as a barometer to ensure the project is on track, and at the end of a project to test out the findings (Remenyi, 2013). The number of groups and their composition therefore assume greater significance. The 10 - 12 participants often used in market research focus groups is not appropriate for academic research and a smaller size group is recommended (Remenyi, 2013; Barbour, 2014). If the group is too large, it can be difficult to manage an animated discussion and keep notes whilst adhering to the prompt questions. An assistant focus group facilitator is sometimes required. Between six and eight participants is recommended (Remenyi, 2013; Barbour, 2014) and they should be selected on the basis of a shared experience or attribute (Barbour, 2014). Ideally, the participants should not know one another, but this was always going to be a challenge in the two CCGs due to the compositions of the various CoPs. Participants were often members of more than one CoP.

The focus groups addressed the first subsidiary research question: ‘What is the nature of a trusted peer relationship?’ They were held at the start of the project to assist understanding of partnership working. Participants were either exclusively service users and lay representatives or exclusively clinicians (GPs) with a leadership role in the CCG. Two focus groups for each CCG making four in total were therefore planned. The discrete groups were to encourage open discussion and the exchange of ideas, since not everyone would be involved in the same CCG projects and work streams. Participants, or informants in ethnographic terminology, can prompt one another in discussions (Hammersley and Atkinson, 2007).
Three out of the planned four focus groups were completed with participant information sheets provided and written consent obtained beforehand. There were 11 participants in total; eight service users and lay representatives and three clinicians who were GP leads for clinical commissioning. All had participated in engagement and involvement practices for the commissioning of health and care services within the two CCGs since April 2013. The HASCA implementing CCG clinical commissioning became operational in April 2013. Each focus group was of 45 minutes duration and proceedings were digitally recorded. Transcribing by the researcher (DH) allowed familiarity with the content. Four prompt questions were used which are later discussed with reference to the findings.

Focus group 1 comprised five service users and lay representatives from the urban CCG. The lay representatives were the governance and PPEI representatives on the CCG Governing Body (GB). Focus group 2 comprised three GP leads in the urban CCG and focus group 3 comprised service users and a carer in the rural CCG. The carer had been involved with the procurement of community services in the rural CCG. Her perspective was therefore, broader than providing feedback on experiences of health services often typical of service user and public representation (O’Shea, Chambers and Boaz, 2017).

The focus groups were disappointingly small with only focus group 1 (five participants) close to the recommended size, although four to six people is viewed as manageable (Remenyi, 2013). It proved too difficult to conduct a GP lead focus group in the rural CCG due to several factors, including the geographical location of rural GP practices which, unlike the urban CCG, were some distances apart. It was not feasible for GP leads to meet at another GP practice for a focus group given their patient caseloads. It was also difficult to secure time during the one day of the week they were participating as commissioners on CCG premises. Instead, two GP locality member meetings were observed, and the data considered alongside the other observations. GP locality member meetings are held for and by the GP membership to discuss CCG work streams, some of which may be centrally directed by the NHS. The meetings should include patient and public representation.

Data from the focus groups informed the construction and sequencing of questions within the semi-structured interviews, for example, colloquialisms and how they are used. Similarly, the focus group discussions informed which meetings to observe and the format of observational records.

3.2 Observations

A total of 15 non-participant observations were completed in the two CCG case study sites together with analysis of documentary sources and material artefacts. The observations were made over the course of 11 months at strategic or sub-committee meetings or work streams, where service users and/or public representatives were present, and their views shared or reported to clinical leaders. The meetings constituted the regular business of CCGs and were held every month or two months. Some were required to be held in public, for example, the GB meetings every two months. It was not possible to view every PPEI practice for clinical commissioning, and so those selected provided snapshots for the focused ethnography. The selection was largely determined by informants referring to meetings they attended. There was only one meeting where there was not a service user or lay representative present. The number of observations was not
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pre-determined since the iterative nature of the study meant further observations may have been required to gather specific data.

Observing with a focus is essential in ethnographic studies (Checkland et al., 2013). Observations were overt as the researcher (DH) was not an insider/participant researcher. They were also intended to provide data for the first subsidiary question: ‘What is the nature of a trusted peer relationship?’ Field notes were recorded alongside, but these can present challenges. Participants can behave differently if note-taking is obvious (Barbour, 2014) so recollection and ‘write up’ soon after the encounter is important.

3.3 Interviews

Interviews provide what is described as ‘thick description’ and are the most important data collecting technique for the ethnographer (Cruz and Higginbottom, 2013). An ethnographer is attempting to learn about the participant/informant from their perspective (O’Reilly, 2009), so it is the quality of the interviews that matters as opposed to the quantity. Robust ethnographic interviews require the researcher to be iterative in their approach (Hammersley and Atkinson, 2007). Interviews are never just conversations but reflexive. A list of issues may be on the researcher’s agenda, but the sequencing can change according to the response. The questioning mode may be directive or non-directive depending on what the interviewee or informant reveals (Ibid). To comply with ethical requirements a semi-structured interview schedule was used. A telephone interview was offered as an alternative where it was difficult to secure time for face-to-face interviews. There is always the risk an interviewee will tell you what he/she thinks you want to hear or be cautious about disclosure, hence, the rationale for using two other data-gathering methods: focus groups and observations, to verify or dispel data. This is integral to triangulation where various data collecting methods and multiple sources, including artefacts, provide a richer understanding of organisations and help determine the consistency of findings (Yin, 2014; Remenyi, 2013).

Thirteen interviews were conducted in the two CCG case study sites. The interviewees were GB lay representatives, GP leads, GP locality member leads and GP clinical chairs of the two GBs. There was also one service user representative involved with procurement of a service. This phase of the study aimed to address the second subsidiary question: ‘How can relationships be developed to demonstrate effective service user and clinician engagement?’

The interviews were conducted face-to-face over a period of eight months between March and November 2016, predominantly on CCG premises. Three interviews were carried out in the homes of participants because it was more convenient for the participant, and facilitated discussion that would have been either impossible or time-restricted ‘at work’. Two of these three interviews were with GPs and the third the service user representative for the diabetes service procurement. All interviews were audio-recorded, transcribed and anonymised. The transcripts were then checked with the participants for accuracy.

The duration of the interviews was between 36 and 60 minutes. Seven of the participants were male and six women. Of the nine GPs in a clinical lead role, six were female and three were male. Although a convenience sample, this was remarkable since early reports indicated that fewer women progress in GP CCG leadership roles compared to their male counterparts and are under-represented on GBs (Segar, 2015). Discussion
was facilitated by using the semi-structured interview schedule based on a Donabedian (2005) quality approach of 'structure', 'process' and 'outcome'. Structure pertained to engagement activities within the CCG, including roles undertaken, as these were invariably formalised within the CCGs. Process was the elaboration of the nature and flow of the activities that constituted engagement and involvement to provide a deeper description and understanding. Process and processes can be likened to the 'competence' element of practices described by Shove and colleagues (2012); forms of understanding and practical knowledge that constitute actions. Elsewhere, this knowing in practice has been described as ‘regimes of competence’ where competence is defined by the community and includes a social dimension (Wenger-Trayner et al., 2015). It is not merely an individual characteristic. Competence is recognised by members of a CoP and can be both stable and shifting (Ibid). Outcome was intended to recall outputs from the engagements and therefore elicit meanings, another element of social practice, with respect to trust relationships and working in partnership (Shove, Pantzar and Watson, 2012). Participants often referred to events and work streams that predated the CCG and were from prior iterations of commissioning when working within a Primary Care Trust. This required further probing and clarification to extract the required information. Table 2 (below) provides an extract from the semi-structured interview schedule. Finally, there was opportunity for participants to add any further comments.

### Outcomes

1. Have you seen a work stream activity through to its conclusion? If yes, elaborate. **NB** Ascertain when – before April 2013? How does the experience prior to April 2013 compare with current activity – expand if relevant.

2. How have you been kept involved after the conclusion? For example, are you asked to review or monitor the work stream once services have been procured and implemented?

3. How would you know if the project has improved services?

#### Table 2: Part of interview schedule for outcomes

3.4 Artefacts

Documentary analysis is an important part of focused ethnography (Higginbottom, Pillay and Boadu, 2013) and practice theories with a socio-material perspective. CoPs note the duality of participation and reification of situated learning (Wenger, 1998). Documentary sources and material artefacts such as notes and minutes of meetings, together with CCG website content were useful data sources. They are an important additional source of evidence when using ethnographic research techniques, and can be used to confirm or contrast observational and interview data (Higginbottom, Pillay and Boadu, 2013). Focused ethnography utilises multiple visual, auditory and photographic artefacts to capture data, however, the method was modified to preserve confidentiality.
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and maintain anonymity consistent with ethical approval of the study. Documents and artefacts were scrutinised for content relating to PPEI and if present, included in the data analysis. Most were in the public domain and where these were not integral to the meetings observed, they were listed as additional artefacts. A total of 32 documentary sources and material artefacts were scrutinised. Some of these were collated sets of minutes, for example, GB minutes. Researcher field notes were included to complement the data analysis and interpretation where appropriate.

4. Managing and analysing the data

The computer assisted/aided qualitative data analysis (CAQDAS) software package NVivo version 11 was used to manage, sort and make sense of the large amount and multiple sources of text data. NVivo allows data to be managed and sorted into what the software calls ‘nodes’, which are containers for sections of text that have been coded and categorised by the researcher. Hierarchies can be created so that parent nodes (categories) and various child nodes (sub-categories) facilitate further exploration of the data. Codes can be demographic, descriptive, factual or conceptual in type (Pope and Mays, 2006). They classify so that different sections of the data can be compared in a systematic way (Gale et al., 2013). Therefore, it is crucial that codes are agreed and transparent. After coding and arranging into categories, themes, patterns and trends are sought. As these emerge from the data, they must be explained and interpreted with reference to the existing body of knowledge.

Open coding commenced with the focus group transcripts. This inductive approach is considered good practice to capture the unexpected (Gale et al., 2013). It entails labelling data which are felt relevant in any shape or form and might include behaviours, incidents, emotions or values (Ibid). Initial thematic analysis revealed practices relating to situated learning, such as role and status in the CCG, clinical leadership, representation, nature of partnership and what success as a trusted peer for clinical commissioning looks like. These practices were evolving within the CCG communities as participants pursued working in partnership for clinical commissioning. The focus group discussion quickly showed the significance of role and its status. Participants compared how their roles and appointment had transpired in the CoPs.

The prompt questions were used to make sense and organise the findings. Table 3 (over) shows the preliminary themes (middle column) and subthemes (right-hand column) using the four focus group questions as reference points (left-hand column). The middle column also links the initial themes with the components of Wenger’s (1998) CoP theory. However, by treating the data in this manner, there was a danger of confirming what might be expected. This would likely repeat findings found elsewhere in the literature about involvement and engagement, such as tokenism, single issues, the ‘usual suspects’ and ‘too much baggage’ (El Enany, Currie and Lockett, 2013; Learmonth, Martin and Warwick, 2009).

The focus groups were a snapshot in time from late 2015 to mid-2016, but by observing the relationships between participants as a socially situated learning process, practice theory could perhaps make this explicit. The focused ethnography enabled opportunities to observe the developing relationships as well as interview participants in the two evolving CCGs. As interview transcripts and observation notes were written up, plus key sections of documents (artefacts) identified, they were added to the NVivo project file.
<table>
<thead>
<tr>
<th>Prompt question</th>
<th>Theme and CoP component* (Wenger 1998)</th>
<th>Subtheme</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 What is ‘working in partnership’ and what does it mean to you?</td>
<td>Partnership working</td>
<td>- Hard work and complicated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Lip service to partnership, tick box exercise</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Other individuals and groups key to PPEI</td>
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<td></td>
<td></td>
<td>- Needing feedback, seeing it from all sides</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- Out of comfort zone - learning together</td>
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<tr>
<td></td>
<td><strong>PRACTICE:</strong> learning as doing*</td>
<td></td>
</tr>
<tr>
<td>2 In what ways do patients, carers and the public work with commissioners?</td>
<td>Role in CCG</td>
<td>- Additional roles, past roles</td>
</tr>
<tr>
<td></td>
<td><strong>IDENTITY:</strong> learning as becoming*</td>
<td>- Hours of work in CCG role</td>
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<tr>
<td></td>
<td></td>
<td>- Recruitment and tenure/status and how recruited to role</td>
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<td></td>
<td></td>
<td>- Role definition, understanding role</td>
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<td></td>
<td></td>
<td>- Role as a GP: understanding GP membership and locality</td>
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<td></td>
<td></td>
<td>- Representation: PPEI challenges and benefits</td>
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<tr>
<td></td>
<td></td>
<td>- Muddling PPEI with patient activation</td>
</tr>
<tr>
<td>3 What would it mean to trust somebody and feel like a peer to them when</td>
<td>Legitimacy</td>
<td>- CCG processes with service user and lay representatives</td>
</tr>
<tr>
<td>discussing commissioning or changes to services?</td>
<td><strong>COMMUNITY:</strong> learning as belonging*</td>
<td>- Power imbalance, feeling like a ‘generic patient’</td>
</tr>
<tr>
<td></td>
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<td>- Public not understanding commissioning</td>
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<td>- Too much baggage</td>
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<td></td>
<td>- Wasting my time</td>
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<tr>
<td></td>
<td></td>
<td>- Feeling part of it, new ways of working</td>
</tr>
<tr>
<td>4 How would you know if that trusted peer relationship was working or valued?</td>
<td>What success looks like</td>
<td>- Being heard - more than tokenism</td>
</tr>
<tr>
<td></td>
<td><strong>MEANING:</strong> learning as experience*</td>
<td>- Changes implemented by service users and lay representatives</td>
</tr>
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<td></td>
<td></td>
<td>- Humanity and belonging</td>
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<td></td>
<td></td>
<td>- Not feeling valued</td>
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<td></td>
<td></td>
<td>- Sustainable practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- ‘They don’t know what to do with us’</td>
</tr>
</tbody>
</table>

Table 3: Preliminary themes and subthemes from three focus groups

in an iterative manner. The data were coded to more than one node as appropriate, for example, an interview comment referring to the GB might also be referenced to a role in the CCG and clinical leadership.

There were 148 data codes on completion of coding constituting 11 nodes or categories as listed in Table 4 (opposite). Some nodes were clearly influenced by the additional questions and focus group questions. The additional questions were compiled to prompt during observation, interview and analysis. The study design did not include focus groups and interviews with commissioning managers and other CCG staff. The focus groups were conducted with GP leads and lay representatives and service users. There-
fore, observations, documentary sources, material artefacts and field notes were the only opportunities to capture direct contributions from other individuals key to PPEI commissioning practices. Table 5 (above) provides a sample of the questions emanating from the focus groups.

Qualitative data analysis requires immersion in the transcripts and field notes. For a focused ethnography it is important to ensure that the many voices are heard, what Coffey describes as ‘polyvocality’ (1999, cited by Light, 2010), and that data are situated and contextualised with reference to the wider literature and theories. This often requires returning to the original transcripts, observations, artefacts and field notes to ensure accuracy. Also, listening again to the audio recordings of the interviews and focus groups to check that context is not lost. Then, constant comparison of the data to abstract and summarise. Summaries of ‘data bundles’ are sometimes employed in ethnographic research where there are multiple data from observations and field notes that need to be condensed (Scott, Jones and Watt, 2010).

As the study data were so voluminous, the data were grouped into four bundles or ‘sets of practices’: trust, leadership, learning and partnership. These sets were largely
influenced by the research questions, but were then interpreted with the theory informed analytic framework and its five components mentioned earlier. The framework was applied to each set of practices to elicit themes from the socio-material aspects.

5. Conceptualising PPEI for clinical commissioning

The duality of participation and reification for social learning about working in partnership was demonstrated across the five components of the framework. It was important for answering the research question. By duality, we mean the distinction between participation and reification as two parts of PPEI practices as they were performed for clinical commissioning. Competence, for example, across all four sets of practices (trust, leadership, learning and partnership) was visible by its heavy reliance on materiality; reification evidenced by CCG checklists, meeting nationally determined criteria for work streams and selection criteria for service users and lay representatives. Conversely, GPs were not selected with the same rigour for their strategic clinical commissioning roles. What mattered was their participation, the learning as doing, the learning as experience and learning as becoming a clinical commissioner.

The study used a novel approach for researching PPEI for clinical commissioning to analyse and interpret partnership working within two CCGs. We assumed a different epistemological, ontological and theoretical position uncovering hidden practices that define PPEI as a practice entity. However, PPEI practice for clinical commissioning is like the tip of an iceberg, with multiple practice performances that lie below the surface. A conceptual map was subsequently developed that could be used by practitioners, CoPs and researchers, for examining PPEI for clinical commissioning as an entity and its construction across the complex landscape of clinical commissioning. Mapping practice in this way reveals the underpinning dynamics of social learning, and would be useful as a teaching tool in both classroom and practice settings to develop skills and knowledge of PPEI for clinical commissioning. It could be used by learners and practitioners where there is a focus on clinical leadership and commissioning within curricula.

6. Reflections and conclusion

This account reports the research methods used for a research project examining PPEI for clinical commissioning as a domain of practice. Findings from the focus groups as the initial data gathering method informed both the choice of observations and the semi-structured interview schedule. The research methodology discussed in this paper is a promising approach to developing deeper understanding of the visible and hidden practices relating to partnership in clinical commissioning phenomena. The findings suggest much closer attention must be paid to the explicit and tacit socio-materialities of partnership.

Making an appropriate choice of methodology is complex and also requires an understanding of some of the limitations. One consequence of using NVivo to categorise the focus group transcripts was that the style and flow of the debates and exchanges lost some of the synergy that shaped the views of participants. It did not do justice to the chain of ideas that typically should gain a better understanding and interesting insights (Remenyi, 2013). In addition, the small numbers within the focus groups reflected the busy schedules of all participants, and that a number of individuals were fulfilling several PPEI roles. However, if these ideas can be developed and enhanced so that clinicians,
service users and the public can work together in a trusted peer relationship, there is opportunity to move beyond the ‘atheoretical way of getting input’ (Ocloo and Matthews, 2016) for PPEI in clinical commissioning.


References


**Biographies**

**Dr Debbie Hatfield** is a nurse and qualified teacher. She was a senior lecturer at the School of Health Sciences, University of Brighton for 20 years teaching on undergraduate and postgraduate pre- and post-registration courses. In 2014, Debbie secured a PhD studentship at Brighton and Sussex Medical School sponsored by the Higher Education Academy. Her research explored partnership working between service users and clinicians to commission and lead health and care services. Particularly, the features of effective models of service user-clinician engagement and how this can impact the design of health care curricula. She completed her PhD in 2019 and was supervised by Professor Gordon Ferns, Dr Kay Aranda and Breda Flaherty.
Professor Gordon Ferns qualified in medicine from St Bartholomew’s Medical College, University of London. Following house posts, he trained in Chemical Pathology at St Bartholomew’s Hospital, London, where he also undertook the research for his MD, funded by a Wellcome Pathology Research Fellowship and Aylwen Research Bursary. He was appointed to a Chair in Metabolic and Molecular Medicine and subsequently Dean of Medicine at the University of Surrey. Gordon has worked at BSMS since 2012 as Head of the Department of Medical Education, and Honorary Consultant in Metabolic Medicine. He has written more than 500 publications.

Breda Flaherty is an independent consultant in the small business, healthcare, charity and university sectors. She holds a range of Board roles and leads BFA Development, with a 20 year track record in improving the organisational performance of individuals at the most senior levels. Her focus is on developing leaders beyond their ‘professional expert’ base, to stretch into leadership of teams, services and the wider business. Breda’s national profile includes Programme Leadership of the Aspiring Chief Executive programme within the NHS Leadership Academy.

Breda has a special interest in creating better Dementia care, partnering with patient leaders and national charities such as The Alzheimer’s Society. She jointly created a service user-led approach to the first national standards for HIV. At Brighton and Sussex Medical School, Breda leads the MSc Healthcare Leadership offer, where she champions widening participation and leads on university-business partnerships.

Dr Kay Aranda is Reader in Community Health in the School of Health Sciences at the University of Brighton. She has a long-standing involvement and research interests in community health and community nursing, health and social inequalities and feminism, gender and sexuality and women’s health. As a recent co-applicant for an ESRC seminar series, she has explored and continues to research the value of materialist feminisms and socio-material and practice theories in relation to health and care.
Exploring the relationship between attendance and attainment

DR VY RAJAPILLAI, SARAH VARNEY-BURCH AND SIMON WILKINSON
SCHOOL OF HUMANITIES

Abstract

This article reports on our study which investigates the relationship between students’ attendance in structured learning sessions and their impact on students’ academic performance. Studies in this area (Bati et al., 2013; Mearman et al., 2014) have already started to question the traditional view of a direct correlation between student attendance and attainment. They focus instead on factors such as the nature of the delivery of lectures, difficulty of subject matter, as well as adapting to a higher education environment. However, these studies still argue, explicitly and implicitly, that attendance in structured learning sessions has a direct impact on students’ academic performance, leading to attendance policies, which may even be coercive (Self, 2012). Data from our selected modules suggests that attendance and performance correlate weakly, and that the patterns of correlation between modules are quite different depending on size of cohort, assessment type and content. We argue that the relationship between attendance and performance is far more complex than previously believed, and that the correlations we see in the data result from the interacting relationships of multiple causes, to the extent that increased attendance does not necessarily lead to increased performance. We propose that we address the complex nature of attainment through engagement, rather than simply assume that attendance will lead to attainment.

Introduction

Like Halpern (2007a, p.335) we were struck by the anecdotal evidence around us that student attendance was declining and that this must surely be having a negative impact on their academic performance. Concerns about dropping attendance in higher education institutions (with particular emphasis on undergraduate attendance) may seem like a fairly recent problem, but according to Rodgers (2001), dwindling attendance at sermons in Oxford University in the fourteenth-century was already a concern. Although the number of studies looking at attendance in the past decade or so (Bowen et al., 2005; Bevitt et al., 2010; Halpern 2007a, 2007b; Hilal Bati, 2013; Kelly, 2012; Massingham and Herrington, 2006; Newman-Ford et al., 2008) indicate that this is a widespread and contemporary concern, the question of whether attending and attainment are actually causally related is rarely discussed. The assumption seems to be that getting students
to attend is beneficial but it is not clear whether these benefits are higher grades, more engagement in the course or something else altogether. In fact, it is not clear from the previous research whether attendance has any benefits to the student at all.

This study challenges the cause and effect models of previous studies that suggest that there is a positive correlation (Schmidt, 1983; Romer, 1993; Newman-Ford et al., 2008; Martinez, 2001) and assume a linear relationship between factors which affect attendance and the effect this has on attainment. We argue that assuming that the relationship between attendance and attainment is linear is over-simplistic, because the multiple interrelating factors that lead to attendance or non-attendance mean that attendance or non-attendance cannot be simply used as a predictor of attainment. We further suggest that rather than excluding the outliers from the data, it is these students who need to be better understood in order to understand the relationship between attendance and attainment. Furthermore, we argue that future research should focus on engagement rather than attendance as a possible predictor of attainment.

**Attendance and Attainment perspectives**

**Dropping rates of attendance**

While some studies have tried to simply understand why students miss classes (Halpern, 2007b; Kelly, 2012; Hilal Bati et al., 2013; Bates et al., 2018; Kaye and Bates, 2017; Halpern, 2007b; Mearman et al., 2014), others look for the impact on performance that non-attendance may have (Halpern, 2007a; Newman-Ford et al., 2008; Sund and Bignoux, 2018; Oldfield et al., 2019). Earlier arguments against attendance policies (St Clair, 1999) are revisited in the light of more recent changes in higher education where students may be seen by institutions, if not teaching staff, as ‘customers’ (Lomas, 2007) who demand ‘value for money’ (Woodall et al., 2014), whatever that may mean in this context.

Further studies have explored why attendance is dropping and if that may be determined by individual characteristics (Woodfield et al., 2003; Cooke et al., 2004; Oldfield et al., 2018). Others report on their institutions’ interventions (Bowen et al., 2010; Bevitt et al., 2010) and the use of data monitoring (Bevitt et al., 2010; Oldfield et al., 2018) in an effort to improve attendance. Due to the underlying assumption that attendance needs to be improved, whether attendance or lack of it matters at all is not so widely discussed (although see, for example, Massingham and Herrington, 2006; Halpern, 2007b). Following on from these studies, our research set out to explore the relationship between attendance and attainment for our modules and cohorts of students. However, our approach was not to disregard the multiple inter-relating factors that lead to attendance or non-attendance, as these may lead to correlations with attainment but not in a linear fashion.

**Attendance policies**

The belief that universities should be enforcing attendance seems to be gaining ground, although early studies (for example, St Clair, 1999) tended to argue against such policies. Halpern (2007a, p. 346) suggested that because the impact of attendance on academic achievement is moderate, it is ‘probably not worthwhile for universities to enforce strict attendance policies’. However, studying attendance policies more recently, Self (2012), taking for granted that there is a correlation between attendance and both
achievement and retention, investigates absenteeism among undergraduate students in microeconomics classes. In particular, she addresses how attendance policies impact attendance. Her findings suggest that a coercive approach to attendance through a policy that rewards attendance and punishes absenteeism seem to have a positive impact on students’ attendance, and argues that the policy of punishment has a greater impact than the policy of rewards (Halpern, 2007a).

The idea that attendance correlates positively with attainment is visible in a number of studies, especially those with a focus on attendance policies. For example, without demonstrating that a correlation exists, some studies turn immediately to exploring how students react to policies that monitor their attendance. For example, Bowen et al.’s (2007, p.381) study monitored the attendance of first year undergraduate business students using an electronic system (similar to our own), and found that students were positive about being monitored because it showed that ‘the University cared about their success’. This does seem to indicate that the students had themselves equated attendance with ‘success’ and this assumption made them open to monitoring. Bevitt et al. (2010, p.12) also found that students were positive about monitoring as they felt ‘their attendance was valued by the university’, and that this led to support mechanisms coming into play, which in turn helped improve attendance. It is certainly possible that these policies not only lead to better attendance but also to better ‘success’, but it is still not clear what the relationship is between an increase in attendance and the ‘success’ that the students perceive.

The cost resulting from the introduction and continued increase in students fees should, as Mearman et al. (2014, p.121) point out, ‘create added incentive for students to attend’. Although the idea of students as consumers or ‘customers’ may sit uncomfortably with many educators, students do seem to demonstrate increasingly more customer-like behaviour, expecting and demanding more ‘value’ from their universities (Woodall et al., 2014). What this ‘value’ may be, however, seems to be difficult to define. This consumerisation of education has pushed the idea that if you pay for something you should receive it, possibly encouraging the idea that non-attendance is non-value for money. This may be why some educators are currently trying to justify attendance and the main way of doing this is to imply that attendance will lead to higher grades.

**Multiple factors affecting attendance**

Within the literature that explores issues related to attendance, there are several studies that explore the reasons for non-attendance. For example, Hilal Bati et al. (2013) carried out a study on lecture attendance of undergraduate health science students over one semester using a questionnaire. Justifying the focus of their research, they argue that those students who believed that there was a correlation between attendance and attainment, and attended lectures, did indeed attain high grades. Whilst this study challenged the simple correlation between attendance and attainment, ultimately it accepted that the relationship was in some form causal and investigated the reasons for non-attendance. Hilal Bati et al’s (2013) findings indicate that the fall in attendance is closely related to an individual’s health and the inefficiency of lectures in overcrowded halls. They suggest providing a strong mentoring system that will support individual students, which they argue may impact on lecture attendance. More importantly, even if we
can get students to attend, there is no guarantee that this will impact attainment levels because it is predicated on a belief.

With specific reference to lectures, which are still the most common form of delivery in higher education, Massingham and Herrington (2006, p.84) look at reasons for diminishing student attendance and claim that the ‘reality is that the majority of students will attend lectures if they perceive ‘value’ in them’. They suggest that these reasons include students’ changing attitudes to learning and that today’s students see the university degree as a means to an end (a job) rather than for the joy of learning (Ibid). Closely related to this ‘instrumental’ motivation is that students see ‘attendance purely for access to information for assessment purposes’ (Ibid. p.85). Once again, we see the underlying assumption that attendance leads to attainment.

Some students may find that with minimal effort they ‘can pass the module without attending all classes’ (Mearman et al., 2014, p.13). If students find that this information is provided, as it is on all of our courses electronically (on studentcentral), they may feel that attending classes in person is unnecessary. This was also suggested by Romer (1993), who argued that students may ‘mistakenly believe that attendance is not important to learning’. Importantly though, Romer (1993) also admits that there is no evidence that attendance leads to attainment, only that there is a relationship. It would seem that the increasing use of technology enables students to be ‘more likely to elect not to attend class’ (Mearman et al., 2014, p.121) as poor attenders saw online materials as a substitute for input sessions, where good attenders used them and saw them ‘as a complement’ (Ibid. p.131). Looking at the attendance of medical students, using both questionnaires and focus groups, Bates et al. (2018, p.256) found that students felt they ‘had to attend rather than wanted to attend’ and that the ‘availability of lecture notes affected attendance’. However, it seems likely that it is not the attendance that affects attainment in these cases, but engagement with the materials and topic.

Massingham and Herrington (2006, p.84) also suggest that students coming from schools where learning is less teacher-centred and constructivist in nature find university lectures boring, although this does not explain why students may be even less likely to attend seminars. Unsurprisingly, perhaps, they also refer to the fact that most students need to do paid work to finance their studies, which impacts on students’ willingness or even ability to attend classes. This problem is particularly relevant to students from disadvantaged backgrounds, who are ‘more likely to be in paid employment and are less likely to participate in non-academic activities' (Cooke et al., 2014, p.417), which can impact both their attendance and ability to feel part of the student community. Bevitt et al. (2010) also found that struggling with work commitments or childcare problems were issues for students, but that medical or personal problems were given as the main reasons for not attending.

However, Hilal Bati et al. (2013) study seems to indicate that student engagement, which plays a role in retention, may be more closely linked to the size of a class in lectures. Furthermore, they also identify factors such as effective and engaging lectures and content. Self (2012) does concede that there are factors that are outside the control of the institution or the lectures, and that it is the student perception towards attendance that has an impact. Interestingly these factors are not explored further, but there seems to be an underlying assumption that attendance is necessary, and that institutions insist on students’ attendance through a punitive policy. If university is a place
where students explore their individuality and maturity, coercive attendance policies undermines those valuable developments.

Oldfield et al. (2018) argue in their study that psychological and demographic predictors play a part in lecture and seminar non-attendance. Unlike Self (2012), they recognise that non-attendance not only affects the students themselves, but also their peers and lecturers. Oldfield et al. (2018) identify a range of issues impacting on attendance, such as work commitment, weak sense of belonging to the university, employment, social life commitment, assignment deadlines and mental health issues, and propose various strategies to address these issues. However, there is still an underlying belief that attendance is necessary. Attendance may be important and necessary for certain students while it may not be the right choice for others. Oldfield et al. (2018) also identify issues such as student confidence and belonging affecting attendance. Although this is linked to attendance in this study, it is an important factor for our study since when students are confident they tend to perform well with or without attendance. Furthermore, the focus in these studies has been about the tangible/explicit representation of ‘attainment’. Given the diverse demography, the idea of ‘attainment’ needs to be considered beyond the actual grade.

Correlation between attendance and attainment

Research into the relationship between lecture attendance and performance seems to suggest that there is some relationship (Romer, 1993; Newman-Ford et al., 2008) although this may be a weak correlation (Bevitt et al., 2010). Halpern (2007a, p.335) concludes that there is ‘a significant positive correlation between attendance and academic achievement’ although this is largely because students whose attendance is high, are ‘predisposed to academic achievement’. Mearman et al. (2014, p.121) agree that even if there is a ‘strong positive correlation’ between attendance and performance, this does not indicate causation and ‘may simply reveal a student’s underlying attitude/motivation for education’.

Moving away from this tenuous link between attendance and performance to discuss student engagement and performance, McKenna and Kopittke (2018) carried out a study to investigate student engagement with online resources such as lecture slides, notes and recorded lectures. Using the Australian Council for Educational Research’s definition, they define engagement as ‘students’ involvement with activities and conditions likely to generate high-quality learning’ (Radloff, 2010, p.3, cited in McKenna and Kopittke, 2018, p.234). Their findings show that very low numbers of non-attendees engaged with the recorded lectures, and they argue that engagement is a better predictor of achievement than attendance. In line with this, we set out to explore the relationship between attendance and attainment, acknowledging the correlation shown in previous studies, but also acknowledging the complexity caused by multiple interrelating factors that affect attendance and, additionally, acknowledging that for many students attendance does not equal attainment.

Methodology

A quantitative/statistical approach was taken in order to compare our results with previous research. However, it is important to note that our suggestion for further research would advocate a mixed methods approach. We used IBM SPSS to analyse the data,
not because we thought it could answer our questions but because we thought it would highlight inconsistencies in previous research.

**Scatter plots vs tabular data**

Previous research that has not simply assumed a correlation has tended to present the attendance vs attainment data in tabular form, with results given in terms of the coefficient and P-value. The correlation coefficient measures the strength of the relationship between two variables, in this case, the percentage attendance and the assessment grade. This is done in order to test the strength and direction of the linear relationship. We also calculated these values. However, our intention was to highlight the fact that the relationship between attendance and attainment was complex and the outcome of many components interacting in multiple and non-linear ways. Testing to find a linear relationship would find a linear relationship which would obscure the underlying interactions leading to an oversimplified picture. The P-value helps you determine the significance of the results in relation to the null hypothesis. The null hypothesis has been that there is a causal relationship between attending and performance. As will be seen, the relationship between attendance and attainment is significant, but the P-value does not tell us the direction of the cause/effect relationship, nor does it shed any light on why the two variables correlate. Scatter plots were chosen for a very simple reason: they help us visualise the relationship between variable (Field, 2018, p.208). Only by visualising the relationship, can we see the differences between modules that is obscured by the homogenising effect of the statistical method. For example, two modules may give similar values for the correlation coefficient and P-value but look entirely different when plotted on a scatter plot. The linear relationship between the variables emerges from the underlying complexity of the multiple interacting factors that exist in the relationship between them.

Another equally important factor that led us to use scatter plots is the existence of outliers. Traditionally, outliers are viewed as a type of bias that impacts the accuracy of the data (Field, 2018, p.228). For example, a student who has not attended any lectures or seminars but gets a grade of 75 per cent will have a dramatic effect on the mean and standard deviation and cause any regression line to be skewed. For this reason, outliers are often excluded from the data set. However, in order to understand the relationship between attendance and attainment, we believe that the outliers are valuable sources of information. It seems likely that a student who is passing every module with flying colours but does not need to attend can give us valuable insights on how to be successful and, can also inform us as to why attendance appears to be unnecessary. Because our goal is to understand the underlying relationship between attendance and attainment, the outliers are vital and scatter plots are the perfect tool to highlight their existence. The fact that they skew the data is irrelevant because we distrust the information provided by the coefficient and P-value. The next stage of our research will be to locate the outliers and perform qualitative research to discover the reasons for their good performance despite low attendance, or conversely their poor performance despite high attendance.

**Participants and settings**

Scatter plots were completed for six modules on the courses that took BA English Language route in a post-92 university. These modules were chosen to represent a range...
of variables: different cohort sizes, different years of study, different degree courses and most importantly, different assessment types. All these modules have a VLE presence with reading lists, lecture notes and slides uploaded after every lecture. For the first year module, there are exercises and practice texts uploaded to the VLE after each seminar session.

A first year (Level 4) core module (will be referred to as L4C) was chosen to be tracked across three consecutive years. This module is a large, first year module with an end of semester exam weighted at 100 per cent. The years covered are 2015-16, 2016-17 and 2017-18. The next module chosen, was a second year (Level 5) core research module (L5CR) which has a research project as the assessment. We covered this module for the years 2015-16 and 2016-17. The final choice was a second year core (Level 5) module which had a smaller cohort (L5C). The assessment for this module is a portfolio. At this point, all data is anonymised and no names or student numbers have been recorded.

Data Source

Due to practical constraints, we only used data from our own department. Data was collected from the records by admin staff and placed in a folder that we were given access to. As a school, there is an attendance policy where a student will be contacted by the student support and guidance tutor if they are been absent from class for more than three sessions. If a student’s attendance continues to be poor, they will be contacted by the course leader.

For each module, we only needed the students’ attendance records and their final grades. Attendance was recorded for both lectures and seminars combined. For further research, we will investigate the scatter plots of lecture attendance compared to seminar attendance but this was beyond the scope of this paper. Attendance figures are recorded via scanners placed at the entrance to the lecture theatre and seminars rooms and the students use their unicard to scan in. If they have forgotten their Unicard, they can manually sign in using their university user name. Grades are lifted from the university SITS system and matched via student number to the attendance record. We then received only the attendance percentage and grade.

Analytical approach

For each module, data was plotted onto a scatter plot grid. Vertically, the grid segments attendance by 10 per cent blocks from a minimum of 0 per cent attendance up to 100 per cent attendance. Horizontally, the grid segments attainment in 10 per cent intervals. It should be noted that the grades for L4C module ranged between a minimum of 11 per cent and a maximum of 96 per cent. The range of grades was lower for L5CR from 19 per cent to 86 per cent. The smallest range of grades was in L5C which ranged from 53 to 75 per cent. Outliers were retained in the analysis. Where a student had attended but not submitted an assessment, the data was removed. This is because they cannot be plotted with only one variable. However, it was noted that these students will also have information that is necessary to gain a full picture of the relationship between attendance and attainment.
Exploring the relationship between attendance and attainment...

Findings

Graph A: L4C-2015-16

Graph B: L4C-2016-17
Graphs A and B (previous page) and C (above) show, at face value, that there is a correlation between attendance and attainment. This is in alignment with previous studies (Bevitt et al., 2010; Halpern 2007a and Mearman et al., 2014). However, the flatness of the regression line suggests that the correlation is weak. Furthermore, a close correlation would show clustering along the regression line which is something we do not see in these scatterplots. As the pass mark is a 40 and a first is a 70, it is clear from Graph A: L4C-2015-16, that around 30 per cent of those who achieved a first did not attend more than 60 per cent of the time. Out of 13 students who achieved a grade above 80 per cent, two students’ attendance was below 60 per cent. Looking at the number of students who failed the module, all those who achieved below 40 per cent attended more than 60-70 per cent of the time. Also of interest are the outliers. If we look at the plot for the year 2015-16 in Graph A, we can see a student (top-left corner) who had a 100 per cent attendance but failed the exam with a score that was below the threshold mark of 30 per cent. Compare this to the student who had an attendance of under 26 per cent but a pass mark of 74 per cent. The third highest mark in the cohort was 91 per cent, which was achieved by a student who had attended under half the lectures or tutorials (47 per cent). These findings begin to cast doubt over the assumption that attendance leads to attainment and they suggest that there may be a much more complex relationship at play, and that other factors may be affecting attainment on this module.

If we now compare the graphs for successive years on this module, beginning with the 2015-16 cohort (Graph A) and continuing over three years to the 2017-18 cohort (Graph C) we can see that the graphs for 2015-16 and 2016-17 (Graphs A and B) are remarkably similar. Both appear to have outliers in almost identical places. Both have a similar ‘wavy’ pattern with peaks and troughs that look almost the same. They are so similar that we had to check the data to make sure that we had not somehow inputted some of the data twice. We can confirm that these graphs show two different cohorts of
students, taking the same exam one year apart. Now comparing these years with the cohort for 2017-18 (Graph C, opposite), the pattern is noticeably different. The correlation appears to be stronger because the regression line is more inclined and the points cluster more around it. It is still a relatively weak correlation but the crucial point is that it is so different to the two previous years. Even the profile of the outliers is different. In fact, only one student who had an attendance below 40 per cent got higher than a 2:2. Thirty-six students achieved a grade above 70 per cent in this cohort. Out of the 36 students, three students attended less than 60 per cent of the sessions and two of them achieved a grade closer to 80 per cent, while one was just above 70 per cent. Looking at the three that had failed, their attendance was well below 35 per cent. However, out of the five students who had just passed the module with between 40-42 per cent, four of them attended sessions more than 65 per cent and one attended 100 per cent. 75 per cent of the cohort attended more than 60 per cent of the sessions and passed the module, while 25 per cent of the cohort attended less than 60 per cent of the sessions. Out of the 25 per cent who attended less than 60 per cent only three failed. Eight per cent of the cohort attended less than 40 per cent of the module and passed the module. If we now compare the L4C module to either of the second year modules, we can see that the differences between the three years that we highlighted above are superficial compared to the differences we see between modules. In the scatter plot for L5C-2017-18 (Graph D, above) we can see a drastically different pattern. The graph still suggests a correlation, as demonstrated by the regression line. However, as before, the correlation is weak. The most obvious difference is how the points cluster to the right-hand side. This means that even the poorest attenders on this module get at least a 2:2. Once again though, the scatter plot seems to contradict the claim that attendance affects attainment. Two students gained the highest mark of 75 per cent; one had an attendance of 94 per cent and the other 33 per cent. Similarly, three stud-
ents achieved a low of 53 per cent; one had an attendance of 94 per cent, the second had an attendance of 50 per cent and the third just 33 per cent. Therefore, an attendance of 33 per cent can get a student the highest or lowest marks, which is also true of 94 per cent attendance.

The third module we looked at has a different profile again. L5CR-2015-16 (Graph E, above) has a flat regression line and very little clustering anywhere. One student who attended 100 per cent only achieved a grade of 20 per cent. Ten students attended 100 per cent of the lectures, seminars and tutorials achieving grades of 20, 25, 50, 55, 58, 60, 68, 70, 70, and 72 per cent respectively. With this picture, can the tutors confidently tell their students that if they attend everything, they will achieve higher marks?

In order to check that this was not an anomalous year, we also produced a scatter plot for L5CR-2016-17 (see Graph F, opposite). Once again, the similarity between years is striking. The scatter plots for both years of L5CR are remarkably similar whilst being very different from the graphs of the other modules. If it was a simple case of attendance leading to attainment, we would expect to see fewer differences between modules. The differences between modules is highlighted in the final figure, which shows a cohort of students moving from first to third year. Each scatter plot shows roughly the same students. The relationship between attendance and attainment appears not to depend on the students but on something else.

Discussion

As the above analysis of the data clearly show there is not a simple correlation between attendance and attainment, as a number of studies around this area have implicitly (Halpern 2007a; Newman-Ford et al., 2008; Mearman et al., 2014; Hilal Bati et al., 2013; Oldfield et al., 2018) or explicitly (Romer 1992; Self 2012) addressed. Data indicate that there is a weak correlation, unlike Self (2012) and others (Bowen et al., 2007) had assumed. The outliers in this study drive the correlation to be weaker, hence
drawing the focus away from the well-worn area of trying to change student behaviour through attendance policies (Self, 2012) and monitoring (Bowen et al., 2007) towards a more complex picture (Massingham and Herrington 2006; Bevitt et al., 20010; Cook et al., 2014; Oldfield et al., 2018). The data from this study, especially the data from L4, years 2015-16, 2016-17 and 2017-18 show that module delivery (Massingham and Herrington, 2006) and assessment alone does not impact on attainment. As discussed by Oldfield (2018) psychological and demographic factors need to be taken into consideration. Given there is a tenuous link between attendance and attainment, it is useful to look at engagement and attainment (Hilal Bati et al., 2013). Looking again at the outliers in all chosen modules, it is clear that it is the participation and involvement in the modules that we may term ‘engagement’ that drives attainment/achievement, as students who had failed the module had attended more than 60–70 per cent of the sessions, while there was a proportion of those who had achieved a first, that had not attended more than 60 per cent of the sessions. Across the three years, the relationship between attendance and attainment vary considerably. One could argue that attendance could be influenced by the subject matter, delivery and assessment. However, this does not reflect the attainment of the outliers. This indicates that the focus needs to move away from getting students into the classroom, to getting students engaged with the subject and the learning process, findings which echo with Mckenna and Kopittke’s (2018) argument that engagement is a better predictor of attainment than attendance.

**Conclusion**

This study set out to investigate the drop in attendance among undergraduate students. The initial findings indicate that there is a tenuous link between attendance and attainment. However, this needs to be viewed against the backdrop of an existing attendance...
policy. The outliers that sit away from the middle of the data pool indicate that there is a pressing need to move away from addressing attendance as the driver for attainment, and to move towards recognising the complex nature of learning. Our outliers concur with McKenna and Kopittke (2018) that engagement would be a better predictor. The outliers did not attend but had high attainment because they engaged in other ways, while those who attended did not always attain high grades.

This has been the first phase of our study and has inevitably thrown up more questions than answers. To unpack and understand the complex nature of learning in higher education, in the next phase of this study, we will build on findings by McKenna and Kopittke (2018) on engagement. By recognising the complexity of the process of learning, we may be able to propose strategies to support engagement that will in turn, allow us to move away from the inherent assumption of a causal relationship between attendance and attainment.


Bibliography


Exploring the relationship between attendance and attainment...


**Biographies**

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Assessment in higher education: the anatomy of a wicked problem

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Abstract

Assessment and feedback are matters of perennial angst in higher education. There are concerns about student satisfaction, fairness in assessment, grade inflation, assessment types, assessment ‘burdens’ and equivalences between institutions. This paper examines assessment through the lens of Rittel and Webber’s (1973) concept of ‘wicked problems’. Understanding assessment as a ‘wicked’ social problem rather than a solvable technical problem offers a lens through which to address the complexity of assessment in higher education.

Introduction

Knight (2002) described assessment as ‘the Achilles’ heel of good quality’. We can be great teachers, we might be inspirational in the classroom or in our ongoing support for students, but get the assessment wrong and this can all be forgotten. Although, assessment and feedback are frequently cited as major areas of student dissatisfaction in the UK’s National Student Survey (NSS), the same ‘problem’ is widely discussed in compulsory education and in the higher education research literature from other countries such as the USA, Australia and Hong Kong (Medland, 2016, pp.82-83). This paper examines assessment through Rittel and Webber’s (1973) concept of ‘wicked problems’. Rather than being a cause of discouragement, understanding assessment as a wicked problem can provide the higher education teacher with a nuanced and self-aware lens through which to assess students better.

Assessment as a wicked problem

Applying Rittel and Webber’s (1973) concept of ‘wicked problems’ demonstrates that assessment in higher education exhibits their ten characteristics of a wicked problem. Assessment is a good example of a wicked problem as there is widespread consensus that a problem exists, but not what the problem is exactly or how it could be addressed. We have taken each of Rittel and Webber’s concepts in turn and applied them to assessment in higher education; in short ‘wicked problems’ are not only unsolvable, but it is impossible to formulate the exact characteristics of the problem, and the problem is intrinsically linked to other, possibly more complex wicked problems. While wicked problems may have technical dimensions, it is their social complexity which makes them tough to manage (Camillus, 2008, p.100). The advantage of identifying a problem as a
wicked problem is to understand that the problem is social rather than technical. While new technologies such as online assessment and virtual learning environments offer potential ways of responding, the core problems of assessment remain. As Minor (1901) observed in his discussion of whether law examinations should be, written or oral, long or short, practical or theoretical:

‘Objection is frequently raised to a high and fixed examination standard that it is unfair and unjust, since the student’s percentage will depend in large measure upon the whim or caprice of the person grading his paper; or at least that it is fluctuating and uncertain, since a certain grade with one teacher or at one institution may mean a very different thing from the same grade as used by another teacher or at another institution’. (Minor, 1901, p. 473)

It is important to understand at this point that although ‘wicked problems’ are fundamentally unsolvable, they are not necessarily ‘evil’ in a moral or ethical sense. However, it is also important to understand that just because a problem has been identified as wicked, this does not mean that all responses are equally good or equally bad; in fact one of the characteristics of a wicked problem is that the responses can be ‘good’ and/or ‘bad’, but they cannot be ‘true’ or ‘false’. Therefore, the identification of assessment as a wicked problem does not mean that the situation is hopeless or that all possible responses are going to lead to poor outcomes.

1. ‘There is no definitive formulation of a wicked problem’

Rittel and Webber suggest that in order to understand or describe a wicked problem, we need to have developed ‘an exhaustive inventory of all conceivable solutions ahead of time’. If getting assessment and feedback ‘right’, or ‘improving’ assessment and feedback is the wicked problem then, we must have as a starting point an agreement as to what the problem is – and current thinking on assessment and feedback in higher education evidences agreement that there is a problem, but not the exact nature of the problem. This is perhaps best exemplified by an issue commonly identified in the literature: the gap between what academics think, feel and say about their feedback and how this feedback is received and understood by students, (for example, see Carless and Boud, 2018). The range of stakeholders with a view on this wicked problem also complicates the search for solutions, or a solution – who defines the problem: academics, institutions, students, employers, the Office for Students (OfS)? ‘To find the problem is thus the same thing as finding the solution; the problem can’t be defined until the solution has been found’ (Ibid. p.161).

We can be great teachers, we might be inspirational in the classroom or in our ongoing support for students, but get the assessment wrong and this can all be forgotten. However, the broader question is simply: how do we describe the problem of assessment in higher education? If there is a consensus around assessment and feedback it is that some sort of problem exists. Different stakeholders can have a different perspective on the definition of the problem; as a consequence there are a diverse range of possible ‘solutions’. Moreover, ‘... every solution ... explores new aspects of the problem’ (Conklin, 2005, p. 7). One possible response to a wicked problem is to tame it through imposing a definition onto the problem, but this, at best, can only lead to a short-term
solution. Figure 1 (pp. 54-55, over) provides some examples of how the formulation of the assessment problem can lead to diverse and often contradictory solutions.

2. ‘Wicked problems have no stopping rule’

A non-wicked (or tame) problem is a problem which is solvable, at which point it comes to an end. Moreover, the problem solver knows that they have done their job, the solution to the puzzle is found, or the proof of the equation is found. Additionally, experts in the field can evaluate the solution and confirm that the problem has indeed been solved (Rittel and Webber, 1973, p.162). However, in the case of wicked problems, it is not possible to see that a problem has been solved, and ‘because there are no ends to the causal chains that link interacting open systems, the would-be planner can always try to do better’ (Ibid. p.162). The lack of a definition of problem of a wicked problem (as mentioned above) means that the problem is constantly reshaped and redefined.

Suppose we take the view that reducing the number of students on a course or doing a module, may well make for a different (better?) experience of assessment and feedback for those students – it may be possible to provide all feedback verbally, face-to-face, and students may feel better supported and more engaged. NSS data for assessment and feedback may go up on that course, which could be regarded as a vindication of the smaller class sizes policy,

In practice this success is likely to lead to an institutional pressure to take more students and have larger class sizes. Success on institutional and course level metrics as measured in the Teaching Excellence Framework (TEF), would logically lead to an increase in demand for places at a given university or on a given course, and the economic realities of universities are such that they will take more students to increase their income, thereby increasing the size of classes, which in turn will make the assessment practices that enabled the success impossible to sustain.

3. ‘Solutions to wicked problems are not true-or-false, but good or bad’

‘For wicked planning problems, there are no true or false answers. Normally, many parties are equally equipped, interested, and/or entitled to judge the solutions’ (Rittel and Webber, 1973, p.163) – in this case, academic staff and students, as well as others. The evaluations of the solutions are ‘likely to differ widely to accord with their group or personal interests, their special value-sets, and their ideological predilections. Their assessments of proposed solutions are expressed as ‘good’ or ‘bad’ or, more likely, as ‘better or worse’ or ‘satisfying’ or ‘good enough’ (Ibid. p.163).

While proposed solutions to wicked problems do not solve the problem of assessment (see 2 above) some actions will bring about improvement and others may intensify the problem. Additionally, there will be winners and losers in terms of who benefits from the solution being implemented. Halving student numbers may be beneficial to those who get into university, but could be detrimental to those who don’t. The solution may seem to fix the immediate problem at the expense of creating wider problems. If we fix the ‘assessment problem’ by having fewer students, there are consequences for wider social mobility. In other words, a small wicked problem is actually a component of a bigger wicked problem.
4. ‘There is no immediate and no ultimate test of a solution to a wicked problem’

In a non-wicked problem it is possible to assess whether a solution has worked or not. We can evaluate the assessments in terms of what is known about good assessment, and we can seek the opinions of colleagues and students, but there is no certain test of whether what we have done is really a solution, firstly because we can’t define the problem, and secondly because we cannot determine the basis for evaluating the success or otherwise of an intervention. While a course team might celebrate better NSS scores,
these are not necessarily traceable to specific interventions; nor do they necessarily indicate that the interventions are pedagogically sound. Not only are the views, experiences and performance of my current students no immediate test of whether my solution was intrinsically a good one, we cannot seek an ultimate test by going back to those students in five, ten or 20 years' time. Knight and Page (2007, p.4) identify ‘Wicked competences’ which are ‘... achievements that cannot be neatly pre specified, take time to develop and resist measurement-based approaches to assessment’.

Diagram available at: https://staff.brighton.ac.uk/clt/SiteAssets/Assessment%20and%20feedback%20in%20HE%20legend%20final.svg.
5. ‘Every solution to a wicked problem is a ‘one-shot operation’”

‘Every solution to a wicked problem is a ‘one-shot operation’; because there is no opportunity to learn by trial and error, every attempt counts significantly. ... ‘every implemented solution is consequential. It leaves ‘traces’ that cannot be undone’ (Rittel and Webber, 1973, p.163).

A ‘solution’, to the experience of assessment and feedback of students on any given module will have an impact on those students’ experience – and may have an unforeseen impact on a future group of students. On the micro-level, how often do we respond to student feedback only to find a different, sometimes opposite problem emerges later on? Students tell us a topic isn’t valuable so we take it out, only to have the following year’s students tell us that they needed guidance on the topic we just took out. In both cases some of the student feedback indicated some degree of dissatisfaction. If we take this problem from the individual level to the policy level, the lack of opportunity for trial and error is even more pronounced. While a trial and error approach might be possible from the point of view of the teacher, each solution is a ‘one-shot’ operation from the student perspective. Additionally, it can take many years to really evaluate a particular solution as ‘With wicked planning problems ... every implemented solution is consequential. It leaves ‘traces’ that cannot be undone’. (Ibid. p.163).

6. ‘Wicked problems do not have ... [a] set of potential solutions’

‘Wicked problems do not have an enumerable (or an exhaustively describable) set of potential solutions, nor is there a well-described set of permissible operations that may be incorporated into the plan’. (Rittel and Webber, 1973, p.164).

As there are not finite limits to the description of the problem, there are no finite solutions either, or any agreement about which possible solutions might be implemented. ‘There are no criteria which enable one to prove that all solutions to a wicked problem have been identified and considered’ (Ibid. p.164).

Assessment on any scale, whether across a module, a course, an institution or a national system could be potentially improved by:

a) More summative assessment tasks or fewer summative assessment tasks.

b) More formative assessment opportunities or fewer formative assessments.

c) A larger range of assessments or a narrower range of assessments.

d) An increased volume of feedback, or less feedback provided in a quicker time.

e) More staff training courses or teaching qualifications.

Some of these potential solutions are contradictory which intensifies the sense that there are no finite number of solutions. Even if a course-wide or institutional ‘sweet spot’ in balancing these different solutions can be found, it will be temporary.

7. ‘Every wicked problem is essentially unique’

Rittel and Webber expand on this heading by suggesting that ‘despite long lists of similarities between a current problem and a previous one, there always might be an addi-
tional distinguishing property that is of overriding importance’ (Rittel and Webber, 1973, p.164). This is highly pertinent in higher education, where discussion about broad issues such as the need for consistent assessment criteria, may seem like a simple issue for all module assessments, but the specifics of the criteria for any given discipline area, or any given group of students, or particular task, make the ‘solution’ (and therefore the problem) highly different for each instance. While we can talk about assessment problems generally, what assessment looks like in each individual university, course or module looks different. We can put into place university-wide regulations protecting students from the possibility of over-assessment or under-assessment, but there is no certainty that such regulations will benefit every student or every course and every module. While such regulations around word limits and the number of assessments seek to supply justice and fairness, existential questions such as whether a 20 minute oral presentation is equal to a 1,500 word essay arise. Moreover, is a 1,500 word essay on Module A at Level 4 intrinsically the same in terms of demanding an effort as a 1,500 word essay on Module B at Level 4 covering a different area of the same discipline? Relating to 3) above it is necessary to point out that solutions are good and bad, even though they are not solving the problem. For example, we would regard the setting of regulations around assessment equivalences as a much better solution than insisting that all 20 credit modules must have a two-hour unseen exam.

8. ‘Every wicked problem can be considered to be a symptom of another problem’

‘Problems can be described as discrepancies between the state of affairs as it is and the state as it ought to be’ (Ibid. p.165). Rittel and Webber provide an example to illustrate this – ‘crime in the streets’, which to them ‘can be considered as a symptom of general moral decay, or permissiveness, or deficient opportunity, or wealth, or poverty, or whatever causal explanation you happen to like best’ (Ibid. p.165). Therefore, the issues of assessment and feedback can be seen as: a problem caused by mass expansion of higher education (too many students to give them the individualised attention that might be seen as a solution); lack of time or training (academics don’t have the time or skills to provide good feedback); lack of student skills (students lack feedback literacy and are unable, or unwilling, to turn feedback into action). However, the assessment of students, even those under five years old is a key issue which extends in wicked problems around social mobility, equality of opportunity and, social welling and mental health. A student educated in England between the ages of four and 18 has undergone nationally set assessments at seven, 11, 16 and 18 at the very least. These prior experiences of assessment play an important part in shaping students’ attitudes to assessment at university.

9. ‘The existence of a discrepancy representing a wicked problem can be explained in numerous ways’

Continuing their example, Rittel and Webber indicate that ‘crime in the streets’ can be explained by not enough police, by too many criminals, by inadequate laws, too many police, cultural deprivation, deficient opportunity, too many guns, phrenologic aberrations, etc’. (p.166). The choice of explanation determines the nature of the problem’s
resolution. For example, we can regard the core of problem of assessment as being that teaching staff need to give students better feedback.

Or we can view is as students being inadequately prepared for study at higher education level. In this reading the ideas about the causes of the problem (and therefore any possible solutions) lie outside higher education. Is it that there are simply too many students per teacher to do a good job of assessment? Rittel and Webber suggest that ‘everybody picks that explanation of a discrepancy which fits his intentions best and which conforms to the action-prospects that are available to him’ [sic] (p.166). Therefore, academics might pick an explanation that indicates students do not read or use feedback, whereas students might be more likely to favour an explanation that suggests academics need to provide better guidance (feedforward) on how to improve work.

10. ‘The social planner [educator] has no right to be wrong’

In contrast to scientific problems, where hypotheses are put forward and refuted as a way of advancing knowledge (and therefore no blame attached to postulating a theory that later gets refuted), wicked problems as defined by Rittel and Webber tolerate ‘no such immunity’ (p.167). In education, as in social planning (the area Rittel and Webber draw upon for their discussion), the aim is to improve aspects of the world/higher education experience, and people are liable for the consequences of their actions (p.167). Universities (singular or plural) and teaching staff (singular and plural) are never granted the right to be wrong. Any attempts to solve a given problem, whether at the micro or macro level inevitably has consequences – a lecturer changes the assessment on a module which may suit some students, but others criticise the change. A university can reformulate its curriculum design on an institution-wide basis, possibly to equalise opportunities or fairness across different courses, but possible errors are amplified throughout the system. The other side of ‘no right to be wrong’ argument is that there are not always rewards to being right and improving matters. It is not straightforward to persuade students that this year’s assessment regime is good because you used last year’s feedback to improve it.

Final thoughts on responding to the wicked problem of assessment

1. Assessment is a social issue and not a technical problem

An overarching characteristic of the wicked problem is that the problem is inherently social and not technical. It is instructive at the institutional level that assessment is often addressed through technical means, such as the rewriting of the rules and regulations around assessment or mandating technological systems for the delivery of assessment. Such changes may be necessary and beneficial, but if they ignore or override the social dimensions of assessment, technical solutions are unlikely to improve outcomes. It is essential therefore, that technical solutions (for example, through technology or policies) do not precede considerations of the social dimensions of the issue.

2. Assessment is a wicked problem but there are good and bad responses

As stated previously there are good responses and bad responses to wicked problems. Therefore, awareness of assessment as a wicked problem does not mean that all the responses are equally valid or equally futile. Just as with the other wicked problems like climate change where individuals, businesses, institutions and governments can make
choices, policies, regulations and laws to address the challenge, individuals and universities can work to improve their assessment practices through staff development, research, the sharing of good practice and better engagement with students. Recognising the wicked nature of a problem does not mean that all responses are equal in quality, nor does it mean that all responses are equally futile.

3. Finally, the definitions of what is really wrong with assessment are in a constant state of flux

Whether the nub of the problem is the internet, poor teaching, government policies, universities, schools, grade inflation, plagiarism, contract cheating, lack of agreed standards across the sector or poor assessment design, the essential wickedness of assessment can always be viewed from another angle. Different perspectives on the problem can serve diverse personal, academic, political and ideological agendas and these perspectives underpin the ‘solutions’ which are put forward.

Conclusion

In conclusion, rather than leading to a sense of hopelessness, recognising assessment as a wicked problem can provide thoughtful and nuanced perspectives, which are actually helpful in making assessment work better. Therefore, rather than being stifled by the panaceas often presented by governments, institutions and individual, an understanding of assessment can be strongly liberating.


References


Biographies

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Differences that make a difference: inclusivity from theory, to practice, to impact

Professor Jackie Potter, Oxford Brookes University

Abstract

Perhaps the most pressing frontier for whole institutional educational action is inclusion. By developing inclusive practices, we seek to ensure that the diversity of students in our classrooms and on our courses reflects society, and then to develop curricula, assessment and teaching, and extra-curricula actions to support student engagement, wellbeing and success for all. Our capacity and willingness to make a difference has never been greater, in part a result of three contemporary features of higher education.

First, universities have well developed data capture routines that offer us insight into students’ backgrounds, academic journeys and outcomes. Second, we have more evidence from research and some robust theories to explain and describe approaches that will work to support diverse students’ success. Finally, in the current climate, we need to commit to evidencing the transformational impact of a higher education and counter the narrowing perspective in wider society, media and politics of higher education as measured only in economic value to graduates salaries. In this paper, I outline the recent journey at Oxford Brookes University, as a case study in whole institutional change involving many people, to ‘make differences that make a difference’, that are grounded in evidence and theory, that are practical and locally relevant, and that will have a sustained impact on students’ experiences of higher education.

Introduction

This short article, based on my keynote at the 2019 University of Brighton Learning and Teaching Conference, is about differences that make a difference to the student learning experience. Specifically it contends that we need to and can improve inclusion, and address the systemic issues associated with it, such as differential attainment of students based on their specific characteristics. By developing inclusive practices, we seek to ensure that the diversity of students in our classrooms and on our courses reflects society, and then to develop curricula, assessment and teaching, and extra-curricula actions to support student engagement, wellbeing and success for all. As a sector and as individual institutions, we now have richer and more complete data on the continuation rates and achievement rates of our students than ever before, and we cannot ‘unknow’ the discrepancies and unevenness in the effectiveness of our systems. For that reason
alone, I believe that the most pressing frontier for whole institutional educational action and reform is inclusion.

As a result of recent research and the pressure of our new regulator the Office for Students, there is a national ‘call to arms’ for us all to tackle and eliminate biases in our education that systematically disadvantage some groups of students. We can no longer use an individual student deficit model to explain away underachievement or disengagement by the students in the minority in our classes but that share a particular characteristic, such as ethnicity or social background, because we have a fuller, a wider picture of how their stories are mirrored in other disciplines and in other institutions. We can all improve inclusivity – enabling our students to feel respected and valued and as if they belong within our institutions, disciplines and classrooms. Inclusion can improve when we review and adjust our taken for granted assumptions and practices, and when we all challenge the givens of ‘how things get done around here’.

In this article, I highlight aspects of the recent journey at Oxford Brookes University, as it seeks to transform its students’ experience and achievements through organisational changes that are grounded in evidence and theory, that are practical and locally relevant, and where many people take on the challenge to ‘make differences that make a difference’.

Starting with evidence and theory

Discussions on inclusivity and attainment gaps are not separate to the wider focus in higher education, as public sector bodies, on demonstrating their commitment and success in providing their services without discrimination. It is a legal obligation under the Equality Act (2010) that, for higher education, means that students have a legal right to teaching that does not discriminate against them on grounds of age, disability, ethnicity, gender reassignment, pregnancy or maternity, religion or belief, sex, or sexual orientation. Disabled students have a legal right to reasonable adjustments to ensure that their needs to access education are met. However, for many people, the need to redress attainment gaps is not a legal response but a call for social justice – that there is a moral case to answer when our education systems are not as effective for all people. As the ECU (2013) describe:

‘Inclusive practice is an approach to teaching that recognises the diversity of students, enabling all students to access course content, fully participate in learning activities and demonstrate their knowledge and strengths at assessment. Inclusive practice values the diversity of the student body as a resource that enhances the learning experience’.

In 2015, Mountford-Zimbars et al. published an influential paper for the then higher education funding body, Hefce, and concluded there were differential outcomes for different student groups with, at that time, limited understanding of the outcomes of interventions on those outcomes. They noted that the subject was still difficult to talk about not least as there was caution about sharing data that could reveal unfavourable comparisons between outcomes for different student groups. They provided four explanatory factors for the differences in outcomes, which included curricula and learning as well as relationships (between staff and students and among students), social, economic and cultural capital and psychosocial identity factors. At Brookes, informed by this report and
Differences that make a difference ...

others, a practical philosophy emerged of a Brookes Inclusive Curriculum Framework that would create a curriculum, underpinned by universal design for learning (CAST, 2019) and self-determination theory (Deci and Ryan, 2007), that would address underrepresentation and marginalisation of certain groups or thinkers, and that would be accessible to students and allow them to succeed no matter their differences. The framework was the starting point for devising practical tools and approaches to allow staff in a range of roles, to pause and reflect on practice, and to challenge and improve to better meet the aspirations of the Brookes Inclusive Curriculum Framework. In essence the approach aimed to live up to social psychologist Kurt Lewin’s famous quote that ‘there’s nothing so practical as a good theory’ and to galvanise evidence-informed effective actions.

Three key foci for action

Since the publication of the Inclusive Curriculum Framework, there have been three key foci for the work that has followed at Brookes. These areas are discussed in this section and the key learning points from each are highlighted.

Reviewing practices and policies

Brookes, as a post-92 university, has well developed quality assurance routines to assess and review programmes and modules of study and to evaluate and improve them systematically, as well as providing a comprehensive set of guidelines and policies for a range of routine activities associated with teaching and assessing student work. In 2018, we updated the module descriptor template to make required reference to inclusion, to universal design for learning with the intention that we would be systematically encouraging staff that were devising our curricula to put inclusion at the heart of their design and build process. We knew that all modules were reviewed at least every five years as part of the programme periodic review process and therefore, that within that time period we could anticipate that all modules and their designers would have recourse to consider inclusion. We also devised an inclusive teaching benchmarking tool (https://brookes.ac.uk/ocsld/inclusive-teaching/) for use by programme teams. It comprises 20 searching questions about the curriculum and the teaching approaches in use, and asks teams to self-assess the extent to which they address these areas, and to report on them and suggest approaches for improvement. The tool is supported by a series of suggested resources to encourage a scholarly approach by those that use it. The tool has been adopted for routine use by the Academic Quality Office, and they promote its use by programme teams as a routine part of the evaluation and reflection on current practice, and for setting priorities for future development of the programme as part of the five-yearly periodic programme review process. Across these two actions we have made inroads to embed inclusion within the very fabric of our quality processes for the long-term, to supplement our in-year ‘snapshot’ of current practice to deliver inclusive practices, captured through the annual quality enhancement theme (the topic is chosen each year). In the short term the 2018 quality enhancement theme for the annual review of taught programmes.

Finally, in support of our work to look at practices and policies and embed explicitly a consideration of inclusion, we looked at our assessment compact, a document developed and well-embedded across the institution as guidance for staff in the development
and delivery of assessment (and feedback) practices. A small working group was established comprising staff and student members, who reviewed the document against contemporary developments and issues surrounding assessment and feedback practice (including inclusion and reasonable adjustments but also covering online practices and concerns around academic integrity). The document was then updated to provide, among other things, clearer explicit guidance on how inclusion could be fostered.

Key learning points from the work we have completed to date to explore how our practices, processes, guidelines and policies can be adapted to ensure they support a culture of inclusive practice include:

- Questioning that which is ‘taken for granted’ is an important step in reviewing the potential for embedding new ways of encouraging inclusive practices.
- Being clear on how newly embedded approaches to inclusivity will fit within the cycles of routine and/or periodic activity allows you to plan for and monitor the impact of those new developments.

**Delivering engaging events and resources**

In 2018 and 2019, we have worked with a range of external organisations to hold events on inclusion. The common intention of each of these has been to break down barriers that impede our ability to talk about and act to support students and difference, and the associated issues of an award gap and differential employment outcomes. Following events on equality, diversity and inclusion in teaching and on unconscious bias, in mid-2019, we worked with the University Alliance to run a full day ‘sandpit’ event. This highly engaging and interactive staff development model allowed participants to articulate very practical ways to modify their practices, as individuals and as programme teams, that would improve the potential outcomes for their students irrespective of their diverse backgrounds, needs and aspirations. Institutional factors that could hamper changes to practices were explicitly identified and shared forward with senior managers that could alleviate them. Scalable ideas that could work for many staff and for many students were identified and shared with the inclusive teaching working group. The day rapidly generated enthusiasm, commitment and understanding of inclusion and the role that each member of staff could play in developing a more inclusive environment for students. The sandpit events, developed by the University Alliance’s Teaching Excellence Alliance project (https://www.unialliance.ac.uk/teaching-excellence-alliance/), with their focus on individuals’ developing a clear understanding of the topic, being empowered to act and then able to share forward wider ideas and issues with others who can take those forward, has since gone on to win the educational development initiative of the year for 2019 awarded by the Staff and Educational Development Association.

Events are transitory and we also developed a series of resources available on a new web page (https://www.brookes.ac.uk/ocsld/inclusive-teaching) called ‘differences that make the difference’. For each of ten themes, from assessment to technology, a series of ideas are available for staff to try out in practice to revisit their practices. These have been met with real enthusiasm as a way to promote and encourage purposeful innovation and change to practices that will better support diverse students. In addition to these practical tips, a series of periodic short evidence-based research reports with recommendations for actions, called research insights, have been produced.
to stimulate discussion and reflection on practices. Key learning points from the work to date, to deliver events and resources for all staff that are involved with teaching and supporting diverse learners and creating inclusive learning environments, materials and curricula include:

- Focusing on practical, easily actionable steps that can make a difference.
- Creating a range of opportunities for staff that they can access easily.
- Ensuring that barriers that impede our aspirations and intentions to offer inclusive learning environments, materials and curricula are identified and addressed.

New ways of talking about difference and inclusion

Our work has focused on breaking down barriers to action for inclusion. We have done this by enabling individuals directly, through the provision of resources that provide ideas and by creating time for reflection and discussion. Indirectly we supported individuals’ to act by establishing processes, guidelines and policies that will stimulate directed action. One of the most apparent needs to support action for inclusion has been the provision of a safe space for the conversations about student differences, about bias, about protected characteristics and about the possibility that our educational structures and approaches may not always support all students effectively. We have established an inclusive teaching steering group to lead developments and conversations in the university on inclusion. The group brings together different conversations because of the diverse people involved, from senior managers, academics, leaders of professional services and students, and ensures that the web of conversations held by different stakeholders in the university meets in a place where new conversations can be held.

We have also been exploring how new and intimate ways of talking about difference may help. Roxå and Mårtensson (2009) talk about the importance in the academic development of teaching practices of ‘significant conversations’ with ‘conversation partners’ that are based on privacy, trust and intellectual intrigue. As difference and inclusion are considered quite difficult topics to discuss, with concerns often raised about the right language to use, the topics are potentially made easier to talk about where there is confidence and trust in the conversation partner. We have tried to replicate the conditions of trust and confidence by sharing their model and our purpose of replicating it, to encourage significant conversations with conversation partners where difference and inclusion are the topics of intellectual intrigue (of curiosity and interest).

Key learning points from our work to encourage new ways to talk about difference and inclusion include:

- The value of creating an atmosphere of trust and confidence amongst people to allow them to sensitively and openly discuss their experiences of difference and their aspirations and actions to promote inclusion.

Conclusions

As part of the presentation of this material at the 2019 Learning and Teaching Conference at the University of Brighton, I encouraged two short activities. First, members of the audience were presented with Bovill and Bulley’s (2011) ladder of student par-
participation and asked to consider a piece of curriculum they know well, and to assess the extent to which students or staff had control over aspects of the curriculum. They were then asked how they could offer students more control, more choice, within that curriculum. The premise to do so was to improve inclusion. This was linked to the work of Deci and Ryan (2007) where more curriculum choice would increase students’ autonomy (as a precursor for motivation and persistence) and linked to the provision of ‘multiple approaches to’ (study, represent learning etc) as laid out through the model of universal design for learning. The conversation that colleagues held was intended to be private and intellectually intriguing, and I hoped, based on trust. The second activity that I asked colleagues at the keynote to undertake was a second conversation, this time, flagged as private, based on trust and intellectual intrigue. Colleagues shared what was taken for granted about the way they work with students and their learning. They were then asked to consider how challenging that could improve belonging, autonomy, connectedness or student competence.

At the conference I hoped to share the approaches and work we have been doing at Oxford Brookes University, but I also wanted to provide colleagues attending with the opportunity to experience holding intriguing conversations about inclusion that might lead them to pursue new approaches to their teaching and their curricula; to engage in action that would better support diverse students and differences amongst them within our classrooms. It has never been more important for us all to consider and reconsider the ways we teach, assess and support learners, the curricula we design, and to challenge the way things are that we might take for granted. It is the way we will see theory influence practice and lead to impact for the good of all students.


References


Biography

**Professor Jackie Potter** is Head of Learning and Development in Higher Education and Head of the Oxford Centre for Staff and Learning Development (OCSLD) at Oxford Brookes University. She leads educational and organisational development activities at Brookes and the OCSLD consultancy work for the sector. Recent research work and publications have focused on delivering educational change in higher education, the scholarship of teaching and learning, students’ conceptions of excellent teaching practices and an autobiographical piece on her path to the professoriate. She is a Principal Fellow of the Higher Education Academy and a Senior Fellow of the Staff and Educational Development Association (SEDA). She tweets on higher education and the great outdoors @Jac_Potter. Email: jpotter@brookes.ac.uk.
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