Moving Teaching Online: Cultural Barriers Experienced by University Teachers During Covid-19

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ABSTRACT

This empirical study examines the experiences of academics and professional service staff in a large UK university during first weeks of the transition to online teaching and working from home during the Covid-19 pandemic. The method draws on the work by Gourlay and Oliver (2018) to explore engagement with the digital university in everyday practice. Using data from 412 survey responses and 32 interviews, the study traces varying ways staff characterised themselves during the first months of lockdown in the UK (from March to July, 2020). The findings highlight that university support services underwent a metamorphosis to support the transition to online teaching. However, insufficient attention was paid to the 'identity crisis' and threats perceived by academics who were used to teaching students on campus. Academics tended to focus on transferring traditional teaching practices to the online environment, rather than on changing teaching practice, leaving face-to-face teaching as the default point of reference. These cultural barriers are a persistent obstacle to a more productive engagement with digitalisation. Transitioning to online teaching involves continuing existing work while also learning new practices. Such efforts were challenging for teaching staff who did not have dedicated space at home to work and those with caring responsibilities. This, combined with gendered patterns around caring and the extra support needed by students during the crisis, added emotional labour to already-full workloads. We recommend that intersecting forms of disadvantage be acknowledged, supported and rewarded for universities to create sustainable and just futures.

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1 INTRODUCTION: WHY WE INITIATED A STUDY ABOUT UCL'S MOVE TO ONLINE TEACHING AND HOMEWORKING

As a direct result of the Covid-19 crisis, the Higher Education sector worldwide has undergone the biggest transformation of teaching in its history. In early 2020, social distancing rules were introduced in countries around the world to restrict human-to-human contact and slow the spread of infection (Demuyakor 2020). In step with these national policy changes, almost all university staff were required to work from home (Sahu 2020). Universities ended face-to-face lectures and seminars for millions of on-campus students around the world, moving all teaching online (Crawford et al. 2020; Hewitt 2020). Most research was also carried out remotely, using digital tools for team collaboration and data collection (Waizenegger et al. 2020). These sudden and unforeseen alterations in work practice led to the entire workforce having to transition to working within the Digital University (Nganga, Maina and Nakweya 2020).

At the point of transition, in March 2020, we launched a study aiming to understand the novelty and trauma of these changes in work. We traced the experiences of academic and professional service staff at a research-intensive, UK university comprising 11 faculties with 42,000 students and over 13,000 staff at the point of transitioning to online teaching and working from home. The study draws on work by Gourlay and Oliver (2018) exploring engagement with the digital university in everyday practice, taking a sociomaterial perspective on how these experiences can be understood as embodied, socially situated, and taking place in a complex array of human and nonhuman actors. While Gourlay and Oliver's work focused on students, this study examines the engagement of staff in the digital university. In following these experiences, our intention was to provide an evidence base to inform the decisions made by university policy makers and support services as they supported staff during the Covid-19 crisis.

Crucially, this is not the first time that university staff have had to shift their practices in response to a crisis. Online learning became the predominant way East Asian students continued their studies during the SARS outbreak in 2002 (Wong 2004), and Neuwirth, Jović and Mukherji (2020) point out that US precedents such as the 9/11 terrorist attack and the hurricane Super Storm Sandy required students to learn remotely. However, what differentiates the current situation, they suggest, is the idea that this crisis is on a global scale and there will be no return to the previous 'normal'; educators must re-envision their practices, rather than resume them. With this article, we examine how practices may be re-envisioned by providing insight into the engagement of staff socially situated within more digitalised environments than prior to the pandemic.

This article is based on an empirical study exploring the experiences of academics and professional service staff at University College London (UCL) in Moving to Online Teaching and Homeworking (MOTH *https://www.ucl.ac.uk/ioe/departments-and-centres/centres/ucl-knowledge-lab/ our-research/ucl-moving-online-teaching-and-homeworking-moth*). The study contributes to this special collection of JIME by examining the experiences of university educators as they made the transition, interrogating how online teaching practices evolved and whether new practices are likely to be sustained. In particular, the study examines the varying ways staff characterise themselves under these changing conditions as they move to online teaching and reframe teaching practice; as professional services transform; and as staff transition to working from home. The following sections provide a general framing for each of these themes.

1.1 TRANSITIONING TO TEACHING ONLINE

Prior to the Covid-19 pandemic teaching in most universities tended to be on-campus and in classrooms, therefore online teaching was a small part of university education (Hewitt 2020). Most universities moved from campus-based to online teaching over a period of days to allow students to continue with their studies with minimal disruption (Sahu 2020). This presented at least four main challenges to university staff. First, the rapid pace of change placed considerable time constraints on academics and allowed them little opportunity to design online programmes (Crawford et al. 2020). Academics responded to these time pressures by transferring on-campus teaching practice to the online environment (Daumiller et al. 2021).

Second, many teaching staff, for whom remote and online teaching was a new experience, had to learn how to teach in unfamiliar ways, which reduced job motivation (Kulikowski, Przytuła and Sułkowski 2021). However, there were limited resources available to support them in learning how to teach online within a short timescale. Third, university teaching policies, Human Resource policies and infrastructure had not been developed for emergency remote and online working (Lederman 2020; Murgatroyd 2020; Zhong 2020; Nash & Churchill 2020). Professional services staff with responsibility for these policies and services had to change the ways they supported academics rapidly. Fourth, all university staff had to adapt to working from home, which radically altered the ways staff interacted with each other and with students, impacting productivity (AbuJarour et al. 2021).

These challenges placed pressure on academics to adapt quickly, sometimes over a timescale of a few days, and a characteristic of this rapid transition to online teaching was that customary teaching practices were retained as far as possible (Gourley 2020). Staff were ready and willing to move their teaching online to make sure students could continue their studies, however there was less readiness, confidence and motivation to change teaching practice (Ali 2021; Watermeyer et al. 2020). Many academics shifted from delivering on-campus lectures to providing livestreamed or recorded video lectures for their students (Gourley 2020). Hodges et al. (2020) termed this transition 'emergency remote teaching', differentiating it from the experiences of students engaged in well-designed online learning, grounded in digital academic practice.

While many universities had put in place some of the digital technological infrastructure needed to teach online, and early adopters at universities had the pedagogical knowledge required, much of the response pivoted around these entrenched practices and beliefs about academics' practice (Littlejohn 2020). Entrenched teaching practices within higher education create a persistent barrier to a deeper and more productive engagement with digitalisation (Kaatrakoski, Littlejohn & Hood 2017). At the heart of these practices is the belief in the quality of traditional, face-to-face teaching - particularly lecturing - over alternative, digitalised approaches that have the potential to decentre the expert authority of the teacher, a role which is highly prized by academics and students alike (Gourlay 2012). Under pressure, staff response to the Covid-19 crises sought to sustain the entrenched teaching practices that are a central part of academic identity, however, retaining established practices while changing the medium of delivery caused tensions. For example, staff inexperienced in online teaching reported that in online settings, compared with face-to-face teaching, it was difficult to interpret students' experiences of learning when there were no visual cues about their engagement (Littlejohn 2020). Having to negotiate the delicate balance between maintaining educational standards and requirements and treating students with compassion proved challenging (Neuwirth, Jovíc & Mukherji 2020). It was clear that academics who were inexperienced in online teaching needed support to help them reframe their teaching practice.

1.2 RAPID REFRAMING OF TEACHING PRACTICE

In the first few months of the Covid-19 pandemic, staff were being required to move their teaching online before their home universities and sector-wide support had been put in place to help them do this. To give a sense of the speed of change involved, UK universities announced the move to homeworking at the end of the second week of March 2020, and staff were required to move teaching online for the following week (Fazackerley 2020).

Academics had little time to pay attention to prior research into effective pedagogy for digital education or the circumstances of students. Therefore, to help teaching staff navigate this unfamiliar territory, resources were created at speed, as academics, educational technologists and researchers summarised and shared experiences of effective practices (Bryson & Andres 2020). Some of this advice was made available very early into the lockdown (Bao 2020; Assunção Flores & Gago 2020). Rapanta et al. (2020), for example, characterised the challenges teachers face during the pandemic in terms of Pedagogic Content Knowledge (PCK), focusing on how they design learning experiences and environments; the need to adapt assessment practice; and the challenges of maintaining teachers' 'presence' as they try to establish relationships with their students. Structured support was also offered nationally in countries, for example Advance HE in the UK created a range of guidance tools for universities on activities ranging

from online teaching to 'social distancing' on campus (see *https://www.advance-he.ac.uk/advance-he-membership-benefits/resources-support-you-during-covid-19-pandemic*). These tools allowed academics and professional service staff not only to rethink their own practice, but to review changes in other universities. The development of these tools was in parallel with a change in professional service support.

1.3 CHANGING PROFESSIONAL SERVICES

While there has been a rush to document and study the experiences of students and academics during the pandemic, surprisingly little has been written so far about the experiences of administrative staff, although some research explores the impact of the pandemic on the provision of administration and support services. From a management perspective, there is some evidence that the additional costs of dealing with the pandemic might be met with cuts to administrative rather than academic budgets (e.g. Friga 2020). The wider infrastructure that enables universities to recruit international students – including foreign language test organisations and international flights – has been disrupted (Pan 2020). Institutional services have also had to adapt rapidly: although many university libraries have cloud-based provision in place, publishers' temporary relaxation of licence restrictions needed to be monitored and disseminated (Delaney et al. 2020). Delaney et al. also point to the limits that these adaptations cannot overcome, for example when users want books that are unavailable under a digital licence, or when students need a space suitable for working in with high quality WiFi. Even institutions that specialise in distance provision have faced challenges, for example when called upon to work out how to administer the shift from traditional sit-down examination to distributed, continuous assessment for cohorts of hundreds of students (Hedding et al. 2020).

1.4 TRANSITIONING TO WORKING REMOTELY FROM HOME

While all of these new forms of administration require changes in practice, one of the biggest shifts has been working from home. In response to the crisis, almost all university staff transitioned rapidly from campus to home working. Teaching staff had to move from offices, lecture theatres and classrooms on campus to working online from their homes (Littlejohn 2020). Working from home fundamentally changes each educator's capacity to teach. The work environment is known to influence how professionals participate in work, particularly as they expand their work practice (Fuller & Unwin 2004). The workplace context and culture influences and shapes learning, as professionals expand and develop their practice. This dialectic relationship between work and learning means that it is important to consider the physical and digital context of work, rather than treating the work environment as inconsequential, particularly when staff are having to learn new work routines and forms of practice (Boshuizen 2004). Working from campus provides a sense of identity to university staff; working from home may unsettle this and disrupt work routines.

The research reported here followed academic and professional service staff at UCL in the initial stages of moving to online teaching and homeworking. An announcement was sent out on 18 March 2020 to advise university staff and students that the campus was to be closed and that teaching and research would be carried out online while working remotely from home. UCL adopted a policy of 'Connected Learning' which prioritised connecting staff and students together as an academic community as well as linking research with teaching (see guidance at: *https://www.ucl.ac.uk/teaching-learning/education-planning-2020-21/online-teaching-guidance-tips-and-platforms/ucl-connected-learning-2020*).

A unique aspect of this study is that data was gathered from the outset and throughout the initial phase of emergency remote teaching while the tools and support infrastructure were being developed. The methodology, adapted from Gourlay and Oliver's (2018) earlier study of engagement with the digital university, invited in-depth qualitative reflections on, and representations of, staff experiences as they happened, which were probed afterwards through follow up interviews This provides a distinctive contribution to research on the effect of the Covid-19 pandemic, as well as providing a unique insight into the lives, practices, values and concerns of academics in the UK. The next section explains the methods used for data collection and analysis.

2 METHODOLOGY

The UCL Moving to Online Teaching and Homeworking (MOTH) study was based on methodology developed by Gourlay and Oliver (2018) exploring engagement with the digital university in everyday practice. A survey instrument was sent out to university staff across University College London inviting them to produce an image (e.g. a photograph or drawing) that represented their experience of homeworking under the lockdown. Participants were asked to write short narratives about their experiences of teaching, research and working from home, including discussing the image they shared. The image was also discussed as part of follow-up interviews with some of the participants, with visual methodologies being used in order to move away from an exclusively verbalised or linguistic account of experiences, perspectives and practices. In the 2018 study, this approach was effective in revealing the importance of objects, devices and other nonhuman actors, helping to explore sociomaterial assemblages in the interviews. Similar approaches have been used in related fields such as Human Computer Interaction (Gaver, Dunne & Pacenti 1999). The approach was supplemented by quantitative survey data to provide context. The survey instrument is detailed in Appendix 1 and the analysis of the survey data and interviews are described in this section.

2.1 SURVEY

On 26 March 2020 an email invitation was circulated by the university deans to staff in faculties inviting them to provide short, free-text narratives describing their experiences during lockdown via an online survey. The survey gathered demographic data such as gender identity, age, role, faculty, and the number of adults, children and number of rooms that were possible to work in at home. Participants were also asked to rate their mood on a 5 point scale from very negative to very positive about working from home, the rapid move to online teaching and their experience of remote research. Open text responses were invited to explain these ratings, describing any challenges or opportunities they had encountered and how they felt about them. As part of this participants were also invited as part of the survey to upload a photograph or create an image depicting their responses. Between 26 March and 30 July 2020, 411 responses were received giving informed consent to use their data. Although the response rate is small compared with the total number of staff working at UCL (circa 13,000), the survey provided in-depth accounts illustrating the experiences of a substantial number of staff.

2.2 IMAGE ANALYSIS

Images were uploaded by participants as visual representations of their feelings about remote working. Whilst not all survey returns were accompanied by image uploads, 114 images were submitted and analysed. Participants uploaded a range of image types representing their feelings about the situation, including: Photographs of their home working location and equipment; Web stock photos; Web cartoons and memes; and hand drawn images on paper and onscreen. NVivo was used to code the dataset, starting with broad, salient, descriptive features such as 'Image type', bringing in location, as well as of *overtly* positive and negative affect, for example: 'health and wellbeing', 'home related artefacts', 'space', and others as addressed below.

2.3 SURVEY TEXT ANALYSIS

Open text survey responses were analysed using reflexive thematic analysis. Focusing on different aspects of the data (teaching and research), two researchers familiarised themselves with the data set by reading participants' responses closely and generating initial codes from the data. The researchers discussed the initial codes and generated broader themes by identifying patterns of meaning across the data. These were used to develop a multifaceted description of the experiences of participants as they related to teaching, research and wellbeing.

25 initial codes were generated and were reduced to 12 themes. For example, the initial codes, 'inequalities', 'online safety', 'role disappearing' and 'student's needs' were gathered under the theme of 'anxieties about online teaching'; and 'family', 'part-time work', 'personal space' and 'physical health' were gathered under the theme of 'working conditions'. The final 12 themes were: ambivalence about online teaching; anxieties about online teaching; emotional labour; lack of interaction; lack of time or resources; marking; technology problems; working conditions;

opportunities for interpersonal connections; benefits of the move to online teaching; pedagogy; and solidarity, support and resilience.

2.4 INTERVIEWS

32 volunteer participants were selected for interview. Selection criteria provided a representative cross-section in terms of faculty, discipline, seniority, role, sex, age and ethnicity. Semi-structured interviews were conducted, focusing on their experiences of the transition to lockdown, their 'typical lockdown day', how the participants had adapted their domestic environments to homeworking, and how the lockdown had affected their work in terms of teaching, research and other roles. There was also a focus on the impacts of the crisis emotionally, and in terms of identities and wellbeing, and a discussion of the meaning of their image, if they had provided one. The interviews were divided between four members of the research team, conducted via Skype, then professionally transcribed. Pseudonyms were applied and participants were provided with the opportunity to 'member check' the transcripts and redact any elements which might jeopardise their anonymity or that of their colleagues or students.

The transcripts and images were thematically coded, in the same way as the qualitative data from the interviews; 48 initial codes were generated, which were reduced to 12 themes. For example, the codes, 'difficult focusing', 'isolation', 'stress and anxiety', 'trauma', 'ways of working' and 'workload' were grouped together in the theme, 'emotional challenges'; and 'cancelled events', 'increased productivity', 'loss of productivity', 'overwhelmed', 'research disrupted' were grouped together under the theme, 'impact on research'. The final 12 themes were: benefits; emotional challenges; impact on research; impact on women; loss, disruption and change; management roles; online teaching; post-crisis; practices and routines; professional services; transition to lockdown; and typical lockdown day.

2.5 ETHICS

Institutional ethical approval was granted for the project, following BERA's guidelines (2018). Participants were provided with information sheets and asked to consent to the use of their data for each element of the study; they were informed of their right to withdraw; and for the interviews, were invited to select a pseudonym or otherwise were assigned one. Data were stored securely and personal identifiers removed.

The next section lays out findings from analysis of the survey, interview and image data.

3 FINDINGS
3.1 SURVEY DEMOGRAPHICS

The survey provides a context for the study sampling. 72% of respondents identified as female, 25% identifying as male and the remainder preferring not to say. This proportion of female members of staff responding compared to male members of staff was significant (χ^2 (1, N = 14988) = 68.97, p < .001) when compared to the overall university workforce (53.10% female, 46.90% male). Although those who identified themselves as female made up a significantly greater proportion of respondents than found in the university generally or even at faculty level, we were unable to determine a cause for this. These figures are illustrated in *Table 1*.

With regard to age, broadly comparable numbers of respondents were aged 26–35 (21.7%), 36–45 (30.9%) and 46–55 (27.5%). There was another cluster of responses from those aged 56–65 (12.9%), with relatively few responses from staff aged under 25, 66–75, or 75 and above.

Respondents were asked which ethnicity they identified with, using categories drawn from the UK national census. 6.1% of respondents identified as Asian, only 1.5% identified as Black, 83.9% identifying as White, 4.4% identifying with mixed/multiple ethnic groups, 1.2% identifying with 'other' ethnic groups and 2.9% preferring not to say. The under-representation of Black staff was a concern; we were unable to find a reason for this.

	GENDER				TOTAL
	FEMALE	MALE	OTHER	PREFER NOT TO SAY	
Arts & Humanities	11	4	0	0	15
Bartlett (Built Environment)	27	18	0	2	47
Brain Sciences	38	13	0	0	51
Engineering Sciences	13	3	1	0	17
Institute of Education	99	21	0	1	121
Laws	3	3	1	2	9
Life Sciences	12	5	0	0	17
Mathematical and Physical Sciences	7	5	0	0	12
Medical Sciences	13	5	0	0	18
Population Health Sciences	18	1	1	1	21
Professional Services	13	0	0	0	13
Social and Historical Sciences	30	20	0	1	51
Other faculties or services	13	6	0	0	19
Total	**297**	**104**	**3**	**7**	**411**

Table 1 Respondents and gender per faculty. (All faculties and services that had less than 5 respondents have been amalgamated into 'other').

69.7% of respondents were on academic contracts (which included teaching only, research only and mixed contracts) and 30.3% on professional services contracts. 78.8% of respondents were employed on full-time contracts, 20.4% on part-time contracts and only 0.7% on 'as and when' contracts.

52.8% of respondents had caring responsibilities, with 40% caring for children, 11.3% having elder care responsibility, 7.2% having other caring responsibilities, and 5.3% having multiple caring responsibilities. A higher proportion of females reported looking after children than males (43.10% versus 29.0%), which was significant (χ^2 (1, N = 390) = 6.190, p = 0.013).

17.9% of respondents were the only adult at home; 53.7% lived with one other adult, 14.7% lived with two other adults, 10.0% with three and 3.7% with more. Respondents were also asked about how many children lived with them; 58.6% had no children, 20.6% had one child, 18.1% had two and 2.2% had three. 2 respondents said they had 4 or more children at home.

Respondents were asked about their experiences of teaching and of researching from home, with categories of very negative, negative, undecided, positive or very positive. Both sets of responses approximated to a normal distribution, with very modest skews towards positive assessments. There were no significant effects of childcare responsibilities or gender. The number of rooms available to work in was significantly associated with a positive experience of teaching from home (χ^2 (32, N = 318) = 65.97, p < 0.01).

In the following sections we examine findings from the qualitative data analysis to develop these responses.

3.2 CHALLENGES AND ENABLERS TO TEACHING ONLINE

Teaching under lockdown conditions triggered a significant change in practice. Most respondents reported that they had to quickly shift from on-campus teaching in classrooms or lecture theatres to online teaching. Typically, online teaching was conducted synchronously, using a video conferencing platform (e.g. Teams or Zoom). Prior to the pandemic, synchronous teaching was not standard practice for online teaching, which has been largely asynchronous since its emergence in the late 20th century (Harasim 2000). However, in the emergency shift to remote learning, many educators focused on replicating face-to-face teaching; this was technologically possible, but tended to be viewed negatively, particularly by those who had not previously taught online. One of the survey respondents (respondent 97) commented:

It's obviously (to me) not as good as face to face. (97)

Those who found teaching online challenging often complained about an absence of social cues, including:

> the physical presence of students and the energy that provides, as well as from human signs of comprehension, interest, etc., that are crucial to guide «live» teaching. (55)

Many focused on the limited social interaction with students that was possible online, since interaction was often central to what teachers wanted to achieve. Many respondents expressed a sense of loss caused by not having direct, physical interaction with students. These interactions helped 'energise' staff and engendered a sense of 'joy':

> One of the joys of teaching is to interact with people and share ideas dynamically. (110)

However, in contrast, some respondents found the move to online teaching relatively smooth, and that their students were engaging well. These respondents usually had more experience with online or blended learning. Drawing on their prior experience, they did not have to make big changes in their teaching practice and were more confident using technology:

> I have delivered online teaching before and have worked from home a few days a week for many years, so I›m fairly comfortable with it myself. (99)

> I found that students can in fact be more engaging, as those who may not ask a question in public (lecture theatre) may find asking a question online less "intimidating". (88)

Respondents with online teaching experience focused on exploring new pedagogical approaches:

> Perhaps we have maintained some practices from the pre-technological age for too long and this is an opportunity to fast track to where we should be in terms of flexible provision. (130)

Across the board, however, there was an acknowledgement of the increased time and resource required for teaching online, difficulties associated with changing practice and a demand for greater professional development to support this.

One area of teaching that was particularly challenging was providing pastoral care to students while interacting online. Disproportionately, women tended to describe in the survey text and in the interviews how they spent time supporting students outside teaching or took extra time for teaching to support students. They described how they offered students practical and emotional support as they faced extra difficulties during the pandemic. Doing this from home created indistinct physical and temporal boundaries, making it difficult to separate home life from work emotions, which appeared to impact on productivity and wellbeing. Five percent of participants, primarily those who identified as women, reported concerns about the mental health of students, resulting in a substantial increase in time spent on pastoral care.

3.3 IMAGE ANALYSIS

Image analysis involved exploring features of salience, connection and information value between elements in an image, drawing on multimodal methods (Kress & Van Leeuwen 2006; Rose 2016; Jewitt, Bezemer & O'Halloran 2016) in order to: explore the overall image and its components; look for relationships between items in the images themselves; and provide links with the rest of the dataset.

Images were submitted early in the pandemic (March to May 2020). Across all images, key themes seen in other data in the project remained visible, such as the broad theme of 'caring responsibilities' (overtly referred to in 16 images). Other themes were more subtle, such as personal discomfort or stress on the negative side, as well as positive feelings about being home-based. Whilst not all the images were *overt* in their representation of 'feelings' or health and wellbeing, the image analysis identified a range of themes indicated here together with the number of images that represent each theme: *Overtly* positive feelings or health and wellbeing

attributes represented in the dataset: Calmness [13]; Confidence [7]; Freedom [2]; Happiness [7]; and Organisation [22]. *Overtly* negative feelings or health and wellbeing attributes included: Isolation and Solitude [9]; Feeling lost [2]; Puzzled [2]; Sadness and Unhappiness [9]; Chaos and Disorganisation [8]; Stress [14]; Tiredness [2]; and Pain [2].

Each of the image types in the dataset express these affective responses to moving online and working at home. These types were: Participant photographs of their situation [60]; Web stock photos [27]; Web cartoons [10]; Drawn image (paper) [5]; Drawn image (screen) [4]; Web meme [1]; and Selfie [4].

Looking at each in turn, *participant photographs of home situations* focused on workstations of various kinds, some with office equipment, some improvised from home furniture. The remaining user photographs were of other rooms or a garden; many were clearly not appropriate for long term working.

Web stock photos provided embodied representations which avoided personally identifiable imagery. Reverse engineering searches on Google Images suggested that search terms like 'stress' and 'isolation' were used in conjunction with 'home working' to find images which expressed negative affect. For example, there were images of mothers working from home under extreme pressure or multitasking in some way; people on desert islands, depicting loneliness and isolation; a moonbase; and a house on a tiny island.

Cartoons and memes from the web represented everything from back pain through to work-life balance and a mix of emotions.

Drawn images, whether on paper or screen, were creative and highly expressive of complex feelings about roles, particularly in respect of caring responsibilities. An example of this is included later in the paper.

As noted above, 13 participants also submitted images later in the pandemic (August to December 2020). Some remained calm and confident at home, in 5 cases, but others felt worse the longer the remote situation continued, in 8 out of the 13 examples. For example, one participant uploaded an initial image of a neat home office with a view, which later became an unhappy self-portrait looking back into the room. In another case, the submission of a selfie in a busy working situation became, in the second set, the submission of an image of an empty road stretching away from view. In all cases, across the themes in the dataset, the images provided a way to represent complex feelings.

3.4. INTERVIEW RESPONSES

One of the most prominent themes across the interviews focused on participants' practices and routines in the context of online homeworking. Work space was an important aspect of this: while some had established home offices already, most interviewees described a process of adapting previously domestic spaces to allow them to work from home. This was often a creative act of improvisation, with kitchen tables, bedside tables and even a sewing machine stand being used as work spaces for laptops, papers and so on. These hybrid spaces often represented a challenge to participants, who reported having to deal with multiple demands such as childcare and domestic duties, while in communal areas of their households (Gourlay 2020). Another important aspect of their daily routines focused on ways of communicating, with frequent accounts of the difficulties such as having to conduct multiple video calls using platforms such as Zoom or Teams. There was a common view that the volume and complexity of online communication could feel overwhelming and exhausting, eroding the 'normal' pre-pandemic boundaries which had previously divided 'home' and 'work'. These blurred boundaries took several forms. They were temporal, with some participants reporting that they were working longer hours without the delineating function of their commute. They were also spatial, as areas of the home became work spaces, or morphed between work and other functions through the day. Many participants reported difficulty in focusing and making progress with work for these reasons.

Blurring boundaries were associated with stress for many participants, particularly those also required to look after children simultaneously or conduct home schooling while working. This was reported more frequently by female participants, some of whom gave challenging accounts of overwhelming situations, combining caring demands with heavy workloads. One striking image provided by Lauren illustrated this:
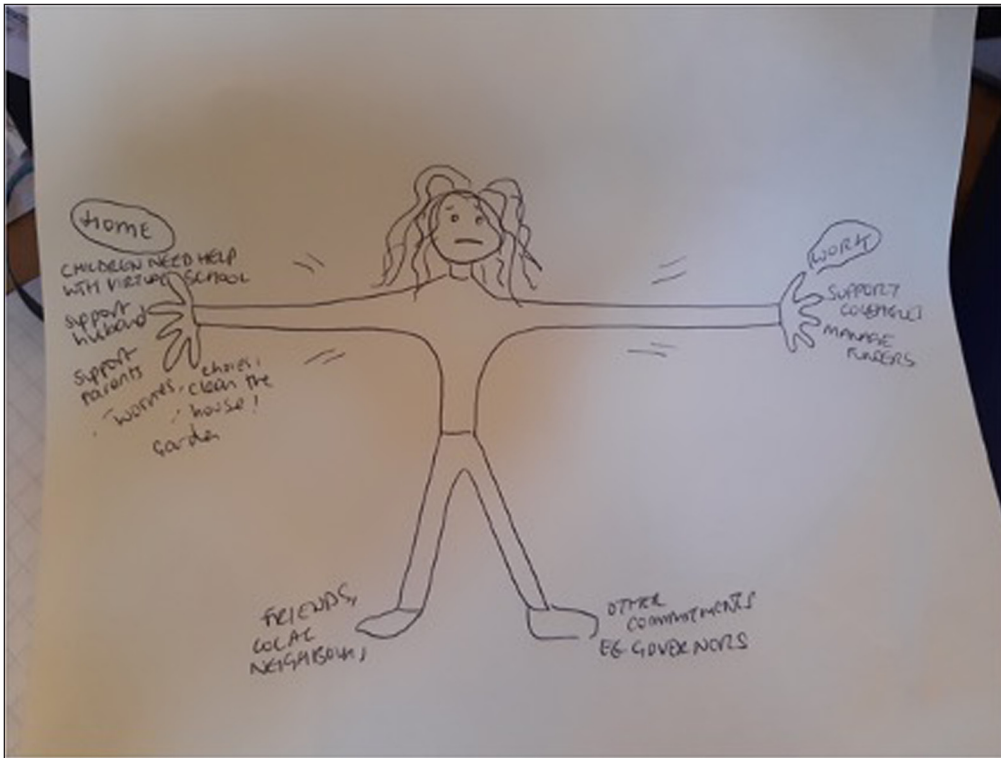
Lauren discusses the image in a written submission (as she was unable to have an interview at that time):

> This is me feeling very stretched! There are home demands on one side (trying to be a good mum and partner, plus the house needs more constant tidying and cleaning because we are all in it the whole time). My mum is on her own (my dad died some years back) and has had cancer plus my brother died a couple of years ago, so it is just me to support her, but she lives several hundred miles away and we hadn't been able to see her for months, so I felt constant worry (and guilt) about being in contact with her and how she is doing – but of course we couldn't actually see her. So that was one of the bits on the family stretch side. There is also the work side pulling the other way (which I've talked about above). Then there are friends and neighbours down one side by a foot – we've tried to keep in touch with friends virtually which has been really nice/important but also sometimes by the end of the day the last thing I felt like doing was being on another video call – it gets weirdly draining, even though I really like having a virtual drink/catch up with friends. The neighbours bit is on there because our road started a really nice community minded Whatsapp group – which was great in many ways- but it was also constant messaging (it's a long road) and sometimes that feels like another pull/stretch/demand to engage (it could easily be over 100 messages a day). ...I should have added a computer screen to the picture to represent the feeling of being constantly on a screen.

Another major theme was loss and disruption. Participants reported a sense of isolation, with loss of contact with their students, colleagues and research communities. Although technologies were used to try to stay in touch, such as Zoom catch ups over coffee, several participants reported that the loss of serendipity and casual corridor chats had left them feeling cut off. For more junior members of staff, this left them feeling that they had less guidance from senior colleagues than usual. Many participants reported severe disruption of their research, with cancelled field work, conferences and lab work leading to slowing or halting progress. Interviewees also reported that the move to online teaching had been extremely challenging and stressful, due to the sudden nature of the change, and the need to familiarise themselves with online teaching platforms in a short space of time. Although some advantages of online formats were acknowledged, many participants felt the student experience had been diminished by the sudden move to online teaching. The level of uncertainty about how the following academic year would be organised was also a strong theme in the data.

Interviewees described various ways that they coped with the difficulty of the situation. At this time, the conditions of the lockdown allowed for some forms of outdoor exercise, and walks in nature were reported as being important by some. Amy had provided a stock image of a woman on a sofa with a laptop and phone looking stressed, with two small children playing around her. She also provided a photo she had taken herself of a book, with a riverside view behind it. She gave explicit permission for this image to be used in the research, as the children are in the distance:

Amy discusses the two images in her interview:

> 'The first one was the kind of sense of not managing anything and the kids being in the way of getting work done. And I would say that image, even if there had been periods where it hasn't been all consuming that I felt like that. I would say that is how it has felt trying to get work done while you can't. But the other one was the kind of admitting defeat and accepting that I'm not going to get work done and the kids and that was one of the days I'd taken the kids for a walk by the river and they were playing and I'd taken a book. Because you can only go for so many bloody walks, I was finding it quite boring. And they would always want to stop and play by the river and I'd be, that's fine, but I don't want to play by the river, so, I'm going

to take something that I can enjoy, so, that we're all happy by the river. And [my partner] can get some work done while we're out, so, we can prolong our time by the river rather than me getting bored. So, I think I'd taken a book and maybe it's me being compartmentally and list again. But by taking a book I felt like I was ticking off the getting some time for me even when I kind of wasn't because I was supervising the kids. So, in a way it was almost saying fill up your own tank of something because you don't get much chance to and then when you get back from the walk with the kids then you can maybe concentrate on work because you have read a book.'

Lauren and Amy's images and descriptions echo many similar accounts provided by the study participants, illustrating the challenges staff faced. These challenges transformed the experiences of academic and professional service staff in complex ways, as summarised in the following section.

4 DISCUSSION AND CONCLUSIONS

With this article, we provide insight into the experiences of academic and professional service staff at a UK university as they transitioned to working from home and teaching in the first weeks of lockdown from March 2020. The responses of academics and professional service staff generally relate to their previous teaching experience and whether they had prior experience of online teaching. Those staff who had previously taught online generally found it easier to assimilate online teaching as part of their professional identity.

This study confirms earlier findings that entrenched practices pose a persistent barrier to a deeper and more productive engagement with digitalisation (Gourlay 2012). Academics' teaching practices and routines form an important part of their identity, which, from their responses, some imagined to be under threat. As a response to this perceived threat, rather than rethinking teaching methods and adapting teaching to the online environment, established practices, such as lecturing or tutorials, were shifted online.

The support made available to help academics teach online did not acknowledge academic identity. Instead efforts to support university teachers tended to focus around the creation and distribution of Pedagogic Content Knowledge (PCK) resources to offer advice and practical guidance to help academics develop online teaching expertise rapidly. However, when academics described how they prepared to teach during lockdown conditions, they seldom referred to PCK resources. This may be for a number of reasons. Respondents may have perceived PCK resources as reflecting the identity of staff who specialise in online teaching and therefore as a threat to entrenched practices, which decentre the authority of teachers (Kaatrakoski, Littlejohn & Hood 2017). It may be that insufficient attention was paid to the 'identity crisis' and threats perceived by academics who were used to teaching students in face-to-face settings. Instead, respondents focused on concerns around how to transfer traditional teaching practice to the online environment, rather than on how to transform pedagogic design or change teaching practice, leaving face-to-face teaching as the default point of reference. These cultural barriers are a persistent obstacle to a more productive engagement with digitalisation.

Another more practical explanation for the lack of take up of support on offer could be the critical (and largely unavoidable) delay in the support being available in the very first weeks of lockdown, requiring teaching staff to improvise their own responses. In addition, when resources were produced (e.g. in the form of short courses) they required staff to take time away from redesigning their teaching, whereas 'Just-In-Time' support (Brandenburg & Ellinger 2003) that could be easily located at exactly the moment it was required and which would help in the completion of the task rather than diverting time away for learning might have been better received.

Mixed responses to working from home reflect benefits such as increased productivity from saved commuting time, increased focus and productivity, but also challenges such as trying to work in improvised environments or being unable to leave behind workplace stress. The blurring of boundaries between home and work is disruptive for those who have a range of roles and responsibilities at home. Being on campus means that staff can set aside time and space to focus on their academic identity, but this may be diminished by working from home. It can, for example, be difficult for teaching staff who share their home with other working adults or children to deliver a polished presentation. Under these varying conditions, staff – particularly

women - characterise themselves as having to balance caring responsibilities, domestic duties and home working resulting in stress and anxiety**.** The rapid transition to lockdown disrupted established and successful work practices. More than this, though, it also overturned patterns of work that formed individuals' sense of professional identity. We recommend that acknowledging and incorporating professional identity has to be a central part of professional development support provided by universities.

Making the transition to online teaching has involved keeping existing work going while also learning new technologies and new ways to interact with colleagues and students. Such efforts were particularly hard for staff with teaching responsibilities who did not have spaces at home that could be dedicated to work, adding an economic challenge. This, combined with gendered patterns around caring responsibilities (evidenced by the survey data, but elaborated in the open text comments, images and most fully in the interviews), and the new demands of caring for students who are also struggling with an unexpected and unfamiliar situation, adds emotional labour to already-full workloads – challenges that are compounded by the ambiguity about the future. We recommend that these intersecting forms of disadvantage be acknowledged, supported and rewarded if universities are to create a sustainable and just future.

ADDITIONAL FILE

The additional file for this article can be found as follows:

- **Appendix 1.** Survey instrument. DOI: *https://doi.org/10.5334/jime.631.s1*

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The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

Allison Littlejohn was a PI on the project and led the project launch and survey.

Lesley Gourlay was a PI on the project and led the interview strand.

Eileen Kennedy was a Co-I on the project leading the analysis of online teaching.

Kit Logan was a Co-I on the project leading the quantitative analysis.

Tim Neumann was a Co-I on the project leading the analysis of researching remotely.

Martin Oliver was a PI on the project.

John Potter was a Co-I on the project working on the image analysis.

Jennifer Rode was a Co-I on the project leading the analysis of groups who are disadvantaged by working from home and online.

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