The Cost of Asking: 'Say that Again?': A Social Capital Theory View Into How Lecture Recording Supports Widening Participation

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Lecture recording, as a form of technology enhanced learning, has been purported to support equality in Higher Education. The introduction of lecture recording is often controversial, with some lecturers having concerns as to how recordings may change teaching and learning. A commonly reported motivation for incorporating lecture recordings is supporting the needs of widening participation students, students who are otherwise under-represented in higher education. In this study, we used focus groups to explore the experiences of widening participation students in higher education as they navigated their university programmes. We held four focus groups in three Scottish universities, and discussed and developed findings alongside a stakeholder group. We then applied a social capital lens to the data to explore whether recordings can be used to overcome a lack of social capital in widening participation students. Our participants identified areas where they lacked social 'credit', such as a lack of peer parity among colleagues and experiences which could be described as microaggressions. Students discussed reasons why the 'cost' of asking questions in class was too high, and how recordings support them by allowing them to save on this perceived cost. However students also recognised the tension of a lack of trust between lecturers and students, which could be exacerbated by recordings. We found good evidence to support a social capital view of 'trust as credit' in interactions between students and lecturers, and provide suggestions for how lecture recording can be used to support widening participation students in this area.

Keywords: technology enhanced learning, widening participation, higher education, lecture recording, lecture capture, education equality

INTRODUCTION

Higher education (HE) has an outcome equity problem. Students from minority groups are less likely to access HE programmes (Gorard et al., 2006; Kettley, 2007), and those students are less likely to be retained throughout the programme (Gale and Parker, 2014; Younger et al., 2019). In the United Kingdom and Australia, the efforts to improve access and retention to HE

are referred to as widening participation (WP). WP in HE focusses on students from groups who are under-represented in HE in relation to their prevalence in the population, and includes students from semi-skilled and unskilled social classes, students with disabilities, and students from Black Asian and Minority Ethnic (BAME) groups (Allen and Storan, 2005). In Scotland, widening access and participation is focused on the under-representation of students from areas of socio-economic deprivation (The Scottish Government, 2016). In addition to this, it is also necessary to consider the experiences of Lesbian, Gay, Bisexual, Trans and Queer (LGBTQ) students, who face barriers to accessing HE (Grimwood, 2017). The focus on under-represented groups is often interpreted to mean minority groups, yet in actuality a very large proportion of the United Kingdom population faces increased barriers to accessing HE, and the United Kingdom's HE system propagates these inequalities through the continued acceptance of these barriers and a lack of sufficient policy action (Boliver, 2017; Brown, 2018).

Barriers to Widening Participation in United Kingdom Higher Education

There are a range of strategies used to encourage WP students into HE, such as the provision of bursaries, outreach to disadvantaged areas, and targets for inclusion, although the success of these strategies are debated (Jones and Thomas, 2005; Pugh et al., 2005). Students targeted by WP approaches in the United Kingdom face a range of barriers to accessing higher education, and these barriers are often unique and individual to that particular student and their context (Florian, 2014). In general terms, these barriers can be financial and social. Tuition fees and the reduction of maintenance grants have reduced low-income student participation in United Kingdom HE (Dearden et al., 2011). Even those low-income students who are able to attend, or Scottish students who have free tuition in Scotland, may face additional financial barriers. For example, students from certain social classes are more likely to live further away from campus and face transport inequality, making journey to their education provider more costly (Kenyon, 2011). As timetabling is often designed for 'traditional' student experience, i.e., those who live on campus and have no competing time demands, WP students often find the timetabling disadvantageous to their studies, requiring access to university for short, non-contiguous periods (Roberts, 2011). In 2020, the Times Higher Education supplement estimated that a 3-years degree programme would cost the typical United Kingdom student ~ £50,962 in fees, accommodation, and additional costs[1]. Students paying back loans, international students, and students on longer

degree programmes would pay back more. The United Kingdom median household income in 2019 was £29,600[2]. Participating in United Kingdom HE requires significant financial investment for the majority of households.

Social barriers are perhaps more complex to characterise, and even more interrelated. Social mobility, e.g., the degree to which one's parents predicts one's outcomes, is commonly considered a challenge in widening participation, as few students enter university as the first member of their family to do so (Vignoles et al., 2014). This cannot wholly be explained by inadequacies in the funding system, as while financial stress is not alleviated by these loans, they account more for retention as opposed to recruitment (Kaye, 2020). What is it that discourages students from WP backgrounds from exploring higher education as an option? One review noted that social barriers could come from ill-fitting assessments, biases within universities about lowering standards, organisations being resistant to changes that would facilitate inclusion such as making disabilities acceptable, and a lack of obvious transitions throughout the education system or a lack of modelling change (Gorard et al., 2006). A lack of peer parity, or role-modelling, is one form of social barrier facing WP students in HE. This is often discussed in terms of gender equality, e.g., when women participate in male-dominated fields, they may engage more readily when they encounter other women (Ford et al., 2017). Peer parity is sometimes criticised as an 'excuse' which lays the blame on the minority group for not being ambitious enough to envisage themselves in a given arena (Clark Blickenstaff*, 2005). With this said, there are very few BAME academics, and academics from lower-income backgrounds, and so BAME persons in academia often feel isolated and unsupported in academia (Mahony and Weiner, 2019). A lack of peer parity means that WP students have little access to social support from those with similar backgrounds and experiences.

The mechanisms of social barriers to HE are more challenging to describe than the financial penalties of commuting, for example. How might isolation manifest or become a barrier for WP students? One potential mechanism is microaggressions, which have recently become a recognised phenomenon facing minorities. Microaggressions have been mainly considered as 'brief, everyday exchanges that send denigrating messages to people of colour because they belong to a racial minority group' (Sue et al., 2016). However, microaggressions have also been characterised as impacting LGBTQ people (Nadal et al., 2011) and those who identify as women or have transgender identities (Sterzing et al., 2017). Microaggressions have been associated with higher prevalence of stress and mental health disorders (Williams, 2020) and are considered impactful because they fit a pattern of multiple

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[1]https://www.timeshighereducation.com/student/advice/cost-studying-university-uk.

[2]https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/householddisposableincomeandinequality/financialyearending2019#:~:text=Median%20household%20disposable%20income%20in,Living%20Costs%20and%20Food%20Survey.

small offenses that minorities experience regularly (Rini, 2018). For students in HE, microaggressions can take the form of small comments which serve to alienate the student from the wider HE community, for example, being mistaken for a tourist or someone who doesn't belong to campus, or a student being told they don't look like a student (Olaniyan, 2021). These serve as 'othering' reminders to WP students, a reminder that they do not conform to the traditional student model. Microaggressions can also be hierarchical in nature, particularly where the staff-student dynamic exists. WP students may be perceived as creating extra work from staff when requesting help to navigate these various barriers, and this can help justify the behavior in the aggressor's mind (Lee, 2020). Microaggressions can be varied and unintentional, but often reinforce a message that the WP student does not belong in HE. This seems an obvious mechanism for the social barriers to HE.

Lecture recording, the practice of capturing some or all of a learning activity for later independent review by students, has been considered one mechanism by which some of these financial and social barriers can be addressed, although the specific mechanisms are vague (MacKay, 2019). In terms of financial barriers, lecture recording may reduce the financial impact of degree costs through allowing greater timetabling flexibility, reducing commuting costs or enabling paid work. By allowing students to dictate their own timetable, some financial and socialising time barriers to participation may be reduced (Gorard et al., 2006) although it should be noted that some research is doubtful as to the importance of financial barriers to WP (Vignoles et al., 2014; Kaye, 2020). In terms of supporting transitions in education, lecture recording may support students with disabilities that either impact processing speeds or increase absences due to mental and physical health problems, and reduce stress surrounding HE (Nordmann et al., 2020a; MacKay, 2020). These barriers are all more likely to be experienced by WP students, yet despite these proposals, there is limited research exploring how the provision of lecture recordings impact WP students specifically. This may be particularly pertinent in a HE context which has experience of distance learning post COVID-19 (Nordmann et al., 2020b). Technology Enhanced Learning (TEL) does not impact all student groups equally (Gorard and Selwyn, 1999), and so to prevent the inadvertent creation of yet more barriers to WP students in HE, we need to explore the experiences of students using these technologies.

Social Capital Theory and Widening Participation

Social capital theory is one of many theories used to make sense of how individuals have different outcomes in HE. Social capital theory was formalised (Bourdieu, 2018) as a way of describing how less tangible social interactions can still be considered a product of accumulated labour (i.e., capital). Bourdieu'stheory was initially formed as a sense-making tool for the differences in achievement across social classes in education and highlights that being a member of a specific group affords opportunities and access to resources that other groups do not have, whether that be

the advantage of a recognisable name, or looking a certain way (Bourdieu, 2018).

Social capital has been framed in terms of specific trust in structures (Coleman, 1988). An example is that of wholesale diamond traders: merchants may pass a quantity of stones to another merchant, who will be able to review those stones in private, with no formal guarantee that the same stones (and thus, the same financial value) will be returned to the first merchant. The closeness of the community enables trust between merchants, and enable the traders to operate more freely and without rules (Coleman, 1988). Violation of these trusts would impact on the social cohesion of the group. In some ways, trust is the currency, and obligation and expectation trade on this currency. It has been argued that underrepresented groups in education must first build trust to acquire social capital (Fuller, 2014). How are WP students to build trust, particularly where they may be facing repeated microaggressions or statements that they do not belong in HE? Student trust in the procedures and staff of higher education has been linked to how they value their degrees (Carvalho and de Oliveira Mota, 2010). Research draws on the importance of mutual trust when it comes to assessment, and the complexity of context, where feelings of belonging matter, such as assessments in a non-native language (Carless, 2009). Additionally, it is arguable that students trade on trust when they tell us they cannot submit an assignment in time. The mere act of requesting an extension requires that students trust in the system and that their reasons for requesting an extension will be considered "good enough". On the flip side, academics might wonder whether a student has truly engaged with the assignment to a reasonable level given any extenuating circumstances - have they consulted with peers, accessed other texts, and understood the academic's original discourse? Have they worked consistently throughout term or left themselves victim to a lack of foresight and time management? This is similar to the perception of WP students creating more work for lecturers when requests for navigation help are not understood (Lee, 2020).

Academic socialisation, the process of understanding what is required and expected of an individual performance (Lea and Street, 1998; Northedge, 2003; Lea and Street, 2006), is an important element of learning, and often comes from assessment and feedback (Hattie and Timperley, 2007). It has been said that "identity matters to the way young people imagine themselves in education and into their futures" ((Holt, 2012), pp 930), and the identify conferred to students through proceeding through a degree, as they 'become' a psychologist, a zoologist, or an economist, allows them to embody new capital. It is through engagements with their staff, often in assessment, that students learn to evaluate their own work to identify their strengths and weaknesses (Nicol and Macfarlane-Dick, 2006; Smith et al., 2013a). As discussed, United Kingdom academia is predominantly composed of well-educated, high-income and white academics, and so WP students may experience further barriers to integrating academic practice when they have to bridge not only a discipline gap but a cultural gap as well. They may be less able to navigate hidden curricula (Snyder, 1971), and excluded (purposefully or otherwise) from scenarios which may help them to navigate these identity forming moments.

We chose to apply a Social Capital Theory lens to this dataset because there are inherent conflicts and lack of trust within the lecture recording debate (MacKay, 2019). These trust conflicts have previously mainly been explored through discussions with HE staff focusing on issues such as copyright, performance management, and job security (Nordmann and McGeorge, 2018; Dommett et al., 2020), with WP students a neglected voice. Exploring how trust, specifically when applied as a form of social credit, impacts how WP students experience university life may provide more concrete examples of the benefits and drawbacks of lecture recording to WP students. We aimed to explore two research questions. First, do WP students experience a deficit in social capital in HE? And second, how does this deficit impact their use and perception of lecture recording technologies, if at all?

METHODS

Ethical Approval

The project and conduct of the focus groups was approved at all three institutions under the Aberdeen University School of Psychology Ethics Committee Ref PEC/4455/2020/1, the University of Edinburgh Moray House School of Education and Sport Ethics Sub-Committee Ref 2678, and the University of Glasgow College of Science and Engineering Ethics committee Ref 300,190,121. We followed BERA's ethical guidelines for educational research (BERA, 2011) but note that due to extensive concern about financial implications for students from WP categories students were given a £20 Amazon voucher to reimburse their time.

Position of Researchers

This research arose from a QAA Scotland Enhancement Themes Collaborative Cluster 'Widening Participation with Lecture Recording'. At the Cluster's first open meeting (December 2019), the participants identified a lack of data regarding how students from widening participation backgrounds experience the implementation of lecture recording in their studies. This research arose from those discussions. The three principal leads of the cluster, JM, EN and JH, are white, *cis*-gendered, female researchers with experience working in the Scottish HE sector. From their own student experience they identify with some aspects of being a 'working class student' at university, to varying extents. JM, the lead on this analysis, primarily identifies with a socio-constructivist epistemological position, and would note as a source of bias the relative similarities of the author backgrounds. While we have attempted to be cogniscent of these biases, we advise readers to be likewise aware, and that our experiences may make it less likely we have identified aspects of student experience we are unfamiliar with.

Participants and Recruitment

Within each university, a recruitment email with standardised text was circulated via the university's widening participation and student recruitment and admissions teams to relevant mailing lists. Mailing lists included students who participated in widening access programmes which target students from postcodes in quintile 1 of the Scottish Index of Multiple Deprivation (SIMD20) or those with other forms of educational disadvantage such as care experience. These postcode areas are usually areas of lower income with low participation rates in HE. Programmes encourage progression of school leavers and mature students into university. The University of Edinburgh recruitment was also circulated via the Edinburgh University Student Union's Widening Participation, Equality and Tackling Elitism lists. After receiving the email, participants had to contact the named researcher to indicate they wanted to take part. A project information form detailing the project's aims, anonymity of participation, and ethical approval was attached to the recruitment email alongside a consent form, and when students contacted the named researcher a mutually agreeable time for the focus group was agreed. Participants were informed they would receive a £20 Amazon voucher to reimburse them for their time, and that focus groups would likely take 50–60 min. While reimbursing participants is not encouraged by BERA's ethical guidelines, we felt the context of this research, that these students are WP students who may experience financial disadvantage, meant we may be asking them to participate where work or earnings may be sacrificed. The participants were undergraduate students, but no information was collected regarding demographics or course attendance. Due to this, we do not know what forms of pedagogy were being used in each course, which may have been very varied. From informal discussions with participants, the groups were not homogenous, including mature and younger students for example, and came from a variety of courses, including STEMM programmes and arts and humanities programmes, but for the sake of protecting participant anonymity, this data was not recorded.

Focus Groups

We elected to collect data through focus groups, as this would allow for the research to explore the heterogeneity of views in this complex issue (Gibbs, 1997). The focus groups were organised to be held in person at the participants' university. Each focus group was run by the staff member from that institution. The same structure and prompts were used for all focus groups. Upon entry to the room, participants were invited to take refreshments, and a recap of the project aims and ethical considerations. Participants were given a definition of Equity, Diversity and Inclusion, and widening participation which no participant disagreed with or stated they felt uncomfortable identifying with. Ground rules were established that would facilitate all participants to speak, e.g. a participant may be encouraged to contribute if the moderator felt they had not been able to contribute, there were no right or wrong answers, the work had no bearing on academic performance, and in the unexpected event that a participant felt distressed they were encouraged to ask the topic to be changed or to leave at any time. This did not occur in any of the focus groups. The focus group was recorded by Dictaphone, and participants were encouraged to use a pseudonym if they felt uncomfortable stating their name. It was not recorded whether participants chose to do this. An ice-breaker exercise preceded six key prompts. There was one focus group at the University of Aberdeen in later February 2020 with four participants. There were two focus groups held at the University of Glasgow in early

March 2020 with four and three participants. The focus group at the University of Edinburgh was scheduled to take place in mid-March 2020, however the impending lockdown of the United Kingdom due to COVID-19 meant it had to an online format. The Edinburgh focus group was therefore conducted via Blackboard Collaborate. Due to technical issues on the part of the participants, it was decided and agreed by all participants that the text-chat function would be used, and so the four participants in the Edinburgh focus group communicated via text and not speech. Audio recordings were transcribed by LM and a secure third party service. The focus group outline and questions is available in the associated OSF project: https://osf.io/q2ruj/.

Analysis

Social capital theory was thought to be a useful lens through which to view this focus group data following preliminary analysis and discussions within the sector. The aim of this work was to explore how trust and social credit manifested in the participants' experience of TEL use in HE. Our use of theory in analysis here is as a framework which influenced the reflexive reading of data, and our interpretation allows us to make links between our data and social capital theory (Reeves et al., 2008; Collins and Stockton, 2018). This work reports on the social capital theory analysis of the work to explore whether WP students experience a deficit in social capital and how lecture recording influences this.

RESULTS AND DISCUSSION

Overview

In this data, participants discussed their experiences of being WP students in their institution. Participants referenced financial barriers to education, such as leaving employment to engage with a programme and commuting costs, and social barriers, such as feeling unable to disrupt classes with questions or navigate student support policies. However, participants also recognized the benefits of attending university and viewed university as a place to acquire capital. They discussed attending clubs and making new connections, although these were often outwith the lecture space and so beyond the scope of this paper. It is important to highlight that WP student experiences at university were not wholly negative, and their experiences were not a monolith. Therefore the analysis mainly 1) characterizes the manner in which social capital deficits may be experienced by students, which can vary depending on the participant's personal circumstances, describing potential microaggressions and experiences of barrier to education, and 2) describes how trust as credit manifests in the WP experience, and how social credit is traded upon, both positively and negatively. The implications for practice are discussed.

Do Widening Participation Students Experience a Deficit in Social Capital

Participants in these focus groups identified many scenarios where participation in HE was made more challenging due to their circumstances.

Sometimes even the processes that are supposed to help, like with the disability services, the first thing that they send you is 'oh here's a long list of the people that you have to visit and things you have to do'. So if you have an anxiety disorder, they've just locked that door for you.–(Participant A, Institution A).

Can these deficits be identified as a lack of social capital? Participants identified a sense of loneliness and isolation as WP students, noting that often colleagues did not have a comparable experience, and that peer parity did not exist. The participants speculated about the experience of other students, and how this sense of isolation may impact their relationship with the university, particularly when travel was involved.

We live the other end of town and I guess I feel like personally I have missed out on making really good friends at uni. (Participant B, Institution B).

maybe [students from WP backgrounds are] quite daunted by the fact of going to lectures and sort of mixing in with maybe people they feel they don't necessarily belong with. (Participant D, Institution A).

This echoes aspects of 'conferred identity', and how the narrative of 'travelling to university', which includes aspects of mixing outwith one's class confers a symbolic power to the student, making up for perceived deficits in social capital (Holt, 2012). A key element of this narrative is the voyage away from what is known and familiar to the challenging new environment of university. This narrative allows students to build an identity of success, but previous work (Holt, 2012) was done on students who, at the least, perceived themselves to be successful in their goals. It is far from guaranteed that this narrative will form spontaneously or naturally for WP students. This is especially true when students experience many small barriers, or potentially microaggressions.

The participants discussed these repeated exposures to small barriers, and being made to feel unwelcome by systems and staff. These fit with the conceptualisation of hierarchical microaggressions highlighted earlier (Lee, 2020). This often included concerns about being unable to navigate university structures, feeling inadequate in terms of knowledge, or perceiving staff to be hostile about aspects of university life. These negative social interactions were often within the lecture space, but also existed within other university structures, and the impact resonated within the learning spaces.

particularly the University having an accessible learning policy that is supposed to include the idea of lecture recording, there's still that, there's a general hostility between, from may lecturers towards accessibility (Participant C, Institution A).

Where at school, obviously, your teachers will do as much as they can within reason to help you in exams and all that. But I feel that when you come here you're very much on your own, certainly my lectures anyway, a

lot of them were sort of even reluctant to help you with questions you had. (Participant D, Institution A).

One participant considered themselves to be 'twice stigmatised', for not fitting in with their lecturer's perceived idea of a student, but also not fitting in with their classmates perceived ideas of a student. Their account describes feeling penalised for caring about their studies, further suggesting challenges for WP students attempting to identify with success narratives, and that university becomes 'something to get through' (Participant M, Institution C).

But people care even about you caring about your own education. There's stigma against being the interested in learning, which is crazy but it's true. The stereotypical uni student is the one who never goes to their lecture and gets drunk four nights a week and doesn't care. And if you're not that then you've got stigma as well. So you've got the twice, double stigma of I'm different and I need this thing. (Participant B, Institution B).

It is commonly stated that 'you cannot be what you cannot see', and the lack of peer parity is a deficit for these students. Without obvious role models, it can be difficult for our participants to see themselves at university, and this may contribute to a 'chilly climate' (Clark Blickenstaff*, 2005), potentially making WP students feel unwelcome due to their incomparable experiences.

Trust As Currency

One of the potential aspects of social capital theory that is of particular interest to how TEL is experienced by WP students is the idea that 'trust' is a form of currency. Staff are concerned that students may not use recordings responsibly for their learning, and that students may exploit recordings to mock staff (MacKay, 2019). Staff may also feel beleaguered by student requests if they do not understand them due to a lack of shared experiences (Hornibrook, 2012; Lee, 2020). This may be due to a lack of trust in these requests. Staff may be quick to perceive 'cheating' when students from disadvantaged backgrounds do well for example (Shotton, 2017; Harper et al., 2018). This may be a deficit in social capital experienced acutely by WP students.

In this work, participants did note that trust was in short supply between lecturers and themselves. This was particularly framed around the attendance debate, with participants expressing concern that lecturers would perceive any drop in attendance as a reason not to record. The participants also highlighted scenarios where if they sought out help for technical issues with recordings, or were expected to make their own recordings, they were again made to feel unwelcome, or as though their presence was an intrusion to higher education.

If it was recorded or had been recorded then they might be hesitant to share that stuff, especially if it's not published yet. A few lecturers in the first or second year would say, sorry I'm not recording this because of

things that I can't have out in the public yet. (Participant F, Institution A).

I'd emailed the lecturer to ask [about a lack of audio] and they just basically said the audio hadn't worked, there wasn't anything they could do about it, and to use the references on the slides to get the information. (Participant G, Institution A).

I am allocated a recorder from disability but find it hard to use in seminars as its intrusive ... the [course] lectures are not recorded as standard. When in the lecture halls I felt I could record but it seems wrong to put it on the desk for seminars as its more talking . . . I don't want others to feel uncomfortable for me to have their opinions recorded (Participant H, Institution C).

In the last quote, Participant H highlights something recognised in all focus groups, that trust goes both ways in the lecturer-student relationship. Participants were aware that lecturers may censor themselves, or change their materials when recorded, and that there is a 'cost' to recordings. Lecturers have previously expressed concern that recordings will be shared inappropriately (MacKay, 2019), and it is not surprising that students have heard these concerns. However, it is also worth noting that WP students bear a higher cost burden when accessibility is not 'mainstreamed' (Ellis, 2011; MacKay, 2020). In this way, recording by default is a form of 'social affordance' through technology (Weidlich and Bastiaens, 2019), facilitating the student interactions within the learning environment. It is the inequity of the cost of requesting extra support that HE must be sensitive to for WP students. This was raised independently in different institutions.

A: I couldn't imagine going in every time and sitting right at the front and setting up the microphone and being yes, I am here, recording your lecture and no-one else is doing that. I think that would be really difficult to cope with. So the fact that it's recorded for everyone and everyone gets it means that whatever you need it for you can just do and you don't have to be singled out.

L: I don't take my microphone in. I'm too scared they'll see it. (Participants A and L, Institution B).

Our participants also discussed the value of approaching lecturers, however, and it is important to reiterate that the WP experience is not a monolith. When participants were able to prepare questions for lecturers, and engage with materials, they can feel extremely positive about their interactions with lecturers.

I just love them because you know academics, they actually prepare for it. They will try to interest you, well, hopefully. But, yes, like I consume information that way quite well. I think it works for me and you can still ask a question after the lecture and just go down and ask. (Participant E, Institution B).

Engaging with lecturers was seen as valuable by the participants, so how does recording impact this engagement? One example of 'trust as currency' from the recording literature is

around student reasons for non-attendance (Nordmann et al., 2019b). A student may have many reasons for non-attendance. Our focus group participants listed work and childcare commitments, chronic health problems, and commuting costs. Where students have to explain their absences they are trading on the trust their lecturer has for them, which may be exacerbated for WP students who have competing pressures.

The negative framing of discussions about attendance by academics may also be one of the reasons why the lecture capture literature has a dearth of positive arguments for the use of lecture recordings to make up for non-attendance and instead the focus has been on "proving" or "disproving" that lecture recordings do or do not affect in-person attendance (Edwards and Clinton, 2018; Nordmann et al., 2020a). However, as highlighted by Participant X, the choice to attend a lecture for WP students can be an entirely legitimate weighting of the relative costs and rewards:

> I live quite far away and it costs me quite a lot of money to get in, so on the days only when I need to come in for an hour or 2 hours, if there's lecture recordings there, I won't come in because it costs me quite a lot of money to come in for a very short period of time. So I will stay at home and watch the lecture recordings instead, but on other days when I'm in for, you know, a whole day, then I'll come to the lecture, and then watch the lecture recording later. (Participant G, Institution A).

Providing lecture recordings may therefore be a marker of lecturers' trust in students and to refuse provision based on attendance concerns risks creating frustration amongst students who have legitimate reasons for missing class, students who are more likely to be from a WP background:

> some of [the lecturers] seem to have the opinion, well if you don't come to class why should you learn from me, and I think it's quite frustrating because I mean to have the opportunity, it could be anything going on. (Participant F, Institution A).

The discourse surrounding plagiarism and the use of originality checking software turns teachers and students into "adversaries not collaborators" (Williams, 2007), whilst others argue that it assumes the worst of both students and teachers (Carbone, 2001). In a similar vein, removing students' agency in how they engage with their studies by refusing to provide lecture recordings is likely to be a pyrrhic victory; gains in attendance will likely be negligible (O'Callaghan et al., 2017; Nordmann and McGeorge, 2018) yet based on the responses of our focus groups, some students may have to spend more 'trust' to accommodate for this than others do. As we look towards a post-covid future of higher education that is likely to involve a higher proportion of staff choosing to work remotely (Zackal, 2021), it is increasingly important to reflect on whether we are affording ourselves a flexibility that we deny to our students.

Trading Social Credit

One feature of providing students access to recordings it that they can revisit materials and control the pace of materials (MacKay et al., 2021). For WP students, having access to the recording allows students to 'save' the social credit cost of requesting information be repeated.

> when I watch the lecture slides at home, I can make the lecturer say it again, if you like, which I obviously can't do in the [lecture]. (Participant A, Institution A).

It is notable that Participant A states they 'obviously' can't request this in the lecture, as this may be contrary to how many lecturers may feel they conduct their lectures. While activity within lectures is varied by lecturer, the majority of lecture time is predominantly the lecturer talking (Smith et al., 2013b; Eddy et al., 2015; Kinnear et al., 2021). In our study, WP participants discussed why they felt they weren't able to request these affordances from lecturers. In the same conversation as Participant A above, Participant C elaborated:

> it can be a real struggle and many of those students will have dropped out of University in the past because, typically, [a lecturer] who is willing to throw lots of information like that, is not someone that is also going to be particularly happy about being approached by students to clarify things. Having the lecture recording, students can go back. So if there is something where you were taking a note and they've moved on and they've said something else, and you're like 'what did they say' and you don't want to interrupt because you're potentially in a room with 2–300 people … there's that huge thing of standing up. (Participant C, Institution A)

The participants in our focus groups recognised a tension between their own needs, the needs of the class, and the needs of their lecturers. Recordings allow WP students particularly to afford some of the oft-unconsidered social capital costs of learning, whether that is allowing a student to absorb materials at their own pace, or approach learning in a more relaxed manner.

> I'm always scared in case I miss something but having that opportunity to go back I can relax and I can take a few notes but then I can go back and add to bits if I don't understand it or go over things. (Participant L, Institution B).

> with the recording you can just double-check if you don't understand the word instead of googling this word [straight away] and missing out on some of the information you're just like, "I don't care, I'll get it later on." (Participant E, Institution B).

Again, the experience of our participants was not wholly negative. Participant L, who previously was highlighted describing their fears and anxieties, noted that small group

work has facilitated social bonding, and transformed their experience of stressful events.

> I've made pals that I spend tutorials with . . . and speak in front of the class and [I] think that I know what I'm speaking about. (Participant L, Institution B).

Participants also noted that recordings helped mitigate other social challenges, particularly those surrounding the University and College Union industrial action that was taken in 2018, 2019 and 2020. While participants were sympathetic to this action, they also highlighted the stress and pressures they were under at university, and the impact this sustained action had had on them. Participant M, who had been affected by 3 years of industrial action, spoke powerfully about their experience, and contrasted experiences of privilege between those who are 'typical' at university and academia, and the experience of WP students. The lack of provision of lecture recordings can be perceived as a lack of care for the difficulties many students face trying to approach university. In this way, lecture recording, or the lack of it, served to reinforce these divides.

> I've made massive sacrifices to be a student. I closed my business and am spending 5 years in serious financial hardship to get this degree. I feel like they are putting it all at risk for me. They have jobs, salaries and so on that are fairly secure but they're not happy with conditions, I have given up a business and live hand to mouth trying to survive and find work that fits in round my studies so I can pay bills as student loan nowhere near covers it. It seems like they are on another planet and have no concept of how people like me live and survive, but then perhaps since the majority do seem to be younger, wealthier students then that's the majority they see (Participant M, Institution C).

Limitations

A key element of WP work is recognising that experiences are not universal, and that the staff and systems within HE are likely unaware of the barriers that WP students face. As mentioned in the methodology, the research team on this paper have many shared experiences. While we have tried to be aware of our limitations, and pre-printed this work to receive reviews from a wider audience, 'unknown unknowns' still exist. We elected to utilise focus groups to empower the participants within this study, as focus groups can support individuals to share individual experiences, reinforced when those experiences are shared, and facilitated to ensure that rare experiences are still heard (Wilkinson, 1998). The experiences raised in focus groups are all valid, even when they contradict one another (Cambridge and McCarthy, 2001). The value of qualitative research like this is not to describe or condense the most common experience, but instead give depth of understanding to phenomena (Kisely and Kendall, 2011). It is still important, however, to note some elements that may make our work less transferable to other contexts. As previously mentioned, our work took place in ancient, Scottish universities. Within these three universities there are different

approaches to WP, mainly in precisely how they interpret Widening Participation. There are commonalities, with a focus on students who are first generation to consider higher education; living in low-participation neighbourhoods; from Scottish Index of Multiple Deprivation (SIMD) Quintle 1 and 2 areas; mature and returning students; and care experienced students. At each university, specific WP teams will approach their work relevant to their individual contexts. Not all participants in this study might recognise the others' challenges, however we observed no strong disagreements in our focus groups, and used a definition of WP that participants agreed upon at the start of the focus groups.

These findings may be generalizable to other universities and student bodies. Although older universities are privileged in their wealth, reputation and ability to discriminate on intake (Boliver, 2015), universities with less financial capital may well face additional challenges in relation to supporting students with TEL. Regardless, with this work we hope to 'sensitise' (Rodrigues, 1999) practitioners to the challenges that WP students can face when attempting to access HE. This sensitisation should help to support the experience of WP students, particularly encouraging lecturers to recognise when and why a perceived lack of engagement may exist, and hopefully facilitate this in future (see implications for practice).

It is important, and necessary, that we consider the experiences of WP students in HE. These are not issues which will 'solve themselves', and we must acknowledge where our current practices systematically disadvantage some students. United Kingdom HE shows low social mobility, with older universities retaining greater social class inequality than newer universities (Boliver, 2011). It has been suggested that even controlling for the financial and social status of the parent generation, it is the grandparents generation which has the greatest impact on social outcomes (Chan and Boliver, 2013), suggesting very low social movement in the United Kingdom. Making improvements in this area is complex and multifactorial. Students need to view university as a viable path for them, be prepared for university learning, be admitted into university, experience a good transition into university, and be supported in their university journey. Our study has found that students can be supported in learning by lecture recording, as it can facilitate their review of materials, without necessitating the student ask for extra affordance from their lecturers.

Implications for Practice

Our main findings were that WP students can utilise recordings to make up for financial barriers to education, such as long commutes, as well as social barriers such as feeling unable to ask questions in class without incurring social penalty. There are implications for practice both for the individual educational practioner, and also at the policy level in the post-COVID landscape.

We hope this work will clearly highlight the difficulties students still face in asking for support in a lecture setting. While lecture recording can help to mitigate this effect, individual lecturers should explore their own practice to determine whether they can build in other mitigations. WP students may not feel comfortable to raise a hand in a

lecture, believing the question is unwelcome. This message may have been internalised by students from processes external to the classroom. There is contention regarding what a lecture is for and whether it should be interrupted or whether it should be more didactic (Cooper and Robinson, 2000; French and Kennedy, 2017). While the authors of this paper advocate for interactive lectures (Nordmann et al., 2021a), either approach can be successful providing all students within the class are given clear and unambiguous guidance regarding the expected behaviours within a class. A lecture which should not be interrupted may expect to see more use of recordings as students ask 'say that again' without disrupting flow. This may relate to the 'transformative' properties of lecture recordings which encourage lecturers to consider what their teaching is trying to achieve (MacKay, 2019). Those lecturers who wish to have more interaction and engagement within the lecture hall should consider how tools such as polling or anonymous question facilities where appropriate may enable students to ask questions with fewer social penalties. We have also seen that lecturers with more positive attitudes to active learning have more positive attitudes towards lecture recording (Nordmann et al., 2021b), and perhaps some of this may come from facilitating students to consume material at their own pace. If the practitioner wants interactive lectures, taking the time to reframe in-class experience as one that can and should be interrupted may go some way to improving these concerns for students.

As we consider the return to the "new normal" and what lectures will look like in a post-COVID world (Nordmann et al., 2020b), might it be better, for example, to prepare all 'lecture' content ahead of time and develop more flipped classrooms? Student demand for lecture capture pre-COVID risks being used as a rationale for reducing face-to-face contact in the new normal and it is important to recognise that WP students still require the socialisation and integration into the university to feel a part of their programme and community. The greater flexibility should be used to support, not isolate students, e.g., to support students missing class when needed, but to encourage a wellbeing check if multiple lectures are missed. The Covid-19 pandemic has highlighted the impact of digital poverty on the most socio-economically disadvantaged learners. While it was not raised in the focus groups held pre-pandemic, the impact of digital poverty on WP students must be taken into account and reinforces the need for flexibility in student learning to ensure every student has a variety of options to accommodate their needs.

In light of the massive changes and upskilling in TEL that have taken place due to COVID-19, it is possible that a post-COVID HE landscape will feature more recorded content and less resistance to lecture capture where face-to-face lectures return. However, professional development for staff must continue to help make staff aware of the varying experiences of the students who are in their lecture halls or watching their recorded content, and to help them adopt new behaviours which are more beneficial to student learning. While all students need support to ensure they do not miss

the hidden curriculum of behaviour through appropriate expectation setting, we need to recognise that not all learning activities have equal cost to all students. WP students are likely to benefit from both the pedagogical changes, but also the additional boons to social capital that these changes may bring. Post COVID, where we will have entire first year cohorts who have missed the academic socialisation of on-campus learning, it may be wise to introduce expectation setting sessions as a matter of policy. Each individual lecturer may wish to highlight what they are comfortable with in their class, whether they expect to be referred to as Professor Doe or are comfortable with being addressed as Jane. At a policy level, we should prepare all students for the variation and uniqueness of individual learning contexts, while recognising that recordings can go some way to supporting students to overcome individual differences.

In practice, recordings can be used to help support study strategies. Professional services staff may wish to be particularly engaged in determining where recordings are used, both to ease transitions for WP students into HE, but also to identify where students may not have the resources to support themselves. Training for students will be likewise important to help make the experience of all students more equitable, as we cannot rely on students arriving to university already trained in the art of academia. Many WP teams already focus on supporting students in this, and we think this study highlights why this training is so important. This may be even more key in a post-COVID environment, where we may see some changes after staff have had to revisit materials that may have sufficed for many years on campus, but required updating for online delivery. Staff may have a renewed appreciation for learning outcomes, technology use, and how students require support to engage with learning objectives. Within this period of unrest, we need to ensure we do not lose sight of the challenges some students face.

CONCLUSION

In this study, we aimed to explore how social capital theory could be used to make sense of WP students' experiences of lecture recording. In our study, based at three ancient Scottish universities, we found that recordings could be used to 'save' on social credit, allowing students to explore materials at a pace that suited them, without having to expend the lecturer's trust by asking for more unnecessary affordances. Conversely, however, when recordings were not made available, our participants perceived there to be a great cost in making recordings themselves, and felt that university was less accessible to them.

DATA AVAILABILITY STATEMENT

The datasets presented in this article are not readily available because "All data is potentially identifiable". Requests to access the datasets should be directed to jill.mackay@ed.ac.uk.

ETHICS STATEMENT

AUTHOR CONTRIBUTIONS

JM, EN and JH led on the analysis and write up. LM contributed to analysis. AB and MA supported the literature review, discussion, and interpretation of findings.

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