

Trust, innovation and risk: a contextual inquiry into teaching practices and the implications for the use of technology

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Abstract

Lasting changes around the use of technology in teaching and learning in colleges and universities, require first an understanding of the practices that staff undertake and the challenges they face. Effective and sustained change comes from a place of working in service to pedagogies, and practices that support and surround learning and teaching. In order to better understand these issues, Jisc, a not for profit organisation providing digital solutions and advice to the UK education and research sector, commissioned research to gain more understanding about practice around learning and teaching and gaining insights beyond the technology-led. This interview-based qualitative research project aims to capture the voices and experiences of people who are and have been teaching in higher and further education, drawing on senior and junior teaching scholars, across a broad range of academic disciplines. This research was conducted over nine months from 2017-18, and the themes that emerge, and questions that arise, come from analysing more than 22 hours of interviews. We report our research results here to provide insights about both practices and priorities for teaching staff, and as an act of amplifying and advocating rather than discovery. The intent is to inform and support, and to boost the voices that are coming through in our research, not pretend that we have discovered any of this for the first time. We also wanted, in conducting this project, to move away from starting with digital, and to ground discussions in the behaviours of people who were teaching, whether their practices had anything to do with digital or not.

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1. Introduction

Lasting changes around the use of technology in teaching and learning in colleges and universities, require first an understanding of the practices that staff undertake and the challenges they face. Effective and sustained change comes from a place of working in service to pedagogies, and practices that support and surround learning and teaching. In order to better understand these issues, the non-profit organization Jisc commissioned research to gain more understanding about practice around learning and teaching and gaining insights beyond the technology-led.

During 2016 Jisc, a not for profit organisation providing digital solutions and advice to the UK education and research sector launched a “Co-design Challenge” around the theme of the next generation digital learning environments. Jisc asked “What would an environment do for staff and students?”, “What kind of learning experiences would an environment need to support?” and “What learning and teaching practices aren’t currently supported in environments?” Over the course of 18 months, Lawrie Phipps held workshops and webinars, and engaged across social media and other modes of communication to elicit input on emerging technology trends in learning environments. The Next-Generation Digital Learning Environment (NGDLE) report (Phipps et al 2018) identified various themes around technology and pedagogy including: the growth in social media, analytics, usability and design and the identification of new vendors in the market. With regards to technology the NGDLE report also identified that innovative practices in teaching tended to occur outside the institutionally provided virtual learning environment (VLE).

The follow up project, which we report on here, flipped the approach taken with the NGDLE work. Rather than asking direct questions about technology, and then thinking about teaching and learning, we sought to ask direct questions of academics who teach about teaching and learning, and then see what if anything these educators thought about technology. The intent here is to ground discussions within education technology as a field of practice in the human work of teaching, and the organisational contexts which inform, constrain, and facilitate teaching. We are working to connect our knowledge of what can be done with technology to what may need to be done to support teaching practices.

This research emerges from the NGDLE report not as an extension of the themes therein, but to fill in the gaps that exist when conversations start with technology. Our focus here is to represent and interpret the views and experiences of people who are and have been teaching in higher and further education, drawing on senior and junior teaching scholars, across a broad range of academic discipline. While their experiences are not universal, they can lead us to useful insights around what is at stake with the coming together of technology with teaching and learning.

2. Methods

Our interest in gaining insight into behaviors of people who teach in HE and FE, beyond a simple catalog of what they do and what tools they use to do it, made a qualitative approach the logical choice for this project. Qualitative data analysis is an inductive approach, whereby the meaningful patterns emerge from the data collected (in this case, interviews and observations of interviewees) (Berkowitz, 1997, Forsythe, 1999). While the patterns and themes identified via analysis are also linked to what researchers want to know (in this case: a deeper understanding of teaching practices and how people conceive of, acquire, and engage with them), the iteration required, the visiting and re-visiting of the qualitative data

sets, orients the researcher to what they have found over and above (and frequently, in addition to) what they thought they were initially looking for (Srivastava and Hopwood, 2009).

The specific qualitative approach we settled upon, contextual inquiry, is a process whereby individuals are interviewed about their practices in an open-ended format, within a particular frame designed to elicit information not just about the content of what they do, but what their motivations are, what personal history contributes to these practices, and how they are impacted by current macro- and micro-contexts. As with other qualitative approaches, the priority is not to arrive at generalizations about populations as a whole, but rather to help recognize and interpret patterns of behavior, so as to generate insight. Contextual inquiry approaches are standard practice in user experience research, especially at the beginning of design processes, and valued in particular for being distinct from “lab” investigations of behaviour that are distanced from the context in which people habitually do their work (Dekker et al, 2003). Because an interview-based project lent itself well to our time restrictions--we could not command more than about 2 hours of time from each participant, and had nine months to complete this project--as well as the method’s orientation to context, and its systematic treatment of interview data in the analysis phase, we found contextual inquiry approach well suited for this research project. In the sections below we further describe our sampling, data collection, and analysis.

2.1 Sampling

We drew on our professional and personal networks to recruit scholars in FE and HE willing to talk to us about their teaching. Prospective participants were informed it would take approximately 2 hours of their time, and met them in the location of their choosing to conduct the interviews. Written consent was obtained to interview them, and assured them that we would, in record keeping, data coding and analysis, and in the writing of reports, protect their identities as much as possible. The participants were drawn from academics in STEM, Humanities and Arts subjects, across a representative range of institutions, including experienced and new to teaching staff.

2.2 Data collection and analysis

Each interview was open-ended, and guided by the overall intentions of the inquiry, so as to result in an exploration of teaching practices and the context in which they emerge and are engaged in. Manual note-taking allowed the capture of content without introducing the potentially off-putting presence of recording equipment. Each semi-structured interview took approximately two hours. Altogether we interviewed 11 individuals, for a total of about 22 hours of interview data. Each interview was guided by the following prompts:

1. Tell me about the teaching you do. Where do you teach?
2. How did you learn to teach? Where else have you taught?
3. How do you learn about teaching now?
4. Who do you talk to/communicate with about teaching?
5. What if anything do you teach your students about teaching?
6. Do you do any research? How does your teaching relate to the research you do?
7. What is the balance of teaching with the rest of the work you do?
8. What kind of support or development do you get for teaching in your job?
9. What do you wish you could do around teaching? What are you not getting to do that

you would like to be able to do?

10. When you have a new course to teach, where do you start? How do you put your courses together?

After the interviews, we gave each participant a £25 gift card to thank them for their time and participation (this incentive was communicated to them at the time of recruitment). We felt it important not to ask for people to give us their time for free, as people in the sector are busy, and we wanted to make it clear that we valued their input and what we might learn from them.

Post-interview, the handwritten notes were revisited, and further notes and annotations were incorporated into the transcribed document. Each set of interview notes was then broken down into a spreadsheet, wherein each cell of the spreadsheet contained a standalone piece of information, e.g. a description of a practice, a direct quote, or an editorial comment.

For example:

Some of her students have WhatsApp and FB groups, and she's not a part of those, but knows they work together within them	CITe57
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Once all of these interviews were completed and spreadsheets generated, all of the spreadsheet cells were printed out, and each sheet of cells were cut into strips of paper. Each piece of information was assigned a code that identified which interview the piece came from (CIT[lower case letter]) and which cell number in the spreadsheet contained the information. Most interviews were about 120 cells long. Altogether we had about 1500 paper strips with interview snippets printed out. On May 11, 2018, 12 people assisted in the initial analytical coding of the interview data, over the course of 6 hours. The people in the coding workshop (in addition to the project leads) included instructional designers, librarians, Jisc members of staff, and academic developers. Analytic codes were suggested from the outset based on preliminary analysis by Phipps and Lanclos, and were then further developed and refined throughout the day by the larger group.

We emerged from the coding workshop with all of the interview pieces sorted into higher-level themes, as well as sub-themes within each. Themes that emerged from this coding workshop then entered into interview spreadsheets, so as to visualize clusters of interview data, as well as to make it easier to dig into the content and meaning of these clusters. These codes were then refined and verified by re-sharing the spreadsheet with the advisory group from the coding workshop.

3. Findings

We have organized this discussion of our findings into four major themes: Technology, Physical Places, Risk, and Trust. In the following sections we draw on the interview data to illustrate and analyze the priorities and practices of teaching staff in UK higher and further education.

3.1 Technology

During the interview process we did not lead participants with direct questions about digital. This was so that the boundaries of the conversation were not seen as limited to, for example,

technology that they already used; this provided a place where they might further understand their existing perceptions of technology. It should be noted therefore that mentions of specific technology, and what did or did not work, emerged from the larger conversation about teaching practices and priorities. The digital aspects become apparent once the conversation has begun and where they are referenced in positive, enabling ways it was apparent that its use was implemented based on perceived needs.

Fundamental to any discussion of technology is the underlying organizational context in which people are using the technology. One thing that emerges from the interviews is that there is no one single model of education technology support across the sector, and that the landscape of education technology and teaching and learning varies. This means that where people identified institutional barriers to what they wanted or needed to do in their teaching was also not consistent. Sometimes participants located barriers in core of their institution, but some participants found a great deal of support in their organizations. The HE lecturer in art and design used the digital tech department at her institution to learn from, and found them to be “really supportive,” with the learning technologists coming to help her when she needed it. The civil engineering professor said he knows that technological innovation costs money as well as time, and he felt he had gotten support for both at his institution.

As is to be expected the VLE featured prominently in teaching practices, with interviewees expressing various levels of comfort and capability with it. The applied ecology professor was confident that she already knew what she needed to do with Moodle to get things up and running, especially as a course leader, and so she found things on offer at the Academic Development office not quite the things she needed to take her beyond what she already knew.

Using technology outside of the VLE was problematic if it did not connect with existing university policies around assessment, raising questions of how participants might reasonably try new things with technology in the absence of structures that might reward or encourage either themselves or their students. The professor of education used a blog for class once, instead of Moodle, and she said “some students really got it.” But because she was not allowed, according to university policy, to assess the work done on the blog, students didn’t see the point of doing the work there in that environment. In this instance, the lecturer found that when the focus of policy was on the specific technology rather than the practice, it stifled innovation and change in her approach to tech in her teaching. There are lessons here about approaches to education technology, about the hazards of letting the tech-tail wag the pedagogy dog.

The participants had many examples of using institutional technology to manage and enhance their teaching practices. We interviewed individuals who were continually iterating their practices, learning from what worked and what did not. It is unclear to what extent their institutions had mechanisms in place that facilitated learning from these iterative practices, so that academic staff as a whole might have opportunities to reflect, learn and change. The anatomy lecturer had experiences of flipping classrooms with 250 students, and he used previous lecture capture footage, edited it, put it online. He then tried to use the 50 minutes of face to face class time to deal with “difficult” issues. The political geography lecturer said that he found having PowerPoint slides available online was good for students with learning disabilities. He also wanted to use Blackboard to make his lecture slides available in

advance, so that his students could write their class notes on the printouts of the slides. The lecturer in forensics also valued being able to share her PowerPoint slides with her students, not because she adhered to them strictly in her lectures, but because she saw them as a help to students who wanted them to read after the lecture had been delivered. The PhD student and teaching assistant in education used her institution's Moodle discussion boards for her post-graduate students, and had also set up two different areas for discussion in Moodle, one where staff were present, and another that no staff had access to, "so students will use it."

The ways that participants talked about themselves engaging with the VLE, or other learning technology, was quite varied. For the most part, their teaching approaches were what informed their needs from the technology, rather than the other way around. The PhD student in education said that how she uses Moodle depends on how she is teaching--if the teaching is "instrumental, then it doesn't matter what the (VLE) system is, you want it to be fast and effective." She also noted that at her institution there was a lot of flexibility in the VLE practices, negotiated schedule and resources, because of the devolved responsibilities for content. She thought that because instructors of modules didn't always get together to make decisions as a team, it made things harder for the students, especially "if you're working part time [as her students are] you want things to be clear"

Anxiety about the role of technology in replacing themselves underlies some of the refusal around using the VLE. This was a not-insignificant concern at the time we were conducting the interviews, as the UCU/USP pension industrial action was active and very much on the minds of practitioners, whether they were on strike or not. For example, at least one institution used previously captured lectures to replace the content (and labour) of striking lecturers (Edwards et al. 2018). The professor of education noted that her colleagues assume that if the "stuff" from class is available online, that students will not come to class--the work of the lecturer, if it's reduced to content delivery, once it is captured online, is perceived to be unnecessary face-to-face. This is an anxiety, an expectation, and not necessarily one that is true, even as the impact of online content and lecture capture inspires anxiety among increasingly precarious academic staff members.

Some described bad experiences with their institutional VLEs that were barriers to student engagement far beyond just the classroom experience. The HE lecturer in art and design's experience with Blackboard was that all of the assessment had to be done via rubrics within the VLE. Her students found it difficult to access the rubric, so her work-around was to take a screenshot of it, and email it to the students. She said that once her student go into Blackboard, "it's a disaster, and they don't ever go back."

The learning environments provided by technology (not just the VLE) were spoken of not just as a tool but also as a place (White and LeCornu 2011). Participants saw technology as providing places for them to discuss continuing professional development issues, for example the English literature professor valued the Higher Education Academy virtual learning environment she had at her institution, where she learned theory and practice around teaching. The HE lecturer in art and design noted that she interacts in constructive ways with her students online (despite their reluctance to engage with the VLE), much like in the informal face to face learning environments discussed above, only in digital form. "I like it" she said, of being on Facebook with her students, "I can keep a better eye on what they're asking about."

It is worth asking, what does “innovative” teaching look like? It’s not just “use of technology” because the following involves technology, and is also terrifically familiar:

“[The professor of education] puts her materials online, uses the slides she has posted online in class, and she gets her students to do activities while in face to face class (all of the activities are on paper).”

“Innovative” was therefore not necessarily the appropriate word to describe many of the uses of education technology, and it is important to distinguish “digital” from “innovation,” as they are not synonymous. For example, the professor of education described Moodle simply as a repository for materials for her classes. The art and design lecturer in FE spoke of “documenting learning” within the Moodle environment, especially in group-work contexts, where students participated in forums as well as submitted the outcomes of their work. Some staff noted that the VLE was seen as the single source of consistency about their course, relying on it as the repository for course materials even if students did not always access it as much as perhaps would be useful, in the minds of their instructors. The lecturer in forensics noted that all her students seemed to want from the VLE was to “know where the lecture notes are.” She took a lot of time to find and put extra resources into the VLE, but also knew they were not used fully as part of her students’ “learning journey” and wasn’t sure about how to change that. The concern about whether students are likely to engage with “extra” content in the VLE mirrors more traditional concerns about students reading the “optional” items on a course reading list. The problem here is not about the technology, then, but about perceptions of what is required to do well in the class, and a larger question of what “engagement” might look like, and indeed if it has to look the same for each student.

3.2 Physical Places

The limits that physical space puts on teaching practices came up repeatedly in our interviews. Concerns about class size, the rooms in which individuals have to teach (lecture or fixed-seating spaces when they want to use flexible spaces, for instance), the limited availability of non-classroom spaces that meet the needs of staff and students, were all persistent themes in the interviews. Some practitioners were arranging their classrooms into flexible spaces that facilitated conversation and group work because their pedagogical approach required that arrangement. If they had to teach in traditional fixed-seating environments, they had to spend time and energy “hacking” their spaces. The English literature professor found it challenging to have to change the spaces every time to make them suit the kind of teaching she wants to do, but “once you make the changes it is worth it,” she said.

Many were aware that they could not get into the kinds of spaces they wanted to be able to teach in at their institution. The professor of education noted there was a “hard limit” on non-lecture spaces at her institution, and the civil engineering professor didn’t always get to teach in the interactive spaces he preferred. The persistent sense of scarcity, an awareness that there are spaces they could be in, or that others could be in, that they cannot get into, points to a need to better understand the relationship of staffing, timetabling, and available physical environments. We need to ask additional questions about what role the digital estate might play in supporting teaching, both active pedagogies and more traditional approaches. What tools are available now, what advice and guidance might be possible to support the

kind of bridge that digital might build from current practices to ones that more fully use the potential of the spaces they have (and want to have)?

Participants expressed a need for non-classroom spaces for themselves, and for their students, because teaching and learning does not just take place in classrooms. For example, staff offices were spoken of as an important place for teaching, a place to do the work of marking and also an important place for face to face meetings, which can be difficult in shared office or hot-desking situations. Some participants talked about doing marking and other admin work in their office in an attempt to keep separate their work and their home lives. While the solution to “not enough space” institutionally can be “share a space,” that solution does not necessarily meet the expressed needs of practitioners. Having confidential meetings, doing work that has private/protected results (such as marking), this is work that requires protected, unshared space. If not offices, then what? We could ask questions about what else might be possible, given the potential of digital systems, and a broader definition of what a teaching and learning space might be. If work, including academic work, is something you do rather than somewhere you go, what role could academics play in designing digital and physical spaces that meet their and their student’s needs? As we saw in the case of classroom teaching spaces, flexibility, a sense of control, and adaptable spaces are a requirement for effective work in non-classroom spaces.

When talking about the work she does in her own office, the applied ecology professor also mentioned that people in her department who have shared desks have to manage student traffic and confidentiality carefully--they schedule meeting students on days different from when their desk partner does, for example. The sense that confidential meetings could and should only happen face to face is an interesting one. Clearly there is a concern for privacy and security, but there is also an underlying assumption that difficult meetings should be face to face. It would be interesting to explore the possibilities for safe and effective pastoral care that happens in digital places and contexts, and the extent to which that would extend the capacity that academic staff have to meet and talk with their students.

Informal spaces emerged as important settings for teaching and learning. Shot throughout this theme is a need for flexibility, once again echoing the concerns that emerged from discussions about formal teaching spaces such as classrooms. The HE lecturer in art and design found it easier to meet students in the flexible learning space set up for her program, the students were more comfortable there (and she was, too). She meets one on one with students in the space “in a quiet corner” at the same time that other students are working in groups--if a student wants to go meet in another space, she has other places (such as her office) to go, but the large, comfortable, flexible space filled with soft seating, tables, whiteboards, and computers along one side of the room was generally preferred.

Students in some cases find their way to non-classroom spaces even if they are not officially allowed to do so, because they need a range of places to do their work, not just lecture halls and tutorial rooms. The civil engineering professor mentioned that students at his institution were “not allowed in the buildings during the weekend”--but they would go in anyway, to use lounge spaces to study where they were comfortable. He said there was a pattern, particularly at the end of the semester, when students need to be in the building to work more, and they largely ignored the rules about when they were and were not “supposed” to be in the buildings.

3.3 Risk

If innovation is defined as trying something unusual or new, change can be simply trying something different. Participants were keenly aware of the risks involved if they failed to innovate, to try and succeed with new things (and discard the things that did not work). The English literature professor stated that inclusive teaching and teaching that doesn't change are mutually exclusive: "You and your practices have to be malleable." Being transparent with students, talking to them about why they are doing what they are doing, emerged as an important way to deal with and manage student anxiety (and a sense of risk) about the impact of unfamiliar approaches. Transparency was thus not only a way of building trust such that students could be more engaged and successful, but also a primary strategy for helping to manage the risks that academic staff felt they were undertaking in trying new or different things in their classrooms and other teaching contexts.

There is a relationship to be explored among change, innovation and risk; some individuals did not feel that they had institutional support to try different things, and if they did try new things, they tried not to draw attention to the things they did, for fear that they would be told to stop, or that what they were doing was wrong. Student expectations can have a dampening effect on whether teaching staff try new approaches. Participants recognize that they have to confront the occasionally quite conservative ways that students frame what teaching and learning looks like, before they can safely try unconventional approaches. They are also aware that more innovative and unconventional approaches do not always correlate to simple measures of "satisfaction" in course evaluations.

Participants pointed to the importance of explaining why they were doing what they were doing across their practices, as a way of managing risk to themselves. These educators wanted to make sure that students could see the rationale behind lecturing in a particular way, or group work, or the particular structure of any educational experience, so that they (students and teachers alike) could be more successful. This kind of transparency is a component part of building and maintaining trust--those who saw themselves as facilitating trusting relationships with their students did this in part via pedagogical transparency, through repeatedly talking about why they were teaching in a particular way, in a particular place, or using a specific piece of tech, system, or social media platform. Their measure of success, and management of risk, was much more about process than content. The applied ecology professor said, "undergraduate success is about breadth, flexibility, and being able to create depth where they want, and making sure they can develop that [ability to go deep where they want to]"

Interviewees were aware of some of the barriers that put themselves, their teaching practices, and their students at risk. The final question of each interview was "what else do we need to know about?" and the (largely unfulfilled) desire to have the time and space to discuss teaching came up repeatedly. The religious studies lecturer, who is also his institution's head of academic development, said he didn't think there was enough time spent talking about Teaching and Learning, and when there were such conversations, they didn't "have institutional weight," because not enough people (and in particular not enough senior people) were participating. The lecturer in forensics pointed out that undergraduate teaching is time-intensive in part because there is a lot that undergraduate students are trying to figure out, and there's a lot more support needed from lecturers. The lecturer in political geography separately echoed this point that teaching takes time, and added that he would like more time with his tutees, but that would require fewer [staff] meetings, and a budget to socialize with them

Several participants felt that time was scarce to have discussions about teaching within internal or external peer networks. Even when there were institutionally provided spaces to discuss curriculum and teaching, they were much more often about compliance and credentialing rather than new teaching practices, or rethinking current work. Instructors talked about having dedicated time to develop new modules, but none to reconfigure or revise in any significant way modules currently on offer. This lack of time to revise existing modules is likely related to the concern about the risks that might be undertaken in changing teaching practices.

Time also affected what kind of choices participants made around getting access to resources. Institutional bureaucracy can be a barrier to getting equipment, licenses, etc, and if people need something on a shorter time scale than organizational red tape allows, they might just purchase something themselves so that they can use it. When we asked the HE lecturer in art and design what she wished she could do in teaching that she can't know, she noted that sometimes she ends up buying her own equipment and licenses, because "it's better than waiting for a year" to get the things she wants to help her teach, or not being able to teach in her preferred way at all.

Bureaucratic processes could also add to the time that important work takes, such as curriculum development, exacerbating the sense that there's not enough time to do important work. For example, the professor of education saw "course design by committee" at her institution, and she found it hard to innovate because of the hours required to do the work via committee. Time allotted to tasks is evidence that such things are a priority. When time is not allowed for the practice or further development of teaching, it is hard to argue that teaching is valued.

Fragmented internal networks are silos that make it impossible for some to see the good work that might be happening. The civil engineering lecturer was convinced that there were "secret projects" on his campus, innovations that no one can see, because of the barriers to their visibility. Others were themselves part of the institutional support system for teaching and learning, but encountered academics who did not want any part of that support. The head of the humanities faculty, in trying to effect change within his institution around teaching and learning practices, encountered academics telling him "stop telling us how to do our jobs." He also recognized that he was part of a network that not everyone at his institution had access to--he spends a lot of his time with staff developers, talking about teaching, but has a small team of them, and so it's of limited benefit to the entire (large) university at which he works. He thought that lack of access had a negative impact on his institution's support for continuing professional development for teaching.

For some interviewees there was very little institutional support for their teaching practices, while other participants had access to internal and external networks of support. For the most part people had access to either internal or external networks, but not both. Not everyone, therefore, had a trusted network to help mitigate the risks involved with experimenting with teaching. For instance, the art and design lecturer in FE had a very limited external network, with few outside connections in his field. In fact, he was hoping to get a chance to do an MA degree in part to build an external network in his field, as it was very difficult to do from his particular institution. But this same lecturer has good internal support from his line manager, and felt he could ask for help. Another participant, in the course of our interview with her, realized when she was talking about the support she got for thinking through pedagogy and

teaching practice, she was referring to resources that were available to her because she was doing her PhD. Once she finished her degree, she would no longer have the kind of access she currently enjoyed, but which she valued for her work.

Those who did have access to a supportive network of peers, locally or outside of the institution, recognized it as an important to how they approach teaching. The applied ecology professor had opportunities to see her colleagues teaching, because co-teaching often happened within her program's modules, and she and her colleagues discuss what to do, how workshops will be run, and generally "talk about practice" amongst themselves. The PhD student in education knew that she serves as a resource for her colleagues, because they know she is doing her PhD, and she saw the relationships with her colleagues and students as helping to provide the materials and approaches for her to use in teaching, too.

3.4 Trust

Trust was one of the most important themes to emerge from people's discussions of why and how people make the decisions they make around teaching. Building rapport with students, building trust and comfort in informal environments is spoken about as a crucial way to set students up for success in the more formal contexts of the university. The need to have access to more than just formal classroom spaces as a part of their teaching and learning practices was also linked in some cases to a much broader desire to engage with students. The civil engineering lecturer simply stated "In my mind, it's about trust: students do more work for you knowing they have confidence that you'll take them somewhere." The lecturer who was head of the humanities faculty discussed the ways that he builds rapport with students, via guest lectures, and field trips as well as module leadership, resulting in students being candid with him, and not just telling him what they think he wants to hear.

The English literature professor's strategy for putting students at ease when they came to see her in her office (a setting she says they are not always comfortable in), is to deliberately notice something about what they are wearing or holding--shoes, phone, clothes, etc--and talk about it enthusiastically, and ask about it. "Because it's very difficult to go into someone's office when you don't know them, And many students coming to my office do not know me yet." She said that students coming to her office for the first time are "very nervous, even though I am not scary at all."

It is worth asking here what else we might be able to learn about the experiences students have, especially the first time they approach an instructor, and the extent to which the student is apprehensive about approaching "A Lecturer" (where the identity is what is scary), or apprehensive about being in a new space (such as an office) for the first time. We need to think about how digital tools and environments might facilitate building of trust, and also ways that current digital affordances might be perceived as barriers to students, in trusting their teachers, and the institutional context in which they find themselves in HE and FE.

Educators wanted to be able to trust their institutions to support their work, and also spoke about barriers to that very support. Some of the barriers to the ways they wanted to teach were seen to be particular people, for example members of the senior management team. The professor of education specifically identified a Dean at her institution as "anti-ed-tech." But change management difficulties could be found at many levels, not just senior management ones, and again, the barrier to change here is not necessarily technological, but

organizational. In the anatomy lecturer's experience, "sometimes people create barriers." For example, if he wanted to change modules, he needed to go through 3 different committees to do so.

Individuals cannot always trust that there will be enough people to do the necessary work: how many people are available to do the work, and what sort of people (and expertise) are in the institution has an impact on what is possible with teaching. When thinking about designing a course, the religious studies lecturer also had to think about who will be available to do the teaching--he said that available staff and their capabilities/characteristics can be a restriction to thinking about what is possible to offer to students. The PhD student in education was trying to have class discussions within the VLE, but it wasn't working quite so well this year (as it did last year) because this year they have online practices that are split between two locations, and one of the locations is in the last year of the program, so there wasn't much attempt being made to keep the two locations coordinated. Therefore she said the platforms were "a bit of a mess" this year. In this case, the difficulties manifest as student confusion within the VLE, but their confusion is not a problem of education technology, but rather one born of not having enough staffing to communicate and coordinate across multiple teaching and learning sites (digital and physical)

Funding (or lack thereof) also contributes to the sense of what is and isn't possible around change, and can heighten a sense of risk, as well as a lack of trust. Funding concerns are not of course just about internal forces within institutions, but are part of the larger political context in which teaching staff in HE and FE operate. This political context informs organizational concern with metrics such as National Student Survey (NSS) scores and Teaching Excellence Framework (TEF) awards. This has the potential to become an even larger concern as attention is paid to the metrics associated with the new Office of Students data-driven approach. The focus on metrics has the potential to distract from the work of teaching and learning. The HE lecturer in art and design called the institutional focus on NSS scores as "nonsense" that was in fact in conflict with research and funding concerns, and that got in the way of doing "actual work."

Interviewees were aware that not just what they do when they teach, but why they do it, is an important part of their teaching success. The need for transparency was talked about in terms of assessment, of student expectations, and of approaches to teaching practices generally. The professor of religion said "whatever you do with students, you need to be able to explain to your students why you are doing it." The PhD student in education and teaching assistant taught her students about teaching by "echoing" within the process of teaching what she wanted them to do--she told them repeatedly, "this will be useful, trust me," and also modelled in her own behaviour the things she wanted them to value about teaching. The anatomy lecturer discussed transparency in the process of putting together a curriculum--he takes a holistic approach, framing everything to a problem, especially the student questions around "why," and designing courses as a journey, which he says "gives meaning to what they are learning." Students, once aware of why certain practices were in place, tended to accept it. The civil engineering lecturer didn't find his students pushing back on project-based learning because those practices are a part of their discipline, and students knew why they were engaging in them.

Transparency of practice was also framed as an important part of providing a context of trust, so that students would come to members of staff when they needed help outside of the classroom. For example, the HE lecturer in art and design had a tutor with dyslexia, and so

was taught in very different ways than she was used to. Her experiences with this tutor opened her to the possibility of different approaches to teaching, and she talks about different approaches with her first year students. The feedback she gets from students is that they had been worried they were alone in their concerns or specific needs, and they realized after she talked to them that they were not alone. She thinks these conversations make her students a more cohesive cohort,

Trust building was important in digital as well as physical spaces--during interviews, people talked about discussion boards and social media as teaching spaces. They also talked about digital spaces that they would not go into because they wanted to make sure that students would interact with each other. For example, the HE lecturer in art set up a space on a social media platform where her students knew she was present, and then she encouraged them to set up a separate space that she was never going to go into, because they needed have time and space to interact with each other when she was not around. The same issues around structured and unstructured spaces, institutionally supported spaces and non-institutionally supported, were true in digital as well as physical spaces.

Digital technology can expand the number of places where teachers can communicate in trustworthy ways with students. The religious studies lecturer was very mindful about his social media presence as a way of breaking down barriers between students and academics. He was aware that sometimes it is hard for academics to frame themselves as people, for their students because they are teachers and therefore authority figures. He very deliberately curated a mode in particular social media accounts to make connections with his students that he could not otherwise make in formal structured classroom environments. He was never under the impression that just because he has a social media account that it would result in engagement with his students; it was about what he did with his presence online that made the difference.

Sometimes such transparency feels risky, and the religious studies lecturer spoke of his privilege in his position as a permanent, long-term lecturer, and also a white man, in being able to safely admit that he doesn't know everything, and that he's sometimes being experimental in his teaching. He is aware that such "risk taking" is not always available to white women or people of colour.

4. Discussion

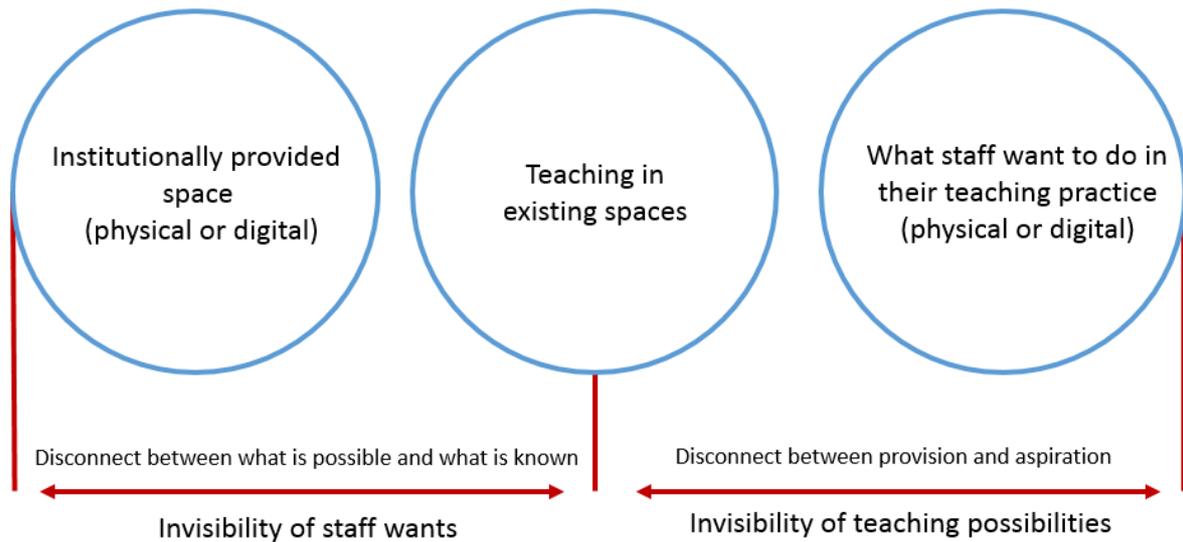


Fig 1

Practitioners are struggling with the disconnect between what they need to do in the spaces their institution provides, and what is possible (Figure 1). Staff have to work harder to achieve the kind of teaching they want to in spaces that are not always configured to facilitate their desired practices. Some of this is a result of limits on space as a resource, however there is also an element of staff not always knowing what is possible in the spaces (digital and physical) available. The opportunities in which innovation can happen are largely invisible to staff who are struggling with institutionally provided technology and teaching environments that are barriers to their teaching. If the circles in Figure 1 started to overlap more, people might start to have more access to the possibilities that are currently not visible to them.

In addition, while “innovation” seems now to be writ large in every institutional strategy, it is important to distinguish that digital and innovation are not the same thing. In some of the interviews people pointed to quite “traditional” practices they were doing: providing content, facilitating student discussions. Neither of these practices is novel, or innovative. It might be “digital” but it's not particularly new or exciting.

When institutions mandate technology, that is not the same as supporting teaching. We see that mandating particular approaches in the name of control or “consistency” stifles innovation and turns people away from the creative use of digital around teaching. Institutionally provided systems are not single-stop places for practitioners, who use open web and commercially provided platforms as teaching (and learning) places. This is not new, as the dilemma of the bounded VLE and limitations is called out here, for instance:

“The phrase ‘lifelong learning’ in higher education strikes at the heart of the ‘bounded VLE’ problem. Students are given the skills to see their CPD as important and necessary and then we give them access to a VLE that is aimed primarily at the modular nature of their course, and when they graduate they lose access to that resource. Compounding this problem is the idea of ‘life-wide’ learning, where students are actively encouraged to draw on their broad experiences and integrate them into their educational experiences - but where is the space within the VLE?” (Phipps et al, 2008)

The familiar tension between the bounded VLE and the potential of the open web continues to have implications for the ways that institutions support and recognize teaching practices that leverage digital places and platforms. How can institutions support individuals without mandating specific digital approaches or tools?

Perhaps one answer is for institutions to recognize and facilitate “not-yetness” (Collier and Ross 2017):

“Not-yetness is not satisfying every condition, not fully understanding something, not check-listing everything, not tidying everything, not trying to solve every problem...but creating space for emergence to take us to new and unpredictable places, to help us better understand the problems we are trying to solve (Collier, 2015).”

This would respond quite effectively to stated preferences for time and space to explore, to find out what works and what doesn't via experimentation, to work with emergent technology and within digital places that haven't been completely vetted and controlled by institutions. This would require trusting academics, and their students, in contexts where institutions might not be able to observe or quantify what is happening.

Trust, therefore, is not just an issue between instructor and student. Trust emerges as an important component part of effective teaching and learning environments. If the people working in an institution do not trust the technology or the people who are in charge of that technology, they are not going to engage. But teaching is not just about the individual who is “the teacher,” delivery of teaching involves staff developers, educational developers, staff involved in curriculum design, and the people who do the timetabling. If at any point in that network the trust is broken, then things start to go wrong. If students go into a system that doesn't work they never go back. If faculty have bad experience with someone who is supposed to be helping them they never go back. If they try to upload a piece of content to a system and it fails they never go back. If faculty think they are going to be punished in some way for not using institutional tools, they will hide their practices in using what is available outside of the boundaries of their institution.

It is worth thinking about the extent to which academic staff trust institutionally-provided technology beyond its traditional role as a repository for materials, and as a potential place for innovative practice. If they do not trust the systems to work, if they do not trust that those systems will not be used against them, as was the case in the USS/UCU strike in 2018, then there is little chance that teaching and learning innovations will be happening with the help of these systems. The political situation of precarity in higher education is having a direct impact on the extent to which people want to engage with technology. Likewise, if academic staff do not have trusted relationships with the teaching and learning support staff, there is little chance that their collective expertise will be leveraged to the benefit of their students.

We also wish to draw attention to the discussion of how important and occasionally fugitive networks are in developing, maintaining, and growing teaching practices. It is striking how difficult networks are to build and maintain without institutional support for the time and other resources such networking requires. Even as the UK has a number of national frameworks and organizations dedicated to HE and FE teaching, there remains an uneven

sense of access to such structures, and the development that they might offer to people teaching in the sector. The distance between the networks people wish they had and the extra-institutional structures available for development of teaching is something that needs attention.

5. Conclusions

We wanted, in conducting this project, to move away from starting with digital, and to ground discussions in the behaviours of people who were teaching, whether or not their practices had anything to do with digital. We report our research results here to provide insights about both practices and priorities for teaching staff, and as an act of amplifying and advocating rather than discovery. The intent is to inform and support, and to boost the voices that are coming through in our research, not pretend that we have discovered any of this for the first time.

The practices discussed in this article and the emergent themes identify a range of opportunities and barriers. Throughout the research we found the assumption that digital was synonymous with innovation to be a barrier to actual change--in some cases it actually helped to maintain existing practices that were perceived as needing to change. Where this perception of digital being the same as innovation we also found instances of institutions mandating the use of technology in teaching, and ultimately stifling innovation. Technology cannot save an institution which lacks trust, without which effective relationships cannot be built among staff, or between staff and students. Trust is the foundation on which effective teaching and learning environments are built.

In presenting this work in talks, conference papers, and to reviewers, we have received some unenthusiastic reactions to our findings and recommendations, especially around “fostering innovation” among educators. We share the disappointment expressed, but not in the educators. Our disappointment stems from structural policies and processes, that despite knowing that education is a human endeavor, continue to fund technology and systems in the place of people and their time.

We cannot hope for innovative practice in teaching (or learning) until the basic needs of educators for time, for networks, for institutional and structural support, are met. That our findings are seen by many as “already known” indicates, not that we do not need to pay attention to this anymore, but rather that we still do not pay enough attention to the human cost of labor and expertise in education. This paper should raise questions: what is the role of the learning technologist? of the IT professional? of the professional organisations in HE and FE in facilitating the creation of spaces and structures? How can educators be supported in experimenting with and growing their teaching practices, both with and without technology? Until their needs are met, with steady funding, and a trust in their expertise, the innovations we see in education will be despite institutions, not because of them.

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