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An exploration of online postgraduate education: an evolving pedagogy.

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Word Count:

Declaration:
In submitting this thesis, I confirm that I am aware of the regulations regarding plagiarism, the submission is my own work, and that due acknowledgement has been given to sources used.
An exploration of online postgraduate education: an evolving pedagogy

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This work has been many years in the making. Over the past ten years there has been a
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Abstract
This thesis outlines an evolving understanding of online postgraduate healthcare education and proposes a pedagogical model to conceptualise the process. It draws together six peer-reviewed publications on the subject and highlights how understanding of this area of education has improved as a result of this work. This form of teaching is evolving rapidly and is currently undertheorized and lacking a secure evidence base. A total of 91 in-depth research interviews were carried out, with educators, learners and graduates during the individual studies affording a good oversight of online postgraduate healthcare education.

Online postgraduate education is conceptualised as situated at the boundaries of professional and academic spheres, offering a potentially democratic learning environment for both educators and learners. Learning is described as a horizontal process, allowing the sharing of learning and expertise between academic and professional environments to occur. Learning is recursive as students combine their professional work while studying part-time. Many online postgraduate learners are mid-career professionals with established professional networks and this helps to explain the impact of such studies that can extend far beyond the individual learner into their wider professional practice.

This work challenges the notion that online learning is social impoverished. When well designed and delivered online postgraduate education can offer profound learning opportunities, however, there is a need for academic staff who are experienced in online teaching to share their expertise more widely. Technology is merely a tool that allows human interactions and does not enhance learning without human agency.

The current instrumental focus on quality within higher education risks regarding online postgraduate degrees solely in terms of their income generating potential. This focus on finance overlooks the educational potential of such programmes of study as well as the academic challenges in delivering high quality programmes. Commonly held views that online postgraduate recruitment can be scaled up without significant academic effort and additional resources are countered.
Glossary

Please note the glossary is not presented in conventional alphabetical order but rather the topics are considered in a hierarchical manner.

Ontology: Ontology is a consideration of the nature of reality or being. The fundamental consideration is whether (or not) reality be reliably measured and described in an objective way. If one takes a scientific, objectivist approach to research then one believes this to be the case and that reality is experienced in the same way by everyone. Conversely a more subjective or interpretivist approach holds that there is not one fixed reality and that individual perceptions of reality vary. Such perceptions are often socially constructed and cannot be reliably measured, only described. If one has a certain ontological position it will have an impact on the research one undertakes and how one chooses to answer any questions of interest.

Epistemology: This relates to one’s belief about knowledge and how studies about the nature of knowledge are undertaken. Broadly divided into two areas: positivist (and post positivist) or interpretative. A positivist approach holds that knowledge is there to be revealed with no further elucidation, while interpretivist researchers study events or actions in a unique way that is largely influenced by their own frames of reference. Ontology and epistemology are intimately entwined and can be seen to be important considerations to researchers active in the social sciences. This work takes an interpretivist, pragmatic approach.

Methodology: Methodology concerns the theoretical stance adopted by the researcher and should be in alignment with the choice of research method employed. For example, phenomenography is a methodology and research interviews are an appropriate choice of data collection method associated with this methodology. A variety of methodological approaches were taken in the studies that contribute to this thesis.
1. Introduction
This thesis presents a detailed consideration of online postgraduate education, an under researched and theorised area. Using my own programme in Clinical Education as a case study the potential impact of such education is considered. Learners are working professionals, in this case clinicians who teach. At a basic level masters programmes in this area could be considered as a form of faculty development for clinical educators, teaching clinical teachers about teaching. The democratic approach to programme delivery employed allows the development of a vibrant academic community of educators and learners. The programme is designed to encourage learners to share their professional experiences and draw on the expertise of other learners, so making the links to clinical practice explicit. The professional nature of the learners on this programme and the increasingly connected world we live in helps to explain the potentially profound learning that can occur in online programmes. This learning can also expand beyond individual students to their wider professional networks, with students acting as vectors in the transmission of new understanding (Roxa et al., 2011).

I will draw on six peer-reviewed papers and discuss how these papers align to provide a coherent investigation of online postgraduate education in healthcare education. The work starts with an overview of online postgraduate education and is followed by contextual information regarding online postgraduate learning at the University of Edinburgh where this work was undertaken. In subsequent chapters I will provide an overarching discussion of the general methodological choices employed in each paper, then in the findings section each paper is presented as a chapter, followed by a critique of the paper. Finally, conclusions are drawn that highlight the major themes running through all the papers and considers the impact of the research and how it has advanced knowledge in the field.

No work occurs in a vacuum and I would like to highlight at the outset, the main formative influences on my thinking. Sometime ago I was introduced to the metaphor of a dinner party as a useful way to focus on which figures have been of key influence in developing one’s own position on a topic (Kamler and Thompson, 2006). If I were to host a dinner party to discuss this work, the invitation list would have to include John Dewey, Pierre Bourdieu, Etienne Wenger and Yrigo Engeström. While this is an admittedly terrifying prospect, the topics that are most commonly associated with each individual; pragmatism (Dewey), capital and habitus (Bourdieu), social learning (Wenger) and expansive education/activity theory (Engeström) form the backbone of this work and the links between the topics and their impact on my thinking will become clear as the thesis unfolds.

The papers that I have published, and which form the focus of this thesis, are discussed in the following order:


This paper draws on the work of sociologist Pierre Bourdieu and offers insight into how learning from online postgraduate study influences not just graduates, but their
professional practice and the conversations they have with their peers. The scale of the impact reported by individuals was a surprise and raised questions about the nature of this transformative learning. I wished to ascertain the views of colleagues involved in online teaching, so initially asked those involved in teaching the MSc Clinical Education about their experiences of learning to teach online.


This phenomenographic investigation described the number of different ways in which online teaching was experienced, by those new to the role. Moving from an initial focus on the activities of the teacher, to those of the student, and then onto seeing online study as a way of fostering interaction and engagement. These findings start to challenge the dominant narrative that online education is in some way less socially valuable than face-to-face teaching when building relationships in postgraduate education.

The focus of study was then expanded beyond one programme to consider the experiences of staff from a range of postgraduate programmes at the University of Edinburgh. The University of Edinburgh Principal’s Teaching Award Scheme funding allowed a university-wide study of PGT Programme Directors.


Programme Directors were identified as likely to be the group with the longest exposure to PGT education within an institution. Twenty-two interviews were undertaken with Programme Directors from the University of Edinburgh. This group all reported considerable enjoyment of their position, largely related to contact with students. Interestingly no difference was reported by those who ran online programmes and those who led face-to-face programmes. Frustrations reported relate to the lack of strategic direction for PGT education and lack of support and training for the role. The unique position of PGT programmes at the boundary of academic and professional spheres was acknowledged. Half of those interviewed had come late to an academic career from the profession they now taught in. This offered helpful insights into students’ learning needs and the development of an equal academic relationship, as learners were seen as peers.

To investigate this further a study of the dissertation component of online masters degrees was undertaken, as this is the part of PGT programmes where the staff: student relationship changes from ‘one to many’ and becomes ‘one to one.’ This was felt to potentially afford the greatest insight into the nature of the academic relationships which developed online.

This work was undertaken in collaboration with a dissertation student who interviewed five pairs of recent graduates and supervisors from around the University of Edinburgh. Online delivery was found to offer a positive, supportive and constructive supervisory relationship, with students bringing professional expertise and supervisors providing academic input. A model of participatory alignment is proposed with a suggestion that the supervisory relationship is a democratic and dynamic one that can become over, as well under aligned. Establishing and maintaining the relationship takes time, effort and negotiation from both parties.


This commentary builds on the previous four papers to challenge the assumptions that online education is socially impoverished and that student recruitment can be easily increased. Online education means many things to many people but online postgraduate education can provide a high-quality educational experience, if built on shared understanding and discussion. This takes time, effort and experienced educators, who not only understand the needs of their students but the academic environment. A postdigital perspective counters the notion that online teaching is in someway deficient to face-to-face teaching and that any teaching is about high-quality interactions between educators and students, irrespective of the mode of delivery.

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To offer a more detailed understanding of the pedagogical underpinnings of online PGT education this paper synthesises two studies, one whose participants were current students on the MSc Clinical Education and the other with experienced online educators (13 within the institution and 2 from other institutions). The investigation utilises activity theory to provide a powerful lens, which highlights a horizontal recursive approach that allows both academic and professional learning to be shared and developed as a result of online PGT education. The findings are synthesised into a proposed model to conceptualise the process of online postgraduate education and develop a theoretical basis on which subsequent work can build.

The six papers have been ordered in this way to offer the most coherent overview of the studies and to build on each other in a logical way. It is not the order that they have been published in, mainly due to the considerable variety of time each paper spent under review, from a period of weeks to almost a year.
The main themes arising from the papers that will be discussed in the thesis are:

- Online teaching takes academic time and effort that is often unrecognised;
- Successful approaches to postgraduate online learning involve sharing experiences and building community and relationships;
- Online PGT programmes can afford the opportunity for learning to move between the professions and academia;
- Learning not only impacts the development of individual students but can also influence those in their wider networks; and
- Online postgraduate learning is not a one-size-fits all model that is easily scalable and care must be taken to ensure that commercial pressure to increase student numbers does not override good pedagogical design.

1.1 Background to this research study

Postgraduate taught (PGT) programmes are widely recognised to be the least well investigated of all academic awards sitting as they do, uncomfortably, between the better understood and well-established postgraduate research and undergraduate programmes of study. The Higher Education Commission noted that postgraduate teaching is ‘a forgotten part of the sector’ (Higher Education Commission, 2012:17). A situation that leads to some of the challenges that I will go on to consider in this work. Traditionally PGT programmes have been regarded as a means of progressing to doctoral study, with students interested in this path enrolling on one-year, full-time taught masters degrees delivered on-campus, but the recent growth experienced in the PGT sector has largely not been experienced in this traditional face-to-face full-time delivery. The University of Edinburgh provides a clear example of this pattern, with growing numbers of postgraduate students choosing to study in more flexible ways, often via blended and online delivery. Postgraduate degrees are increasingly seen as a method of career progression in the professions where the online, part-time delivery allows established professionals to combine work and study.

Many postgraduate students are not now studying in preparation to join the work-force, they are the work-force and they have chosen to undertake additional study, often voluntarily. While individual motivations for undertaking study will vary we know that many do so for career progression, with nearly 60% of PGT students (online and on-campus) choosing to study for professional advancement (Bennett and Turner, 2012).

Twenty-nine percent of all academic qualifications awarded in the UK in 2014/15 were PGT degrees (UK Council for Graduate Education, 2018), with growing numbers of students choosing to undertake taught postgraduate study over the past three decades (Morgan, 2015). Despite this growth, PGT education is under-explored and theorised, there is not a coherent body of literature in this area upon which researchers can build. A Higher Education Academy (HEA) funded study looking at the experiences of new PGT students in STEM subjects and their expectations and attitudes towards PGT level study published in 2013 did not even mention online PGT programmes (Morgan, 2013). Compounding the problem is the difficulty of understanding the scale of online PGT provision, with metrics such as those produced by the Higher Education Statistics Agency and Universities UK
currently silent on the numbers of online learners in higher education. A survey of PGT Programme Directors and Administrators in the UK (Macleod et al., 2018), noted that the flexible delivery offered by online delivery had made postgraduate study a possibility for some who could not have previously considered it. The authors then go on to quote Rovai and Jordan, (2004) who caution that online learning is not suitable for all academic subjects. Yet, Rovai and Jordan fail to give a rationale or evidence for this perspective, citing general factors that are likely to apply to all new students about to undertake a new form of study, irrespective of how it is delivered. The work by Rovai and Jordan is illustrative of the lack of criticality applied to online education more generally, something I challenge with co-authors, in paper five of this thesis (Fawns et al., 2019).

PGT student recruitment does not have any centrally imposed restrictions in the UK, in the way that undergraduate programmes do. Theoretically this means there is no limit to the numbers of students that can be matriculated and while on-campus programmes do have limitations imposed by the physical estate, this is not the case with online programmes. The limitations are perhaps those shared with other forms of teaching, where larger cohorts of students are likely to need larger numbers of teaching staff if quality is to be maintained. This focus on student numbers and recruitment has dominated discussions at the expense of other considerations such as the quality of online programmes and the pedagogical approaches required. It must be recognised that learner, educator and policy-maker perspectives will differ, however in the absence of a theoretical base underpinning online PGT education, it is very difficult to understand why such programmes are successful or whether or not they can be scaled up without problems. It is surprising that there is not more work published in this area, given the increasingly competitive environment in which online PGT programmes operate. It is unclear if the lack of journal articles relates to an absence of active researchers interested in online PGT education, or difficulties in finding suitable journals within which to publish the work, given the lack of an established evidence base to build on.

Before moving on to consider institutional and wider higher education sector contexts it is important to consider both my own motivations, background and experiences that have brought me to the position of undertaking doctoral study in this specific area. Before working in online postgraduate education, I had spent many years in higher education, mainly in undergraduate face-to-face teaching in a variety of roles and institutions. Prior to this I worked as a dietitian for over ten years giving me a good overview of both healthcare delivery and education. I was initially a reluctant online educator, feeling out of my depth with the technology and finding a medical school to be a challenging workplace. I was surprised that there was not much in the way of support available for those new to the role of online educator, nor much that I found helpful in the academic literature. There were a lot of papers on online learning but they seemed to focus on technical skills, or competencies rather than discussing what educators did online and what and how students learned.

However, as I became more experienced my interest in online PGT education within healthcare grew and I particularly came to value the interaction and relationships that developed online. This was crystallised for me when I met my first cohort of students at graduation. Graduates had come from Egypt, New Zealand, Canada, Turkey and around the
UK to graduate in person. It was an extraordinary experience, it was as if we had known each other for years, which indeed we had, just not in person. Many from this group, along with subsequent cohorts, have stayed in touch and continued to share their ongoing development as clinical educators. In fact, several have contributed as participants to this work, and as co-authors in other work (see for example, Pokryszko-Dragan et al., 2019).

While acknowledging that there is a wide variation in online PGT programme delivery, I have found online PGT education to be a very democratic form of education, where traditional hierarchies apparent in healthcare largely do not feature. Teaching sessions are fun and interesting, often ending up in unexpected conversations and insights. This freedom and flexibility in delivery suits the needs of postgraduate healthcare students, the vast majority of whom have to fit their studies around busy clinical workloads and other responsibilities. This flexibility is key to the successful development and delivery of online postgraduate programmes but can be problematic for programme staff as academic regulations and policies that govern academic programmes have generally been devised to cater to the needs of on-campus undergraduate students. A specific example is that until very recently pressure of work was not considered suitable grounds for special circumstances. Clearly the working demands of busy clinicians are often unpredictable and likely to be very different to those of the work undertaken by undergraduate students. The needs of older, working professionals vary and, to date, are not well understood or explored within the higher education sector.

Ten years’ experience teaching, and now leading, an online programme has given me a very privileged understanding of this form of education and it has led me to want to understand more clearly what is important in the development of quality online PGT programmes and to share these findings. I know anecdotally about the profound impact on individuals of their studies and while this might be useful for the marketing of programmes, the impact of online PGT programmes needs to be investigated further and reported in a more considered way. If those providing online programmes cannot articulate why these programmes are successful then they have little chance of influencing policy decisions that may impact on them.

The motivation to undertake most of the studies contained in this thesis, came from the number of times I asked myself why things were as they were - in the mode of critiquing the taken for granted (Quinn, 2012). This type of research can effectively be undertaken when there is the insight to generate such questions by curious researchers. While the proximity of the researcher to the topic of interest might be a cause for concern in some quantitative research paradigms, within more qualitative and constructivist approaches, such as the approaches adopted within these studies, the researcher is considered an integral part of the research process. These ideas are addressed further in the methodology chapter. However further interrogation of my motivations for undertaking this work is required for axiological purposes. I came late to academia and I find navigating the academic terrain and conventions challenging. Working as an educator in higher education, specifically in an environment where researchers have much of the power is also difficult. Working in online PGT teaching where attention is often focused on the income generating potential of online PGT programmes is also difficult. While the institution is making progress in promoting educators to senior positions, this is only happening slowly. The continuing dominance of
research in defining professional identity within universities (Barnett, 2003) ensures that committee structures are largely dominated by researchers and conceptions of teaching as secondary to research prevail (Badley, 2002). In addition, policy decision-making in higher education has been criticised as not informed by the specific concerns of educators, with Rowlands (2018) describing a ‘diminution’ of the academic voice. I aim to challenge the dominant narrative of online learning as in some way a deficient model of teaching when compared to face-to-face teaching, and to offer a more nuanced understanding of online PGT education that acknowledges the academic time and effort involved in providing high quality online programmes and the impact of such programmes.

1.2 The Contextual situation for PGT online teaching at the University of Edinburgh

The University of Edinburgh is an ancient research-intensive university, which generally finds itself comparing well with other institutions throughout the world, currently ranked twentieth in the world by one of the current ranking scales (QS World University Rankings, 2020). The University is divided into three colleges, the smallest of which is the College of Medicine and Veterinary Medicine (CMVM). This college contains the smallest number of teaching staff of the three colleges but the highest number of researchers. With several large undergraduate degree programmes, the College also offers taught postgraduate programmes, the numbers of which are growing and increasing delivered online. Many online programmes, particularly within the College, have grown organically, often due to the efforts of enthusiastic and determined programme teams. A few programmes, such as the MSc in Clinical Education, which I lead, have experienced considerable growth in student recruitment in the past decade with over 200 students currently studying over the three years of the programme. This produces a, not inconsiderable, quantity of student fees meaning that postgraduate education that is delivered online has become a significant generator of income, both within the College and in other higher education institutions (Morgan, 2015). This income generation has led online PGT recruitment to be identified as a perceived area for growth by business managers, unfortunately these ideas are often developed without detailed discussion with those providing such programmes.

Online learning means many different things to many different people and it is important to consider the local context within which this work was undertaken. Online postgraduate degrees are all structured and delivered along similar lines within CMVM. All programmes are made up of courses designed at Scottish Credit Qualifications Framework level 11, most consisting of 10 and 20 credit courses that are offered part-time over a number of years. A student will typically study a total of 60 credits in each year of study, years one and two of study comprising of taught courses, with a dissertation component in the third year. Some programmes, like my own, have the majority of students progressing through each year sequentially with no breaks, but other programmes are offered via intermittent study. Students can graduate at the end of the first year with the award of a postgraduate certificate, at the end of second year with a postgraduate diploma or after three years with a masters degree. Approximately half of all students choose to leave with a postgraduate certificate after one year’s study. Numbers on programme in the academic year 20/21 are 165 first year students, 54 second year students and 70 students studying in their dissertation year (this includes those who have had to extend their studies beyond one year).
1.3 Online PGT: Who are our students?

We cannot assume that postgraduates are expert students solely because they have an undergraduate degree. Tobbell et al., (2010) warn that the completion of an undergraduate degree does not necessarily result in students being ready to undertake postgraduate study. Bamber et al., (2017) suggest students need to be better prepared for postgraduate study, with specific study support and careful managing of expectations. Additional care and effort must be employed in supporting students in their transition to online study and this takes time and effort, both from administrative and academic staff. There is no readily available published research into understanding PGT students’ prior academic experience before they commence their studies at postgraduate level. Therefore, it is difficult to know how students’ lack of, or the potentially rusty nature of, academic skills might affect their expectations of, and attitudes to, studying at masters level. The lack of information about students’ academic skills is an important omission in the planning of online PGT programmes, that should be addressed to better plan the support for new online postgraduate learners. Many students are returning to study after a period of many years, many have never studied online and often considerable support is required in developing academic writing at a level of insight and criticality required at masters level. Given the geographic spread of students studying online there are important cultural factors that must also be considered when planning online programmes to ensure students feel equally able to contribute. Another factor is the multi-disciplinary nature of the student body on most online programmes, it can be challenging to ensure that such disparate groups can all reach the desired programme learning outcomes, and this requires a flexible teaching approach. As Cornelius and Nicol (2016) state, supporting online learners requires flexibility and an understanding that student groups can be very diverse. The diversity and flexibility required in the teaching approach, compounded by the lack of pedagogical understanding of online PGT education can make the whole process of teaching this group of students a challenging undertaking. We know what we are teaching our students but much less about what they are learning and how they are applying this knowledge in the clinical environment and their own teaching. Given the distributed nature of the online student body and their relative professional seniority graduates are likely to be disseminating their learning from these programmes widely. As educators we need to have a much better understanding of this process. If we cannot articulate the value of our programmes, it is difficult to see how they will remain credible and viable.

Online PGT programmes are offered throughout the University and most recent figures suggest that twenty-three percent of all PGT programmes offered were online programmes (73 online, 249 on-campus) (University of Edinburgh, 2018). Student intake figures from 2018/19 report 1,449 PGT students studying online out of the PGT student body of 3,600, across all years of study. In areas such as Clinical Education more students are choosing to study online, we also know that the geographical reach of online programmes is impressive with 38% of current online PGT students coming from the UK, 13% from rest of Europe, 13% from North America, 10% from Africa and 26% from the rest of world. These figures start to hint at the diversity of the online student body. Figure 1 shows the location of students on the MSc Clinical Education programme (from the current induction course on the Learn virtual learning environment).
Online students also tend to be older than their on-campus peers, with the mean age of online students being 33 years (see Figure 2). In terms of gender, 56% of current students are female.

Figure 2: Age of online students currently matriculated at the University of Edinburgh.

Entry requirements for most online programmes specify that prospective students need to have relevant professional experience to be offered a place to study on a programme. Given the mean age of online students at the University of Edinburgh is 33 years-old, many choosing to study will have significant professional experience to draw on. While this is an excellent teaching resource and enables learning to include discussion, sharing and collaboration it does mean online postgraduate education differs markedly from
undergraduate studies in many ways. Experienced professionals studying online PGT programmes part-time will have very different concerns and motivations compared to other face-to-face or undergraduate learners. The background of students, is a factor requiring careful consideration by those involved in online postgraduate teaching.

A Virtual Learning Environment is used by teachers as the means of organising course content and managing group work, synchronous and asynchronous activities, with most programmes operating on a university-wide version of Blackboard known as Learn (version 9). As with many online programmes, a version of the flipped classroom approach is utilised (McLaughlin et al., 2014), meaning that students can study at their own pace with interaction built in by means of discussion boards, real-time tutorials, email, skype or other technology. Specific delivery will vary between programmes but a dialogic approach is often taken, utilising a number of communication channels. This ensures flexibility is built into the programmes, which is key to accommodating the needs of online postgraduate students, many of whom are holding down challenging jobs and also juggling the demands of family life.

1.4 Online postgraduate programmes in healthcare education

A recent report noted that there has been a proportionately greater increase in PGT enrolments in programmes related to healthcare and education (Universities UK, 2018) than other subjects. A masters level qualification is often cited as an essential requirement in job specifications within healthcare (Tekian and Harris, 2012) and it has been suggested that masters programmes are producing the educational leaders of the future (Artino et al., 2018) and that graduates of such programmes go on to undertake influential roles (Sethi et al., 2018). Sethi et al., (2018) note that a postgraduate qualification in medical education aids career progression. What is less well reported is what exactly is being taught in these programmes, and whether it has an influence on the practice of individual students. Given the increasing visibility and leadership potential of the graduates of these programmes, these questions should be considered more widely. Online PGT programmes offer a valuable opportunity to investigate the potential transferability of academic learning to the clinical workplace, because most students choose to combine their studies with paid employment. However, other than the work of Sethi and colleagues at the University of Dundee little work has been undertaken on the experiences and motivations of clinicians engaged in PGT programmes.

With the online mode of teaching, the postgraduate nature of the student body and relatively new popularity, this work does not fit neatly into one established research area. It is messily situated at the boundaries of digital education, postgraduate education and health-professions education (Jones et al., 2020). While this situation can provide opportunities, it does mean that it has been difficult to get work published with editors suggesting the work is too educational for clinical journals and too clinical for educational journals. This situation will not improve until others in the field start to engage critically with the educational work that they undertake and start to disseminate this work more widely to help establish a more coherent and insightful body of research work. To add to this complexity, programmes such as the MSc Clinical Education can also be considered under the faculty development banner, dealing as they do with helping clinicians to become better
educators. The fact that this programme teaches clinical educators about teaching sheds some light on the potential impact of the programme and makes what is being taught and the impact of such studies of interest to the wider clinical education community.

In summary, online PGT is a form of education that is little understood and undertheorized but increasingly important to both the students who undertake this form of study and the institutions that offer it. Online PGT programmes are situated in an increasingly competitive marketplace that contains both established academic institutions and increasing numbers of private providers of online education. It is essential that those delivering online postgraduate programmes have a sound understanding of the pedagogical approaches that are successful and the impact of this form of education to remain competitive. This information is not solely useful for marketing purposes but as a counter to the dominant neoliberal drive for expansion in the sector. The quality of the teaching and resultant education must be the main concerns of educators and is the focus of this work. If we better understand the impact of online PGT programmes in healthcare, and the factors that are key to successful learning and teaching in these programmes, these insights will support the design and development of future high-quality programmes.

In summary, the aims and objectives of this thesis are:

Aim
To understand the important characteristics of the structure, pedagogy, and impact of online PGT programmes in healthcare education.

Objectives
- To conceptualise what successful pedagogical practices support online postgraduate learners.
- To undertake a critical exploration of the sharing of learning between the academic and clinical environments.
- To critically describe the nature of the academic relationship that develops between educators and students in online PGT programmes in clinical education, and the attendant impact on identity
2. Methodology

2.1 Introduction
The six papers that have contributed to this work have employed a range of different approaches, paper one utilising the sociological constructs of Pierre Bourdieu, paper two is a phenomenographic study, paper three a thematic analysis, paper four a constructivist grounded theory investigation, paper five a commentary and paper six was informed by activity theory. While each paper gives a summary of the methodologies employed and the rationale for their choice, this chapter considers my own beliefs in detail and connects all the papers in a coherent manner. Each study was designed to best answer the research question, but each study also builds into a coherent body of work informed by a unifying pragmatic approach.

As might be expected with any period of study, my appreciation and understanding of the nature of knowledge and its investigation has evolved and developed over this time. While this means I now have a more developed understanding of the literature on the philosophical basis of education I still believe that an appropriate methodology was employed in each piece of research to best investigate the topic of interest. Undertaking each study, producing each paper and now the writing of this thesis, has encouraged me to crystallise my thoughts and produce a coherent narrative account of the underpinning philosophical position that has informed this body of work. Over the past five years I have developed what I consider to be a wider appreciation of the underpinning philosophy of education. An epistemological view that has expanded from constructivism to encompass more social and material aspects of learning and teaching. This epistemology is best described as pragmatic, in the spirit of adopting whatever methodological approach will best answer the particular research question of interest.

2.2 My development of this position

In common with most healthcare professionals my undergraduate studies and clinical practice were very much informed by the scientific tradition and the tenets of evidence-based medicine. Evidence was largely in the form of quantitative data reported in terms of its statistical significance in studies of clinical interventions. An approach that is commonly referred to in philosophical terms as the positivist or post-positivist tradition, concerned with discovering truth and reality. Those of us coming late in our careers to the study of the philosophy of education face the difficulty of seeing the world through a different lens to the one we have been taught to believe is the best or only way to understand the world. The terminology employed in the philosophy of education is confusing and imprecise, multiple terms exist that describe, seemingly, similar positions and I have found it difficult to understand and critique this work.

My masters degree in education introduced me to more qualitative forms of research common in educational research; approaches less focused on issues of proof and truth, and more interested in exploring, understanding and offering insights. Generally, these approaches are referred to as relativist, naturalist or constructivist and reject the notion that there is one objective truth or reality that is out there waiting to be discovered. What is
available to the researcher is a subjective understanding that offers some form of representation of reality.

As a form of human interaction, education is often investigated using qualitative or mixed methods research. The two well established and seemingly incommensurate paradigms (positivism and constructivism) discussed by educational philosophers (Guba, 1990; Guba & Lincoln, 2005; Lincoln, 2010), continue to classify approaches to research in terms of the ontological, epistemological and methodological approaches. The researcher starts with an ontological position that describes their perception of the nature of reality, which informs their epistemological beliefs about the nature of knowledge, which in turn influences methodological choice. This top-down approach clearly suggests that whether one follows a post-positivist or a constructivist approach there is a wide schism between the two that is difficult to overcome. Crudely speaking one either believes that there is one reality that can be known or one believes that there are multiple realities that can be simultaneously experienced by different people.

I found reading around the topic to be frustrating and confusing, agreeing with Morgan (2014) that many authors writing about educational philosophy were focusing on what seem like semantic concerns about paradigm wars rather than offering more helpful advice to the uninitiated. I found the focus on ontological and epistemological concerns particularly unhelpful, positivists criticising constructivists for producing work of insufficient rigour and constructivists criticising positivists for trying to discover an objective reality that they felt did not exist. A recognition that, in part, led some educational researchers to develop new methods of research to try and address this incommensurability, for instance developing methodologies to offer qualitative researchers a rigorous basis on which to develop conceptual insights (Bryant, 2009). An example is the work of Glaser and Strauss (1967) and their development of grounded theory as a proposed method of bringing the rigour of quantitative research to a qualitative research process. Much of Strauss’s thinking was informed by his studies in Chicago and exposure to the pragmatism of John Dewey and others in that school at the time (Bryant, 2009). Strauss has described pragmatism as a ‘red thread’ that ran through his work, informing his decision making (Strauss, 1993:22).

2.3 Dewey’s pragmatism
The term pragmatism was originally attributed to Dewey’s colleague Charles Pierce, who later distanced himself from the term preferring the alternative pragmaticism. Dewey originally referred to pragmatism as instrumentalism due to his belief that knowledge exists in the form of statements or theories that can be considered to be instruments or tools (Bryant, 2009) as opposed to absolute truths. Dewey considered that philosophers should focus on human experience rather than absolute truth. The search for truth was an approach common at the time Dewey was writing and he firmly rejected the ‘epistemological industry’ with its focus on knowledge (Dewey, 1941). Through his focus on inquiry, Dewey asked about the sources of an individual’s beliefs and the meaning of their actions, both questions that were intimately related in a cycle where experience brings both concerns together so creating meaning. He considered reflection on experiences to be the key factor to learning. Generally, reflection is a habitual process, often without conscious deliberation, but when a new situation is encountered, what has worked in the past may no longer do so, necessitating a more mindful process of decision-making that Dewey termed
inquiry. Previous experience does not always provide sufficient information to allow us to deal with new situations successfully. This highlighting of the significance of context to Dewey, led to the concept of fallibilism in pragmatism, the idea that current thoughts or instruments may be superseded at some stage in the future and replaced by newer insights developed in light of more recent experiences. Fallibilism is clearly in conflict to the notion of an objective and knowable reality, with its suggestion that our understanding is never fixed and constantly open to review. This argument is summarised by Rorty (1991) in his suggestion that all ideas must be open to doubt. While this is an attractive idea to those who undertake research, it also projects a troubling lack of certainty that can easily be linked in one’s mind to the current dominant political narrative where expertise is seen as something to be rejected along with the rise of fake news (Fischer, 2015).

I am also drawn to pragmatism due to its rejection of what Dewey (1917) called the ‘spectator theory of knowledge’, which suggests that the researcher is in some way separate to the research process, a passive observer of a reality that is just waiting to be discovered. I cannot claim to be a spectator in this thesis. I am researching an area I work in, I am acquainted with many of the research participants and can be considered to have a vested interest in the research area. This work can be considered an example of practitioner inquiry (Campbell, McNamara and Gilroy, 2004), a process where practitioners undertake research in their area of practice. Dewey’s experimental theory of knowledge emphasises that the value of knowledge should be judged in terms of its usefulness which must be context dependent. I have endeavoured to provide sufficient contextual information in each paper and this thesis to allow other practitioners to judge the utility of my work to their own context.

Dewey and other pragmatists sidestep the ontological and epistemological tangles that consume much educational philosophy and the discussion of research paradigms based on the metaphysical nature of reality. Instead they start from the position that life is contextual, social and emotional, undertaking a process-based approach to knowledge through inquiry. In this way the entrenched paradigms of post-positivism and constructivism with the debate about the commensurability of differing camps is no longer such an insurmountable problem. Rather than considering that one’s ontological position should inform the choice of methodology at the outset; the researcher should start with a problem and all else follows from there. This inductive process is common to other forms of constructivism. This is summarised by Dewey in his 5 Stages of Inquiry model, represented below in figure 3. I find this representation particularly useful as it clearly shows that this is a continuous process that is cyclical in nature. Insights from one study will influence the next, as described in subsequent chapters of this work.
Another influence on my decision to adopt a pragmatic approach was the ‘so what’ question, relating to the practicality of the research. As someone who must have written that exact phrase on hundreds of student assignments this really appeals to me. Rather than choosing between an inductive or a deductive approach to data analysis, the more flexible notion of abduction appeals. Abduction has been referred to as a hybrid of the more rational forms of research with a more imaginative approach (Reichertz, 2007). Put more simply it might be described as coming to the simplest, most logical conclusion from a set of observations.

Practitioner research or inquiry has its basis in school teaching but is commonly employed in professional doctorates where a professional is engaged in studying the area within which they are employed. While, as noted by Drake and Heath (2011), it is challenging to do practitioner inquiry well, a clear advantage is that:

‘the newness of this knowledge comes not from a single research domain but from combining understandings from professional practice, higher education practice and the researcher’s individual reflexive project’ (Drake and Heath, 2011:2).

While this approach has been criticised by those who associate the term practitioner with amateur (Saunders, 2007), it is difficult to see how complex areas such as online PGT teaching and learning could be investigated fully by anyone other than someone with insight into the area, spanning as it does, so many different domains. Practitioner inquiry has obvious links to Schon’s description of reflection on action (1983) in uncovering and making
explicit the, often tacit nature, of professional knowledge. The link to pragmatism is clear, in the aim of producing descriptions accepted as ‘ringing true, rather than being true’ (Campbell, McNamara and Gilroy, 2004:8). This work and the associated papers all provide sufficient descriptive context to allow readers to determine if the reported findings do ring true.

The insights and understanding available to the researcher in practitioner inquiry (Campbell, McNamara & Gilroy, 2004) are helpful in seeing what is in the data, recognising the surprises, or providing flashes of insight described earlier as abduction. Obviously, the counter to this is that one may not experience, or be open to, these surprises if one knows the field well so there is still an onus on the researcher to keep an open and critical mind when engaging with the data. A process that will be explored later in this section when considering the quality of educational research. A specific example of this is found in paper three where one learner described how she felt that she was not well supported by her dissertation supervisor and related this to them having an established and friendly relationship. This observation, which was completely unexpected led to the insight that the supervisory relationship could be too positive (or over-aligned) as well as under-aligned.

2.4 Dewey on education

Pragmatism then, with its focus on practicality and utility, its acceptance that understandings change, and that thoughts and actions are connected in inherently social ways is a valuable approach to investigating social phenomena (Morgan, 2014). All education involves human interactions and Dewey’s description of experience as a social process, emotional and embodied, suggests that pragmatism is a helpful framework to investigate education, and is often associated with methodologies like action research (Hammond, 2013). In addition, experiential learning and reflective practice, common in modern healthcare (for example, see Schon, 1984, Kolb, 1984), are also consistent with Dewey’s ideas. These echoes of Dewey’s work reinforce its continuing relevance today in helping us to understand even newer methods of teaching such as online postgraduate education. Dewey (1963) argued that education, like all social movements, is subject to conflicts and controversies and goes on to recommend that all intelligent theories of education should look to the causes of conflict and attempt to develop a plan to address these difficulties. This concern is particularly acute in new forms of education where there is a departure from established traditions, as might be seen in the move to online education in universities. Those involved in online PGT education tend to see it as a positive and constructive development in the educational offering of universities but the educational potential of online education is not always widely shared or understood. This limited appreciation of the potential of online postgraduate programmes can cause tension between those who are involved in delivering high quality online PGT programmes and those responsible for policy making in higher education institutions.

Dewey was a firm believer in the unity of theory and practice, holding that all principles are abstract and only become concrete when the consequences of their application become apparent. In Experience and Education (1963) Dewey argues that all education occurs as the result of experience but warns that not all experiences are educative. It is the quality of the experience that is key, with more democratic experiences tending to promote better quality experiences. This led Dewey to suggest that educators must understand the notion of
hospitality and humane methods in their teaching design and interactions. This idea of hospitality in teaching design and delivery underpins my own teaching practice. Dewey warns that if one does not have an underpinning philosophy of education then one is at the whim of every new initiative. Online PGT education can be argued to be in such an undertheorized position - another important motivating factor in the undertaking of this work. The production of a pedagogical model enables the online PGT community to better understand the value of their teaching and to provide a coherent and robust justification of the educational approaches adopted.

2.5 Criticism of pragmatism

It is important to note that there are many opponents of pragmatism. Pragmatists are often criticised for opting out of ontological debates (Lincoln, 2010) or failing to consider the philosophical underpinnings of their work (Denzin, 2012). Pragmatism has been criticised for lacking a moral stance with its rejection of absolute immutable facts and failing to consider that thought without action is possible (Morgan, 2014). It is important to recognise that pragmatism is more commonly utilised in mixed methods studies (Tashakkori and Teddlie, 2010), and the ‘what works’ over-simplification is justifiably a commonly cited criticism (Hesse-Biber, 2015). Morgan counters these arguments by suggesting that pragmatism offers a more practical view than the traditional ontology, epistemology, methodology philosophical basis of knowledge where philosophies can be crudely reduced: positivism to a knowable reality, constructivism to reality only being known in the minds of the observer. The neo-pragmatism of Rorty (1991) employs the analogy of knowledge as a web, rejecting traditional hierarchical conceptions of knowledge with science at the top and attributes such as common sense seen as lesser concerns with the utility of any knowledge judged by its applicability, which is necessarily influenced by context.

The appropriateness of pragmatism (or any other philosophical approach) for any study can be critiqued but embracing pragmatism has enabled me to reject the notion of the passivity of the researcher, recognising my input as a clinical educator researching online PGT learning and teaching. Surely the test of any research in education is whether it provides insight into why something is working (or not), or is of value.

Judgements of quality in research are best made by the community of researchers within the field that the work sits, as evidenced by approaches such as the peer-review process. Morse (2006) cautions that the tendency of some qualitative researchers to try to apply the criteria used to judge the rigour of quantitative research, such as validity and reliability, to qualitative research to make claims about the research undertaken is unhelpful and stifles more meaningful considerations of quality. There is a considerable body of work that considers the issues of rigour in qualitative work (for example, Guba and Lincoln, 1981, Creswell and Miller, 2000), with Sin (2010) suggesting the notion of rigour is a limiting one when considering qualitative research and that quality is a more helpful aim, citing the work of Spencer et al., (2003) and their framework for assessing research quality in studies employing qualitative methods. The framework consists of four characteristics that should be emulated in good quality qualitative research:

- The work should advance knowledge of the field;
- The study design should be defensible and be able to answer the research question;
• The study should be undertaken in a transparent and systematic way; and
• The claims made are plausible and supported by the data collected.

This framework has informed each of the studies undertaken in this work. I also remained mindful of Mishler’s (1991) warning that data collected by interview can be problematic due to the difference between language and meaning, particularly when there is no transparent description of the context that the interview relates to. Care has been taken to ensure that sufficient contextual information is available in each paper. Those interviewed were asked about their experiences and of course the interview process is necessarily relational and subjective providing as it does a representation of experience. A commitment to reflexivity is a way of acknowledging the researcher’s impact on the study (Lincoln and Guba, 1985). My own preconceptions and experience cannot be ignored and through detailed notes and reflections throughout the process I have sought to be clear about my own role in each study. In many cases, the research participants were known to me, and often involved in the design and delivery of educational programmes. As such, considerable effort was made to ensure interviews were less extractive and more developmental and learning focused.

Care must be taken when considering any claims made about the generalisability of any of the work reported here, given the highly contextual nature of qualitative research. Care has been taken to offer a rich description in each study to allow readers to identify similarities to their own contexts, or recognise patterns (Spencer et al., 2003). I have endeavoured to provide a rich description of the context of each of the studies undertaken, questioning simplistic notions of transfer and that there is always some requirement for recontextualization when applying learning to new settings (Aitken, 2020). Therefore, in giving rich theorisations of the sites of research and the educational activity that unfolds within them, one is giving the reader useful tools to apply to other contexts (which they can only do when they, themselves, have sufficient knowledge of that context).

2.6 Ethical concerns:
No methodology section is complete without a consideration of ethical issues. I obtained full ethical approval for all the studies reported in this work that involved the collection of data, by the University of Edinburgh, Moray House School of Education and Sports Ethics Committee. Throughout all the studies that contribute to this work a total of 91 in-depth research interviews were undertaken, all participants gave informed consent and had either responded to a request for research participants or were approached as they were perceived to be particularly knowledgeable on a particular topic (Sandelowski, 2000). All studies followed University of Edinburgh research guidelines and British Educational Research Association (2018) ethics guidelines. Participants responses were treated confidentially and data was handled and stored in compliance with General Data Protection Regulations (2018) guidelines and the Data Protection Act (2018). I also acted as a responsible researcher, in compliance with my professional code as a current registrant of the Health Care Professions Council, acting with professional integrity.

While the more formal ethical concerns of informed consent and judgements of the ethics committees were adhered to, the concept of axiology, commonly discussed in pragmatism must also be considered. This is an appreciation and recognition of my own impact on the process, my own values, attitudes and biases and their potential impact on the research.
The questions I chose to ask, the data collection methods employed and how I chose to analyse and interpret the results all must be considered. Such axiological concerns have been touched on earlier in the introductory section and are addressed more fully in the consideration of each of the papers.

2.7 Copyright:
Each of the papers is published in journals that allow the reproduction of these papers by the authors in scholarly work such as this thesis. As such, there are no concerns with copyright in reproducing the papers as a whole in this work. Each paper is discussed in the finding section, with the full paper available in the appendices.
3. Findings

3.1 Critique of paper one


The motivations to undertake this study were to better understand both the process of postgraduate learning and teaching and the product i.e. what students took from their studies. The work arose from my concerns about claims made about the development of graduate attributes (GA) at the University of Edinburgh and an acknowledgement that we could not say, with any degree of confidence, that all our students would graduate with these or any other characteristics.

In 2016, I co-led with Sarah Henderson (Programme Director of the MSc Clinical Management of Pain) a University of Edinburgh Principal’s Teaching Award Scheme (PTAS) grant application that was successful, and this allowed research to proceed focused on graduate attribute development from online PGT programmes. The money was used to appoint a research assistant to undertake the collection of data for the project. Sarah Henderson and I jointly interviewed and appointed Douglas Sutherland as the researcher. I obtained institutional ethical approval and recruited participants for the study, who were recent graduates of the MSc Clinical Education programme (plus four graduates from the MSc Clinical Management of Pain). Douglas carried out seventeen interviews in total, but the funding ran out before he was able to complete the analysis of the data. I undertook a thematic analysis of the data and identified the following themes: academic voice, infectious curiosity, and expanding worldview. I then further interrogated the dataset through the lens of Bourdieu’s concepts of habitus, field and capital. I drafted the paper for publication, with support from the co-authors. If I was undertaking the work again I would have undertaken more of the interviews myself. The research assistant did a good job, but lacked familiarity with the area and missed several opportunities to ask more probing questions. While the resultant analysis is an accurate reflection of the data, I suspect some interesting accounts of how practice has been affected by study were not explored as fully as they could have been and this area of research is something I plan to revisit in future studies.

This particular work has created a lot of interest in the wider PGT community within the University of Edinburgh, leading to conversations with other programme teams (Masters in Public Health, Internal Medicine, Pain Management, Critical Care, and Surgical Science) about undertaking their own educational research. More importantly for me and the rest of the Clinical Education team, it gave us confidence to carry on with our programme of research and reassurance that our teaching was having an impact, not just on our students but also on their practice in the workplace. To date, this paper has been cited 5 times and downloaded 1,700 times.

Graduate attributes (GAs) are both a topical and controversial issue in the academic literature. Neatly summarized by Hager (2006), as transferable skills and dispositions
produced by engagement in programmes of study, their alleged development is claimed in the strategic plans of most Higher Education Institutions. However, GAs remain contentious, largely due to their reductionist nature and the instrumental approach that GAs are based on (Bradshaw, 1992). The suggestion that learning can be captured in a few lines of text is problematic for several reasons. Primarily because it ignores the diversity apparent in any group of learners and such reductionism can also lead to a potential disconnect between more academic or contemplative notions of knowledge. Also pertinent to postgraduate education is the debate focusing on whether or not GAs can be translated between settings, in this case from a university to workplace, and whether the development of GAs is something that can (or even should) be measured, or is rather more of a developmental process (Holmes, 2013).

I chose Bourdieu’s work as a theoretical framework to better understand engagement and outcomes of online postgraduate education, and in an attempt to open the work out from a focus on narrowly defined attributes. Habitus is a term employed by Bourdieu that refers to an individual’s unique tastes or perceptions (Bourdieu and Wacquant, 2013). My first paper considers the potential influence of postgraduate study on habitus in ways that allow individual students to operate more effectively in their own clinical area (or field, to use Bourdieu’s term) where there are likely to be internal struggles for limited power or resources (Bourdieu, 1977). Bourdieu (1986) suggested that to understand power in a field it was important to know what form of capital was valued in that particular field. By referring to the academic skills developed during postgraduate study as embodied cultural capital and the social links and connections made during the students’ time on the programme as social capital, the benefits of study can be seen to extend far beyond gaining an academic award. Bourdieu’s work offers a helpful conceptualization of the value of online postgraduate education and its transformative potential. By considering the potential impact of study on habitus which ‘is not fixed or permanent, and can be changed under unexpected situations’ (Navarro, 2006: 16) affords insight into how students may be changed by their studies.

The findings of this study offer insights into how students were affected by their studies and the benefits they reported. Yet, the question still remained how students developed these attributes. Students report being changed, but the nature of these changes is unlikely to be captured in the simple punchy sentences that the University employs to describe GAs. Changes in capacities and dispositions due to postgraduate study are complex and messy processes, reflecting the worlds which our students inhabit. Often students will be unaware of these changes at the time of their studies and the benefits may not be immediately apparent, a view commonly expressed by this group of graduates, who discussed how they had been changed in ways they had not expected by their studies.

A key finding of this work is that by acting collaboratively in their studies, postgraduate students can become more competitive in their own workplace. To ensure a collaborative learning environment it is important that online educators are creative in programme design and in teaching approaches. Online educators need to ensure a safe learning environment is created where students are able to share and collaborate, for example working with peers on problematic and controversial topics, to facilitate the application of this new knowledge to the workplace. When discussing their experiences, participants
identified the opportunity to discuss, share experience, and learn from both academic staff and other students (who also bring their unique professional expertise) as key in leading to the development of an expanded worldview. The discussion of meaningful interactions occurring during online study permits a challenge to the commonly held view of online programmes as socially impoverished.

Developing online community and learning experiences that encourage interaction, present design challenges to educators because competition and hierarchy are hardwired throughout healthcare, in both education and practice. As undergraduates, health professionals are continuously assessed and ranked and not often offered the incentive to collaborate which is unfortunate and shortsighted given the team-based healthcare delivery common in modern healthcare. Online educators must be clear in their discussions with students and course documentation about the aims and benefits of programme design that promotes collaboration. Less mature learners often are unaware of the potential benefits of more collaborative forms of education and often focus predominantly on the mark they are awarded. If we are asking our postgraduate learners to study in new and unaccustomed ways it is incumbent upon us as educators to help them develop the necessary study skills to do so successfully. The time and effort expended by academic staff to undertake this preparatory work is often unacknowledged, with this lack of recognition of the academic expertise required to deliver high quality postgraduate teaching one of the central themes of this thesis. This theme is returned to and discussed further in paper three.

An important limitation of the study design that only became apparent as I read more widely around the work of Bourdieu and forms of capital was that the habitus or cultural capital that our participants arrived with at the start of their postgraduate studies was not ascertained, making claims about the development of such attributes problematic. This is particularly important in online PGT programmes where fees are high and sources of funding are scarce making access inequitable. Wakeling and Laurison, (2017) have suggested that postgraduate qualifications are now the new frontier of social mobility and further work should focus on this aspect of postgraduate study.

As the first piece of qualitative research that I have had published, this was a long and painful process. Given the under-researched nature of the field there were no established researchers to ask and there was a lot of trial and error, submitting the paper to other journals (twice) resulted in exceptionally helpful critiques allowing the editing that resulted in the paper’s final publication. While I still stand by the results published in this paper and the study design, my understanding of academic publishing is now such that I would not have included so many topics in one paper. The results of the study confirm that it is indeed a very complex area. The graduates I interviewed felt transformed by their studies, with all feeling that they had benefitted professionally from undertaking postgraduate study. Largely these changes they experienced were not in ways that they could have envisaged before undertaking their studies with the impact being far greater than they had anticipated. These findings further reinforce my concerns about claims that are made about graduate attributes and offer a more nuanced picture of the benefits of online postgraduate study.
3.2 Critique of paper two


The motivation to undertake this study largely came from my own experiences learning to teach online. I was initially very sceptical about the value of such education, having come from a background with over 20 years’ experience teaching face-to-face in higher education. However, I quickly discovered that I enjoyed the interaction with students from around the world and came to realise the potential of establishing collaborative relationships with students on the programme. I could not find much about this relationship formation in the literature and wanted to know if my own experiences were common to others. No information seemed to exist within the University of Edinburgh and most of the literature I found related to early adopters of technology talking about how they had developed programmes, or educational technologists considering how technology might work in education. Few appeared to have heeded the suggestion of Anderson, Varnhagen and Campbell, (1998) that training and support strategies should be aimed at the mainstream majority of online educators rather than the early adopters or those with special technical expertise. Very little was published from the perspective of online teachers (Baran et al., 2011). The view that online teaching was considered inferior in terms of social interaction was a common one, which I cannot claim to be surprised about as I had held similar views myself.

The paper adopts a phenomenographic methodology and involves interviews with ten educators who taught on the MSc Clinical Education programme. This was the whole of the programme team involved in teaching at the time of the interviews when I was employed as the programme co-ordinator and the first full-time member of academic staff to join the programme team.

Phenomenography has been defined as
“a research method for mapping the qualitatively different ways in which people experience, conceptualise, perceive, and understand various aspects of, and phenomena in, the world around them.” (Marton, 1986:31)

Suited to investigating complex social phenomena such as education (Säljö, 1996), I considered phenomenography a helpful methodology to better understand the complexity and little understood area of online PGT education, and the different ways online teaching was experienced in this group of staff. The basic premise of phenomenography is that there are a limited number of ways that a phenomenon can be experienced. It is this variation in ways of understanding that is of interest, and how these variations are structurally related to each other, described in what phenomenographic researchers term an outcome space. Phenomenography is best understood as offering a second order perspective, in that it concerns a person’s description of an experience (representation) as the means of accessing the individual’s understanding of the experience (their reality). This understanding is relational as the description offered to the researcher is the individual’s internal sense-making of their own experiences within the world they inhabit. Phenomenographic research
relies on interviews as the primary method of data collection as a means of accessing people’s conceptions. The contextual nature of interviews has led to criticisms of phenomenography in the literature (for example, see Mishler, 1991) for the lack of transparency in the relationship between representation and reality. While this criticism could be levelled at many research methodologies that rely on interviews as a method of data collection, I remained mindful of the suggestion by Hammersley (2003) that the potential pitfalls of undertaking research interviews need to be recognised, particularly during data analysis. I kept a research diary and detailed notes to record my thoughts after each interview and also during the data analysis phase, which was supported by conversations with colleagues.

More fundamental concerns have been expressed about phenomenographic research design (Säljö, 1996) in relation to the accepted practice of linking interview data explicitly to the object of the study (in this case conceptions of teaching online) and reporting these as results. In contrast, Johansson et al., (2006) claim it is essential to look at an individual’s perspective to identify meaning when exploring internal relationships and that it is necessary for the researcher to introduce and guide the interviewee around the topic of interest. As someone with an interest in the topic in question, my influence on the work cannot be ignored. While phenomenography accepts the non-dualistic engagement of the researcher with the participants I also discussed my findings widely, both with knowledgeable colleagues and those I interviewed, as ways of ensuring the trustworthiness of the findings.

I undertook the interviews and carried out the initial data analysis, with my co-author Daphne Loads contributing an academic development perspective. There was a gap of three years between the data collection and final analysis, mainly due to lack of any dedicated research time and the demands of running an expanding programme. I drafted the final submission, with input from Daphne. Her suggestion to consider an academic development frame to the data analysis proved to be apposite as all those interviewed were asked about their experiences of teaching about teaching. Programmes such as the MSc Clinical Education are a form of academic development that sit in medical or health faculties rather than academic development units.

Daphne’s suggestion to consider a growth narrative (O’Meara, Terosky & Neumann, 2008) in the analysis, rather than the more traditional constraint narrative proved to be very helpful in framing the work. The drive to value what is easily measured in higher education is particularly problematic when applied to online learning due largely to the amount of easily assessable data produced by virtual learning environments. Data such as time spent online, number of posts to discussion boards can be thought of, albeit simplistically, as proxy measures for quality. This is compounded by the income generating potential of online programmes due to uncritical perceptions that they are easily scalable. Both these misconceptions and their impact on online PGT are addressed in subsequent papers in this thesis (papers three and five) and in more detail in a more recent paper which I co-authored (Fawns et al., 2020). In paper two the emphasis of the study was on the educator’s articulations of their own professional experience and judgements, focusing on understanding the potential of teaching online in the development and growth of individual educators. In terms of academic development if we better understand what is being learned
(in this case becoming an online educator) we are better able to support learning (Neumann, 2006), putting learning and development at the centre of the academic role and highlighting the constantly evolving nature of academic work.

The arguments in paper two challenge the skills-deficit model common in academic development (Boud and Brew, 2013), widening out the focus and considering both teaching and academic development as complex social practices. Doing this allows us to see the problems associated with bundling up content to deliver courses that are often offered in a one-off, front-loaded format with little in the way of support or follow up. There is a tendency for online skills training to focus on competencies and technical skills rather than pedagogy. Uncritically moving face-to-face content online does not address the empowerment of online educators (Baran et al., 2011). A focus on technology and transferring resources online misses the opportunity to think more deeply about the possibilities of online teaching rather than the challenges. Paper two demonstrates how educators move beyond this focus on their own actions towards a focus on interaction with students as they become more experienced. Although developed independently, this has echoes of the work of Peter Kugel describing how academics learn to teach (1993). Kugel proposes a similar process where the focus of novice lecturers moves from internal to external as they become more experienced and confident. Taking a more critical view of online education offers insight into the potential of this form teaching for its own merits rather than merely comparing it to face-to-face teaching.

The results from paper two describe the transition to online educator undertaken by ten academics and in doing so describes their realisation that technology can afford the opportunity to develop new and rewarding ways of teaching. These results also counter the view that beginning to teaching online can adversely affect an educator’s identity (Copploa et al., 2002). Study participants described the process as challenging but rewarding, and useful in developing new skills. Thus, supporting the growth narrative in this group. This discrepancy to previously published work may be explained by the group in paper two choosing to teach online rather than it being something that had been imposed on them. Motivations to teach online and potential impact on educator identity is another underexplored area and worthy of further investigation. Paper two supports the suggestion of McShane (2004) that online education is democratising the educator and student roles through greater collaboration, to the benefit of both, potentially increasing interaction and discourse between teachers and students online. This is likely to be a contributory factor to the sense of reward described by this group of educators, as they develop and adopt a collaborative approach. These insights regarding the nature of interactions online between academic staff and postgraduate students led onto further work, specifically papers three, four, five and six.

Looking at the paper now, over two years since it was written, I can see how my understanding of educational research methodology has advanced. The neatness of the hierarchical relationships commonly described in phenomenographic results I now find troubling. The resultant outcome space described in the papers appears somewhat neat and ordered for such a messy and individual process. However, putting aside such methodological concerns I think in this instance phenomenography produced helpful insights into the process of learning to teach online that are useful to those developing programmes of staff training. The work has been shared with those in the institution who
have an interest in this work and with the Institute for Academic Development to inform subsequent developments.

It is difficult to draw any conclusions about the impact of this paper more generally as the journal it is published in, is a relatively new journal and does not publish any metrics. However, the paper has resulted in several conversations with interested colleagues and discussions with the Institute for Academic Development at the University of Edinburgh about more helpful ways to support the development of new online educators. The paper has been summarised as a Teaching Matters blog post which is accessed from the main University of Edinburgh website. The post was published on the 27th March 2020 and just over a week later has been accessed 86 times.

3.3 Critique of paper three


The paper has been allocated to the December 2020 edition of the journal and is currently accessible online only. It was made available online on the 30th March 2020 and to date has been accessed 130 times. The paper was accepted with minor revisions with one reviewer commenting ‘this is a great paper’.

The study arose from discussions with a group of PGT staff about the importance of developing more pedagogical research in online PGT programmes to enhance the theoretical foundation in this field. I was involved in another successful bid for PTAS funding, which allowed the appointment of Sinead O’Carroll, a PhD intern, to act as a research assistant to undertake the data collection. As a PhD candidate in psychiatry, Sinead was a natural interviewer and conducted insightful interviews with twenty-two programme directors (PD) of postgraduate programmes (online and on-campus) from around the University of Edinburgh. Interview transcripts were professionally transcribed and Sinead undertook the initial analysis with my support and I completed the process of data analysis and wrote the paper. I have to acknowledge the flash of inspiration from my colleague Dr Tim Fawns, that the themes should be conceptualised as circus acts.

This paper is central to the thesis in its suggestion that PGT programmes operate at the boundaries of academic and professional fields. Programme Directors (PDs) are employed as academic staff in academic institutions but operate in what can be considered an in-between space (Boud, 2006), between academic and the professions. This contrasts with more traditional academic roles which are often more clearly defined and better understood. While PDs relished the flexibility that the boundary spanning nature of the role afforded, the complexity and conflicting nature of both the role of PD, and PGT programmes more generally, is felt to be poorly understood. The notion of an in-between space is returned to in paper four where it is further considered in light of Guiterrez’s description of a third space (2008).
Those interviewed had very positive experiences of the role of PD, and all reported that the contact with students was the most enjoyable aspect of their work. Yet, this was tempered with the view that the PD role was ill-understood, not well regarded and considered to be inferior to research roles at a similar grade in the institution. PDs did not feel well supported or adequately trained to undertake the role, largely relying on the support of others in the same position. While this is a situation that is likely to resonate with most educators in higher education today there is very little discussion of this in the academic literature. By framing the training needs of educators to focus on the needs of PGT educators I hope to open up more debate in this area. I am presenting this work at the University of Edinburgh Learning and Teaching Conference in June 2020 and I hope to establish a new support group for PDs as a result of this work.

In its Strategy 2030 document, the University of Edinburgh states that multidisciplinary postgraduate education pathways will support flexible whole-life learning and this is a perceived area of strategic growth. Given that some of the expertise required to facilitate this growth resides within the existing group of PDs of PGT programmes, the onus is on us to organise ourselves into speaking with a coherent voice to help shape these developments. Given that, as described in paper three, the market in which PGT operates is complex, messy and contested these new proposed educational pathways are unlikely to be as straightforward and easily managed as perhaps the strategy developers may hope. Online postgraduate education is an area of great strategic and financial interest in most higher education institutions, but at the same time the market is increasingly crowded and competitive with newer private universities and large technology companies such as Google and LinkedIn expanding their educational offerings. Institutions like the University of Edinburgh that have a large offering of online programmes need to be clear and explicit about the added value of a University of Edinburgh degree in this increasingly competitive climate, particularly given that the University of Edinburgh has placed itself at the top of the fee scales for these kinds of programmes. This paper suggests that there is still work needed to articulate what the value is of the University’s PGT offering, as well as to support and develop the staff skills necessary to provide such education. If universities persist in seeing students as consumers they need to seriously consider the quality of their programmes, the staff training offered and what the overarching aim of taught postgraduate study is. The views expressed by the PDs interviewed in this study directly challenge this neoliberal view of students as consumers, positioning students as fellow professionals or peers.

My motivations to undertake the work in paper three came from my experiences leading an academic programme and my perceptions that this senior teaching role is not well understood or rewarded. I had felt that this was particularly so in online postgraduate programmes where much of the work occurs in ways that are less visible than in on-campus programmes. Teaching often occurs in the evenings (due to differences in students’ time zones), tutorials or supervision are often via Skype or other online media which require peace, but not much space, and so are often carried out at home. Similarly, programmes are delivered to people who are often thousands of miles away from the institution, often people who are in senior and responsible positions within their own organisations and who have very high expectations of their studies. I had expected to find a difference between online and on-campus PDs, but the results of this study did not suggest any discernible differences, suggesting that the fundamental facets of the post are the same, irrespective of
the mode of programme delivery. The finding that academic staff had similar experiences irrespective of whether they were leading an online or on-campus programme is a fascinating one and worthy of further investigation. Reports that teaching online can have negative effects on academic identity (Copploa et al., 2002, Maggio et al., 2018) have already been challenged by the results of paper two. Paper three supports the findings of paper two, suggesting that senior educators face similar challenges whether their programmes are delivered online or face-to-face. Frustrations reported by this group focused on the fact they are teachers, not the mode of delivery of the teaching they engaged in. Those interviewed were split 50:50 online: on-campus. Half those interviewed had come late to an academic career, and it may also be relevant that the mean age of those interviewed was 48. Most had considerable previous professional experience, often within the subject they now taught. This wealth of professional experience was considered helpful in giving PDs the confidence to undertake this diverse and challenging job successfully.

One of the paper reviewers suggested the business literature on internal start-ups might be a helpful way to conceptualise PGT programmes, given the entrepreneurial aspect of the PD role. Govindarajan and Trimble (2010) consider why internal innovations (such as PGT programmes) that they refer to as NewCo will inevitably run into conflict with the established business (the central university (CoreCo). Govindarajan and Trimble suggest that rather than developing in isolation, innovations should be managed internally by a group that consists not just of the innovators but also those from the main areas of the business. To date, this is not happening at the University of Edinburgh with PGT programmes still operating with a degree of isolation from campus based PGT programmes and other forms of taught programmes, and this has resulted in many of the concerns reported in this study. Pursuing a more integrated approach with other areas of university teaching is likely to be a fruitful way forward.

A more worrying suggestion from participants interviewed in this work, that is supported by other work that I am currently writing up, was that postgraduate students often do not appreciate the nature and the potential challenge of postgraduate study and the self-directed learning necessary at the start of their studies. This is an important area to investigate further as the potential reasons for students being unprepared or unwilling to undertake self-directed learning are likely to be complex and greater insight into students’ expectations is vital for the continuing success of postgraduate programmes. This is not a new problem and indeed, Bamber et al., (2017) noted that postgraduate students should be better prepared to undertake their studies and better informed about the nature and expectations of postgraduate education. Some programmes like the MSc in Clinical Education, offer introductory study skills courses to students prior to them commencing their studies. Unfortunately, this is not common practice and something that needs to be implemented more widely to ensure that new students are getting the support that they need and understand the requirements of postgraduate study from the outset.
3.4 Critique of paper four


The work was published online on the 27th March 2020 and to date has been access 167 times. It has also been the subject of two Teaching Matters blog posts. This work developed out of a student dissertation project. Most students come to the dissertation year with a very clear idea of the topic which they wish to investigate. However, a few students are not in clinical practice and struggle to identify suitable research projects. In this case, the student, Kelly Smith, wished to look at some aspect of online learning as she had found her studies to be much more valuable than she had anticipated when she had first enrolled. As her supervisor, we discussed potential topics and I suggested the online supervisory relationship as it was a topic that I had wanted to investigate for some time. Kelly agreed that it would be interesting to study the process that she was going through herself at the same time. I wrote and submitted the request for ethical approval to the Moray House School of Education and Sports Ethics Committee.

Kelly had been influenced by the paper by Schwartz and Holloway (2012) that described the relationship between masters students and their teachers as mutually beneficial and on the basis of this we decided to investigate what made a positive supervisory relationship. I approached five experienced online supervisors and asked them to identify a recent graduate with whom they felt they had established a good supervisory relationship. Kelly undertook the interviews and did the initial analysis that she submitted for the award of her own dissertation. She wished to write the work up but did not have any time to do so. I felt the dissertation would need a lot of work to get it ready to be published but had a conversation with the wider programme team and agreed that we would look at the work with a view to getting it published. I then reviewed the data and further developed the analysis and reworked it significantly for publication, refining the model and analysing it in relation to Gutiérrez’ (2008) third space, Wenger’s (1996) notion of duality, and Granovetter’s (1973) strong and weak ties, thus providing a firmer conceptualisation for the work. I wrote the final paper with a focus on the finding that the supervisory relationship could become over aligned (i.e. too close) as well as under aligned (too distant); this is a novel suggestion that builds on the work of Dysthe (2002) considering supervision as a partnership.

This paper is important to the overall coherence of the thesis in that it investigates relationships that develop online, in this instance the mutuality of the online supervisory relationship from the perspective of both educators and students. Academic staff come with academic expertise and students come with the professional insights that allow them to identify areas to research. They meet together in a third space in which the authority and expertise of both is recognised and welcomed. In online PGT programmes this is not an entirely academic space or an entirely professional one but somewhere between the two. Gutiérrez’ conceptualisation of a third space is a discursive construct, where dialogue between teachers and students occurs. She posits that more authentic and meaningful interactions can develop here, developing beyond what is more commonly understood as
academic knowledge. The work of Gutiérrez’ (2008) is also helpful in describing the potential of online postgraduate education in developing new understandings between areas that is further explored in paper six.

The finding that the supervisory relationship can sometimes be too positive is also worthy of further exploration, with the work of Granovetter (1973) offering some insight into why this might be the case. Granovetter suggests that we have strong ties with those with whom we work closely, for our students this is likely to be their clinical team. Once we cross out of this secure network and access another, in this instance the academic arena, we can be seen to be crossing a boundary and forming weak ties with a new network. Granovetter considers that weak ties are necessary for the generation of new insights and knowledge and it is precisely the act of moving between networks that allows the potential for sharing between these networks. If relationships become too cordial and comfortable, the tension inherent in weak ties is no longer present so reducing the potential benefits of the learning that occurs. Roxå et al., (2011) describe those who cross boundaries and share knowledge as they do so as brokers. In this way, students can be seen to be sharing their academic learning with their clinical colleagues (a process described more clearly in paper six). The relationship cannot become too comfortable or the generative tensions described by Wenger (1998) as duality will not exist. The Zone of Participatory Alignment describes the conditions required for two individuals to meet and develop the necessary relationship to allow the student to complete a dissertation. The relationship needs to be supportive but also to recognise that both parties come with their own knowledge, experience and needs.

I must have supervised well over 50 online masters dissertations over the years and supported the development of many new supervisors. I have never had any training for this and am constantly struck by the range of topics that students wish to investigate. I have supervised topics as diverse as ‘What are the lived experiences of new graduate nurses participating in a one-year transitional nursing programme? A systemic review’, ‘Teaching Speech-Language Pathology students to work with People with Aphasia: Clinical Educators Experiences’ and ‘Feedback: Influencing learning, ultrasound skill acquisition and confidence specifically in performing clinical abdominal ultrasound’. Some subjects are very clinical, others more educational but all make a difference to the student’s own practice. I cannot claim to be an expert in most of the topics that my students wish to investigate, but nevertheless it is my job to support their learning. When I first started supervising online dissertations, I worried about my lack of knowledge of many of the topics I was asked to supervise and I had many conversations with those I was supervising over the years. I find it intensely reassuring that one of the findings of this study is that supervisors and students meet as equals with each contributing their own expertise, which is an important consideration in the training of new supervisors. There is no need for supervisors to have detailed clinical expertise as the student comes with this. In fact, some distance from the research topic is helpful as it allows the supervisor to ask questions and seek clarifications that ensure the student becomes explicit in defining the nature of the problem they wish to address and why it is a problem worthy of investigation. These findings also reinforce the point that online learners are established professionals with knowledge and insight to draw on in their studies. Any online programme offered to this group of staff must take this into account in its design and delivery. With the majority of online PGT students motivated by
professional reasons, educators must make the links between professional practice and academic study explicit in programme design.

The findings in paper four clearly describe the success of these relationships with online supervision meetings seen as being helpful in concentratıng discussions. The often-precarious nature of internet communication ensured that conversations moved quickly to the dissertation and stayed focused on it. Nasiri and Mafakheri (2014) have suggested that the spatial and temporal distance between students and educators in online study can be problematic. However, the descriptions of positive supervisory relationships described in paper four does counter the view that online delivery can be a barrier to learning. It is not clear if the positive relationship formation relates more to the postgraduate nature of the student group as opposed to the mode of delivery. Certainly, both students and educators were very clear in their descriptions of the relationship as a professional one. The work of O’Shea et al., (2015) focused on the experiences of online learning in Australia, suggest that online education is not just about the mode of delivery of teaching, it is also asking much more fundamental questions of teachers and academic institutions about what is valuable and important in education. Technology is disrupting the ways in which teaching in higher education is delivered but also challenging teachers to think about what is important to them and why. Similarly, online delivery is opening up higher education to groups such as the working professionals discussed here. These professionals will come with their own experiences and motivations that need to be more explicitly considered by academic institutions. Studies that focus on the differences between online and face-to-face delivery are missing the point, such comparisons are of limited value. Questions relating to what works and why, such as the approach described in paper four will yield more informative results that allow the pedagogical underpinning of online education to advance.

Paper four highlights the potential of online programmes to develop fruitful supervisory relationships. All those interviewed found online communication to be helpful but it must be recognised that the students may not have had any other supervisory experiences to compare this with. The educators do generally have supervisory experience to draw on and this was helpful in allowing supervisors to create the tone for a constructive supervisory relationship from the outset. This is a small study and it only considered positive supervisory relationships. However, the paper explores several interesting theoretical ideas in relation to online postgraduate study, with the notions of a third space and weak ties both important in conceptualising the value of the online PGT mode of study.
3.5 Critique of paper five


This work is a commentary and has been included in the thesis for two reasons. Firstly it was an opportunity to share more widely the approach to teaching and supporting learners online that had evolved on my programme. Secondly it offered the opportunity to challenge some of the established orthodoxies about online education that we hear, but which do not hold true to our experience.

“We challenge the perception that the experiences of online learners are limited by distance or technology. Rather, we argue, the limiting factors are time, policy, infrastructure and pedagogy.” p293.

This paper was very much a team approach, firmly reflecting the distributed approach to programme management that I have implemented as the programme has grown and the numbers of academic staff increased. The paper emerged from a conversation between Dr Tim Fawns, Dr Derek Jones and myself about the impact on our work of an increasing drive to standardisation and expansion within the institution. Our concerns focussed on the commonly held idea that online education could easily be scaled up and that more staff were not needed to facilitate this process.

“This kind of online learning cannot be scaled up without significant additional cost because whilst technology can replicate resources and provide rich (or poor) possibilities for communication, it cannot solve the fundamental requirement of skilled staff spending time on, and with, each student.” p296

Tim drafted the initial paper and I edited it to align it more clearly to our work on online postgraduate education. Postdigital Science and Education is a relatively new journal and as such its decision making is much faster than more established publications. Importantly the journal’s postdigital premise, that one cannot separate the digital from the non-digital, is one that sits well with the programme ethos.

The paper has been exceptionally well received, with 5,400 downloads and an altmetric score of 131. It is the third most read paper in the publication. It has been shared 161 times on Twitter by 120 different people. Example comments posted online include:

"I absolutely agree that “online is a place where meaningful relationships, based on trust, can develop”. This is a great read, and challenges many viewpoints around online learning”. (Professor Jo-Anne Murray, Assistant Vice Principal, University of Glasgow)

"Surfacing the challenges & assumptions in online courses - it can be a richly rewarding, embodied exp for teachers and learners. Thanks for a very timely, useful and interesting paper and a bit of Bjork to boot" (Clare Thomson, Digital Design Consultant, University of Belfast)
The paper has influenced local practice and perspectives at my own institution, having been cited in at least two Advance HE recognition applications (1 FHEA and 1 SFHEA). It was also the basis of an invitation by Springer to (successfully) propose an edited volume, of which I am one of the editors: Online Postgraduate Education in a Postdigital World - Beyond Technology. I am also writing a chapter in this book with Professor Sarah Hayes on a theme closely aligned with my work for this PhD, namely, the need to recognise the work and value of teachers in online postgraduate education.

This commentary allowed us to articulate what we feel to be important factors in running a successful online postgraduate programme, building on the findings from paper one, namely that successful online postgraduate education requires more critical conceptions of teaching both in terms of programme planning and delivery. In addition, postgraduate students are often very clear about their learning needs. The paper is also important because it challenges the commonly held view that online learning ‘happens’ online in some disembodied way, when it is situated in the physical environments that students inhabit. In this way, the environment is of the students’ choosing, not the educators. This is likely to be advantageous to the students’ learning but does also hint at the ‘always on’ nature of online learning and some of the challenges this presents to educators (as discussed in papers three and four).

The push at the University of Edinburgh and other academic institutions towards standardised procedures and infrastructure that results in relatively inflexible systems, is a challenge to online educators and the flexible approaches to learning that their students require resulting in a more fragmented pattern of working common to many online educators. There is a shift from delivering what might be considered formal teaching to less formal approaches common in online learning (McWilliams, 2008), that are much less visible and more difficult to quantify. This requires a degree of flexibility that does take time and skill to develop. Teaching based on dialogue needs to be delivered by educators who know what they are doing and have the confidence and ability to judge when to relinquish control of sessions to best meet the learning needs of particular groups of students. This links back to the findings of paper two and the recommendations made for providing academic development support to those unfamiliar with online teaching.

The growth in the numbers of online postgraduate students is testing much of the technical and administrative structures of the University and those of us who lead online programmes find ourselves in almost daily conflict in trying to balance the needs of our students within the academic frameworks that our programmes sit. Much of this tension is encapsulated in this Teaching Matters blog that I co-wrote with colleagues: https://www.teaching-matters-blog.ed.ac.uk/the-octopus-in-the-string-bag-why-regulations-based-on-undergraduate-on-campus-students-dont-work-for-online-pgt-in-healthcare/. This tension can be better understood if one considers the situation of postgraduate programmes at the boundaries of academic and professional worlds (as discussed in paper three). This conceptualisation allows one to more clearly see the potential impact of postgraduate study and the obligation on educators to ensure they are credible and understand the responsibilities upon them. Producing this commentary allowed us to draw on the work we had undertaken to date and also introduce topics that we wished to explore further and led directly to paper six plus several other on-going pieces of work.
3.6 Critique of paper six


This paper was made available online on the 5th February 2020 and in that time has been accessed over 1,000 times, and cited twice. As such, it is a little early to fully consider the impact of the paper externally. However, the work was presented at a University of Edinburgh online teachers’ network at the end of 2019 that was over-subscribed with a waiting list. The paper has now been circulated to over 400 staff who subscribe to the list and has resulted in two requests to talk to other groups of staff within the institution and an invitation to speak at the Association for the Study of Medical Education conference in autumn 2020. A Programme Director of another MSc Clinical Education in the UK contacted me to say

“I really enjoyed reading your paper. Having made a bit of a transition myself (just finished teaching my first DL [distance learning] module), it chimed on many levels…”

· The tendency in the sector to view online postgraduate education as a market-led ‘solution’ rather than offering authentic opportunities for learning and teaching
· Online postgraduate education being ‘an area where traditional boundaries between academic staff and students are collapsing…’
· The subversive challenge it presents to all those pyramid models (Miller, etc) – ie ‘expertise’ having ‘horizontal as well as vertical aspects”

Paper six draws on two individual studies, one with online postgraduate students as the participants and the other investigating the views of staff who teach postgraduate healthcare students online. In the paper, I draw the results together and propose a pedagogical model of online postgraduate education, shown below in figure four. The diagram represents the activity system of a student.
Activity theory investigates the wider social and material aspects of learning as well as the more individual influences. Activity theory is an evolving research area in the social sciences, most commonly associated with Yrjö Engeström and colleagues, (Engeström et al. 1991) but originates in 1920’s Russia in the work of Vygotsky, Leont’ev and Luria. Engeström devised a triangular representation of activity to demonstrate how many differing elements can potentially influence any given activity. Figure four builds on Engström’s third generation of activity theory which looks at interactions between activity systems. Each system is represented by a triangle, system one is the clinical environment where the student is employed and system three is the academic environment where the educator is employed. System two is the academic programme where the students and educators come together. The dotted circular line represents the activity system of a postgraduate student as they pass back and forward between the academic and clinical environments. A similar circle could be drawn around systems two and three to denote the activity system of a member of academic staff.

Each activity system has a subject (in this case a student) and a desired outcome, in the case of a student this is likely to be an academic award. For the student to achieve this outcome they have to produce certain objects (such as assignments) that are mediated by objects (such as virtual learning environments or reading lists). Each activity system operates within it a wider community or organisation that has its own rules or conventions.

Figure four helps to show the horizontal nature of learning apparent in online postgraduate study. Both educators and students can be seen to move between their established professional communities and meet in the activity system of the programme that can be conceived of as a third space. While this figure is represented in 2D this is conceived of as a
dynamic and ongoing process with both groups continually moving in and out of their relative systems. While this is not a physical embodied movement, it does help to illustrate the potential of online postgraduate study to share understanding and knowledge between professional groups. Engeström et al., (1999) have made a distinction between internal and external activities and postgraduate study might be seen as a way that some of the internal conundrums of clinical educators might be externalised, with a resultant impact on practice. Online postgraduate study, based on sharing and discussion, provides the opportunity to consider novel creative solutions to existing professional problems. For example, if an assignment is designed to link to professional practice it allows the student to propose a solution and get feedback on this approach before putting it into practice.

Paper six pulls all the previous papers in the thesis together, building on the findings of papers one to five, to develop a coherent pedagogical model that offers a theorised account of how students’ learning moves horizontally within and across academic and clinical settings in a recursive manner. The themes identified in paper six: crossing boundaries, ripple effect, eroding structures and hierarchies and expansion describe the mechanisms by which online postgraduate students learn as a result of their studies but also the wider impact of these studies. Healthcare professionals do not work in isolation and figure four provides a representation of how knowledge can move between settings. This model assumes the presence of two factors in this group of online students: that they are combining employment and study and that they are studying part time over a period of at least three years. The first factor is important as it is the contemporaneous nature of clinical work and study that allows the continual movement of students between the academic and clinical environments. Secondly the longevity of postgraduate study, allows for the development of the meaningful relationships that are described here.

The paper evolved naturally from the previous studies already discussed in this thesis. I was undertaking two pieces of research in tandem and the analysis of both was proving to be strikingly similar despite the fact that one group of participants was academic staff and the other postgraduate students. In the first study focused on staff participants, the staff members were academic staff who taught PGT students with a healthcare background online. Ethical approval was granted from the Moray House School of Education and Sports Ethics Committee. It is difficult to estimate the total numbers of staff teaching this group of students online is, as many programmes rely on a number of external tutors. Directors of Teaching in schools that were likely to have postgraduate healthcare students studying online agreed to send an email invitation to their individual contact lists. Thirteen staff agreed to be interviewed. To test the preliminary analysis of the staff experiences more widely I emailed members of a Special Interest Group in Postgraduate Education of the Association for the Study of Medical Education (current membership 35). Several colleagues expressed interest but for technical reasons only two were able to be interviewed within the timeframe of the study (one colleague from Glasgow and one from Newcastle). The interviews were undertaken by Sinead O’Carroll as I had secured some additional internal funding to extend her research contract. The interview questions were informed by the results of paper one, where graduates were asked about the impact of their online postgraduate studies. The themes discussed in paper 1: academic voice, infectious curiosity and expanding worldview were used as the starting point for the interviews with the academic staff in this study. As previously discussed in the critique of paper 1, I was unclear
what it was in the programme approach to teaching that was leading to the transformative learning that graduates were describing. Some of the motivation to undertake paper 6 was to explore the thoughts of other experienced online educators for their perspectives on the topic.

The second study focused on student conceptions of teaching, had been ongoing for two years and was focused on the course Principles of Teaching and Learning that I teach in the first year of the MSc Clinical Education programme. It is the first course of the first year and in it I ask students to complete a formative assignment to describe their philosophy of teaching. This is a short (500 words) piece of work encouraging students to really think about what is important to them in their own teaching practice. The research study involved asking students to reflect on this piece of writing at the end of the first year of their studies with the intention of encouraging students to articulate their conceptions of teaching. The first set of interviews, at the end of the academic year 2017/18 were undertaken by myself, Derek Jones and Tim Fawns (11 interviews). In 2018/19 the interviews were undertaken by Katey Warren, another PhD intern (8 interviews). I was analysing the transcripts from Sinead’s interviews at same time that Katey was undertaking the second round of interviews. Despite the differences in the backgrounds of those being interviewed (staff and students) and the different topics (graduate attribute development and conceptions of teaching, respectively) I was struck by the major similarities between both datasets and so combined them to create paper six. The strength of the paper is that it gives a more comprehensive picture of online learning by considering the experiences of both educators and students. Reviewer one stated

‘the case study is conducted and described superbly and I accept the paper with minor revisions’

This work has involved the participation of students currently enrolled on a masters programme in clinical education, as such they may be considered an atypical student group, given their interest in education and motivations to undertake postgraduate study while working. Nonetheless some interesting insights are described that will have relevance to those teaching other postgraduate professionals online. Students offered helpful insights into what they found valuable in their learning, specifically content directly applicable to the clinical environment and the opportunity to share and discuss their experiences with others.

Teaching needs to be clearly related to professional practice and this is particularly important in assignment design. Therefore, academic staff need to have a good understanding of the professional context and the learning needs of their students. The group interviewed in this paper (in common with paper three) contained many individuals who had come late to an academic career, which raised some questions about how best to train and support the development of this group of academic staff. Several online educators in the institution are knowledgeable about effective online teaching, but currently there is no mechanism for sharing and growing this expertise. The interviews undertaken with colleagues from the Universities of Glasgow and Newcastle suggest that the situation is similar in both of these institutions where the pressure to develop online postgraduate degrees is also apparent. This is redolent of the finding of paper three that newer innovations such as online PGT programmes need to be integrated as part of University core
business to prevent many of the challenges reported by educators in this study and paper three. To date this has not happened at the University of Edinburgh but I hope that my work will add impetus to supporting new developments in the ways online PGT programmes are conceptualised and supported.

3.7 Summary
In summary, the six papers reported in the findings section can be seen to build a coherent picture of online postgraduate education in healthcare and are supported by the pedagogical model proposed in paper six. The main findings from each paper are as follows:

Paper one, online students were utilising their learning with direct impact on their workplaces;

Paper two, staff found the process of becoming an online educator challenging but rewarding and with experience came to realise the potential for interaction that online study could offer;

Paper three clearly situated online postgraduate study at the boundaries of academic and professional work and described some of the challenges for those leading these programmes;

Paper four considers the relationships that develop during online dissertation supervision that are mutually rewarding, but warns that care must be taken to ensure that the interactions do not become too cordial as this can lead to a loss of some of the generative tension required to produce critical work;

Paper five critiques the notions that online postgraduate education is easily scalable and is social impoverished;

Paper six draws on the experiences of both staff and students to describe online postgraduate education as a horizontal recursive process. The learning does not just reside with the students enrolled on these academic programmes but has expansive potential to can spread amongst the student’s wider professional networks with potential impact in the clinical environment.
4. Discussion

The six papers discussed in the previous chapters demonstrate an evolving understanding of the relationships that develop in online postgraduate programmes and starts to untangle why it is that these programmes can have such profound effects on those who choose to undertake them. Positive changes are experienced not only by students undertaking these programmes but also by the educators who teach and lead such programmes. A consideration of the relationships and interactions that develop online allows the impact of these programmes to be seen more clearly to be about the human interactions that are facilitated by technology rather than the online mode of delivery. A postdigital sensibility allows the focus of investigation to move away from technology to a consideration of pedagogy with the suggested model described in paper six. While each paper stands alone and is designed to answer a specific question, they build on each other, with each one informing subsequent work and allowing the proposed pedagogical model to be conceptualised. Proposing this model would not have been possible without understanding the impact of postgraduate online study to graduates (paper one), the impact of teaching online PGT programmes on staff (papers two, three and six) and the relationships that develop online (papers two, three, four and five).

As stated in the introduction, PGT programmes are under-researched and not well-understood outside of the small groups of academic staff involved in their organisation and teaching. The academic potential of such programmes is not well recognised, with a more common and narrow focus on their income generating potential prevalent. As the MSc Clinical Education programme grew, two things were emphasised to me time and time again. Firstly, the impact that students reported their studies were having in the clinical workplace. Secondly, as I recruited more staff to the team, each one remarked how enjoyable they found the work and how surprised they were about the quality of teaching interactions that occurred online. This led to a few exploratory pieces of work that have not yet been published, but also gave me the confidence to go further and question more aspects of my practice. I will now go on to consider the impact of the work, firstly within the institution, then more widely and finally the impact on my own development.

The specific impact of each paper has been documented in previous sections and all of the papers are creating significant interest internationally. One problem in dissemination is the lack of a key journal focused on online postgraduate provision, with the subject matter tending to fall between different established fields. The six papers discussed here have been published in journals in the fields of health education, higher education, academic development and critical pedagogy. At the outset I thought that medical education journals would be a good fit for my work, but it is a challenge to get qualitative research published in many medical education journals with most having a strict 3,000-word limit. Each paper found a home eventually and there is some additional value in these papers having found a range of different audiences. There is clearly interest in this body of work (and other work by the team) as evidenced by the book request from Springer. The call for chapters was well received with an excellent mix of international contributors. The book will allow me to build and expand on the work reported here and so access a wider audience. It has also led to new connections, networks and potential future collaborators for further studies.
4.1 Impact within the University of Edinburgh

My questions about PGT education have led to a programme of research and the development of a nascent research group within online postgraduate healthcare education. Thinking critically about this form of education is new within the institution and is creating a great deal of interest. My team has recently run a forum for the online educator’s group within the university sharing the pedagogical model from paper six. This event, plus regular contributions to sharing good practice days, learning and teaching conferences, study days, University-wide blogs and other fora demonstrates our commitment to sharing this work.

This work has also encouraged other postgraduate teams to consider a more critical approach to their own programme delivery and I am often approached for advice and support. However, I see the main benefit of this work as being the influence that it has on the confidence of online educators in relation to the value of what they are doing. This body of work, showing the potential impact of online PGT programmes has been key in developing a coherent voice for this group of educators and lobbying for greater recognition.

The total numbers of postgraduate students at the University of Edinburgh (taught and research) is dwarfed by the numbers of undergraduate students, but the numbers of PGT students is roughly double that of PGR students according to the University of Edinburgh 2017/18 annual report (University of Edinburgh 2019b). The same report lists the numbers of professorial appointments in the same academic year. Of a total of 64 appointments only two related to education (with both based in the School of Education). This disparity suggests there is still a way to go to achieve equity of esteem between researchers and educators within the institution, and this can result in a feeling amongst teachers that what they are doing is in some way second rate.

4.2 Impact outside of the institution

My team and I are also asked to talk about establishing educational research groups by other programme teams and we are currently working with NHS Lothian staff (some of whom are graduates of the programme) to develop an educational research programme for clinical training fellows to facilitate greater dissemination of the work they currently undertake. Similarly, educational initiatives have been developed and run in Hong Kong, India and Poland as a result of relationships we have built with students from the MSc Clinical Education. These initiatives are built on insights generated by this body of research and willingness to share experiences of the processes involved (both good and not so good).

I was invited to establish a Special Interest Group in Postgraduate Education by the Association for the Study of Medical Education (ASME). The research discussed here has generated considerable interest in this group and I am leading on the development of a proposal for a multi-centre study to further investigate the model proposed in paper six.

The work has been well received when disseminated at conferences and study days, as it starts to identify what is valuable in online postgraduate educational teaching and potential impact.
4.3 Contribution to advancing knowledge in the field

The findings reported here begin to build a theoretical base on which online postgraduate educators can develop their practice. The findings also hint at why online PGT programmes are often overlooked by the wider higher education community, due to the programme being situated at the academic boundaries where much of the impact of teaching is dispersed and distributed into the professional workplace of students. The current narrow, instrumental focus within higher education on generic concepts such as graduate attributes is at odds with the messy, ill-defined and organic mode of education I’ve described in the six papers. However, this intricacy and complexity within online PGT programmes is the value of such programmes and key to their success. Unfortunately, online postgraduate programmes are still largely considered only in terms of their income generating potential (Fawns et al 2019). In paper three, the particular vulnerability of online postgraduate programmes to the marketisation of higher education was considered. This emphasis on scalability of student numbers (critiqued in paper five) misses important determinates of quality in the pedagogical interactions and community building apparent in some programmes: there is a vast difference between these instrumental views of online PGT programmes and high quality online PGT education. If success is measured solely in terms of student numbers and income generated, then programmes built on community and sharing, face a very uncertain future. If this focus on quality is not maintained nor recognised more widely by senior decision-makers then the results of such programmes are likely to be less impressive and thus less attractive to students. The potential of online postgraduate study to develop people who are able to move between and successfully integrate into complex systems, networks and relations should not be under-estimated. The factors that I consider important in the transformational nature of online postgraduate study are further explored under the following headings of interaction, authenticity and phronesis.

4.4 Interaction

The data collected for paper one provides persuasive evidence that students can be transformed through participation in some online programmes. Kember and Leung (2005) found that part-time postgraduate students on applied professional programmes developed attributes more quickly than full-time students and suggest that this is because they generally interact more effectively – as fellow professionals – with programme staff. Burch and Nagy (2007) suggest that metacognitive skills are fostered by meaningful interaction with tutors, and Nicol (2010) posits that the nexus between experience and education in postgraduate taught programmes nurtures the metacognitive skills which underpin the development of graduate attributes. Thus, the impact of online postgraduate study can be linked to the interactions that online teaching can facilitate. The professional nature of postgraduate students and the expertise they bring to their studies allows for the horizontal nature of learning described in paper six.

Academic staff interviewed in papers two, three, four and six all described a very democratic approach to their teaching, firmly rejecting more traditional metaphors of teaching as either transmission or transfer of learning (Hager and Hodkinson, 2009). Instead they described their educational approach as more discursive and exploratory. Rogoff’s (1995) conceptualisation of development taking place across ‘three planes of analysis
corresponding to personal, interpersonal and community processes’ (p. 139) offers a further salient insight into the educational process. Rogoff described the developmental processes corresponding with three planes of analysis as: apprenticeship, guided participation and participatory appropriation. The third process, participatory appropriation is particularly useful in exploring online postgraduate learning, specifically the importance of engagement, and is described as:

... the process by which individuals transform their understanding of and responsibility for activities through their own participation.... The basic idea of appropriation is that, through participation, people change and, in the process, become prepared to engage in subsequent similar activities. By engaging in an activity, participating in its meaning, people necessarily make ongoing contributions (whether in concrete actions or in stretching to understand the actions and ideas of others). Hence, participation is itself the process of appropriation. (p. 148)

Since participants in the programmes are established professionals in their respective fields (a requirement for admission) it seems reasonable to suggest that their experience of apprenticeship would be, at most, fleeting and that they would quickly move through guided participation to participatory appropriation. However, this cannot be assumed for all learners and with some requiring more support to develop the necessary study skills at the commencement of their studies than others. The skill of online educators is creating programmes of education where those learners can be identified and supported. Key here is that educators recognise the need to design material that facilitates this participation in what Gutiérrez’ defined as a third space that area where educators and students can discuss topics of mutual interest outside of what might be considered as traditional academic interactions. Planning for, and facilitating, this interaction is not well understood or discussed in current online teaching design. This is unfortunate as I feel it is the key to the success of any online programme for professional groups. Teachers must be visible and credible, but they must also have enough insight into pedagogical design to understand how to design education that encourages active engagement and participation for a diverse range of learners. More work is needed to better communicate the value of highly engaged and relational online learning to a wider audience.

4.5 Authenticity

Another overarching theme to emerge from these studies is that in online PGT programmes, learning is an organic process which results from learner’s active engagement in the learning process. This is not a standardised process given the diversity within this student group. As well as flexible design, educators have to ensure sufficient authenticity in programme design and teaching to build a learning environment that is more conducive to applying the learning outcomes to real-world contexts (Herrington et al., 2014). An implicit characteristic required by educators in an authentic learning environment is described by Herrington et al., (2014, p. 404) as ‘access to expert performances and the modelling of processes.’ These characteristics can be described in the data of several of the papers discussed here. Several graduates interviewed in paper one described how they learned directly from the role-modelling of good practice (in the execution of online tutorials, for instance) by programme staff, and the students in paper six discuss seeing academic staff as mentors.
Examining practices common to online postgraduate programmes highlight that other central requirements for authentic learning are frequently accommodated in the teaching methods used. These are: multiple roles and perspectives; collaborative construction of knowledge; reflection; articulation (of student ideas); coaching and scaffolding (which enhance collaborative learning); and authentic assessment. The staff who are running online PGT programmes need to be experienced and resourceful teachers. They need to be comfortable with a democratic and flexible approach to education allowing the necessary pedagogical space (Su, 2014) for students to reflect, discuss and learn from each other. There is much to be learned here about the value of experienced professionals’ involvement in education.

4.6 Phronesis
The practical wisdom exhibited by professionals who understand what the right thing to do is, in certain situations, was described by Aristotle as phronesis. As with all areas of education, some of those educators designing and teaching online PGT programmes could be considered to be rich in practical wisdom. They have professional expertise and academic insight, and utilise both in the planning and delivery of their programmes to disseminate this approach. In this way, the educators interviewed for the studies discussed here have evolved their practice to best deliver the educational experience they judge most helpful to their students. This might be seen as somewhat paternalistic but as discussed in papers three and six, online educators report being in constant dialogue with their students and thus are well placed to understand their specific needs. Derrida’s (2000) work on hospitality is instructive here. Striving to work towards an ethic of hospitality is helpful in reminding us that educators must be responsive to their students and must factor into course design and teaching approaches the ability to be open to new possibilities as they arise. Online postgraduate students will have their own ways of doing things and we should not ask them to surrender the same cultures and practices except where necessary and instead allow these aspects of “strangeness” to shape the learning space. There are challenges to this, but having the ethic of hospitality as an underpinning principle ensures respect for all students but also a default position of allowing space for them to shape our learning environment through their background, culture, perspective and experience. It is important to remain mindful of the learning cultures that operate within programmes and how they might include or exclude participation, and how they might allow our assumptions about teaching and learning to be questioned and overturned. Educators have a responsibility to design and teach an aligned programme of study but there is another responsibility that is key in online postgraduate education, which is the flexibility to be responsive to students’ needs. The juggling and clairvoyant abilities referred to in paper three.

We live in an increasingly risk averse and regulated society and education and healthcare are sectors where these pressures are acute. Still there is a need for professionals who can think in creative ways and apply knowledge in multiple settings and deal successfully with new and unique situations given the rapid pace of change in all sectors of modern society. Online PGT study allows professionals time to widen their gaze and think outside of their own particular professional silos, to be exposed to new and different ways of thinking. This process is enhanced by the multidisciplinary nature of the student body, in healthcare education this means students come with their own particular professional cultures and practices and different ways of looking at the world. This, coupled with the presence of
educators who can plan programmes of teaching that encourage critical thinking and a questioning mentality allow for students not just to be exposed to new ways of thinking but also to hear about different ways of working.

Students that enrol on the MSc Clinical Education are involved in teaching in the clinical environment. They may be teaching students, patients or fellow professionals but they are all actively involved in teaching. This means that any change made to their own teaching due to participation in the programme can have a profound impact and cascade down to those they teach. The phronesis role modelled by some online educators can therefore be seen to have the potential to influence those far beyond the immediate sphere of those enrolled on the programme. The desire to do the right thing, the ability to improvise, to be empathic and perceptive and the ability to make good decisions based on experience, described by Schwartz and Sharpe (2011) in their exploration of practical wisdom, can easily be understood to be key attributes of any educator. If every student enrolled on online postgraduate programmes aspired to these attributes and every online educator embraced this approach the impact on professional practice could be profound.

These ideas link very closely to those expressed by John Dewey nearly a hundred years ago. Dewey regarded education as based on the two fundamental principles of interaction and continuity, which together form the basis of all experience. Education based on experience must be social and democratic to get a sense of individual students and their needs (Dewey, 1936). Dewey also discussed the importance of educators looking beyond the facades students may employ, a timely reminder to online educators that while their students are often exceptionally senior in their own fields they generally are novice online postgraduate learners and require support. Educators require sufficient credibility and authority to deal successfully with some of the challenges and egos that some learners bring to the online learning environment. However, Dewey (1936) reminds us that teachers should only exert control on behalf of the interests of the group, not as an exhibition of personal power, an egalitarian approach likely to be familiar to many online educators.

Learning that can transcend established and traditional boundaries and allow the coming together of professionals from differing arenas to work together in constructive ways, is one of the key factors in the success of some of the University of Edinburgh’s online postgraduate provision. Further developments in the sector should place this focus on professional interaction firmly at centre of any planned developments. Phronesis, or practical wisdom, can be enhanced when professionals take time away from the workplace to think about important and relevant issues, with a framework to inform this thinking and support from insightful educators. This is the real impact of online postgraduate study, not the money it generates for institutions.

5. Issues of quality

Lincoln and Guba (1985) suggest that the quality of qualitative research should be judged by its perceived trustworthiness, going on to state that such trustworthiness should be based on four criteria; credibility, transferability, dependability and confirmability. The work presented here can be mapped onto these criteria in the following ways:
Credibility (confidence in the findings veracity).

This work was undertaken over many years and the prolonged engagement of the researcher, along with their persistent observation of the topic under investigation for a period of over ten years illustrates credibility. The work has been triangulated, with results discussed with peers, students and graduates. Negative cases have been investigated with paper four offering a good illustration of this.

Transferability (the applicability of the findings to other contexts).

The context of the work is clearly described throughout the thesis and detailed in each paper. Sufficient thick description is offered to allow the reader to make links to other areas. The work concerns online postgraduate study in the health professions but clear lessons are apparent to the postgraduate education of other professional groups.

Dependability (the consistency and repeatability of the work).

While this thesis is entirely my work, it is the result of much conversation and discussion with others. Preliminary results have been shared and considered, giving confidence in the dependability of the findings. Similarly, that all six papers have been subject to peer review and published is suggestive of the sectors acceptance of the work.

Confirmability (neutrality and freedom from bias in the work).

Similar to issues of dependability the author has made every effort to be transparent in the production of this work. Research diaries were kept for each paper, triangulation has been used where appropriate and the thesis offers clear evidence of reflexivity.
6. Conclusion

Postgraduate degrees are increasingly seen as a means of career advancement in the professions, with an increasing number of these graduate academic programmes offered online, allowing individuals to access education from anywhere in the world whilst continuing in gainful employment. Why should these programmes be of interest to anyone other than those considering enrolling on such programmes, or those involved in teaching them? Certainly, in healthcare, the wider medical and clinical education communities should be interested as there is a suggestion that those graduating from such postgraduate programmes in health professions education are increasingly seen as the educational leaders of the future (Tekian and Harris, 2012). I know from my own work (Aitken et al., 2019) that graduates identify ways in which their online studies have impacted on their professional and clinical roles; for example, becoming recognised as the educational expert in their own areas or by demonstrating an increased confidence to engage in educational debate. Graduates talked of experiencing a ‘flattened hierarchy’ on completion of their studies and of a confidence that resulted from developing academic and educational language to use within their clinical and educational work.

This thesis discussed why online postgraduate students are different to ‘typical’ university students, why they have different needs and requirements, and why the standardised, instrumental approaches prevalent in higher education today are problematic for online postgraduate students. It also considers the needs of academic staff, both for development and support, and also greater recognition for what is demanding and challenging work. Primarily it is a call for a wider recognition of online postgraduate study and its impact both on individual students and those within their working spheres. The potential of the learning from online PGT programmes, based on the discursive approach discussed here, to extend beyond the boundaries of individual programmes to professional practice in clear.

Conceptualising online postgraduate programmes as somewhere that can enable the development of communities of learners, is as important as seeing programmes as a space where students are taught and learn. The learning potential can be seen to be vast and offer an important contribution to most universities stated aim of being for social good. The pedagogical value of online taught postgraduate study has been largely overlooked to date and the six papers described here offer an overview both of the pedagogical value and the untapped potential of such study.
7. References (not cited in individual papers).


Appendix 1 - Publications

Publications relating to this research:

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<tr>
<th>Number</th>
<th>Authors</th>
<th>Title</th>
<th>Publisher/Journal</th>
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<tr>
<td>Paper One</td>
<td>Aitken, G., Jones, D., Fawns, T., Sutherland, D., and Henderson, S. (2019)</td>
<td>Using Bourdieu to explore graduate attributes in two online Master’s programmes</td>
<td>Advances in Health Sciences Education 24, 3, 559-576</td>
</tr>
<tr>
<td>Paper Six</td>
<td>Aitken, G.</td>
<td>A postdigital exploration of online postgraduate learning in healthcare professionals: a horizontal conception</td>
<td>Postdigital Science and Education</td>
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Included published work

The following pages contain copies of the publications (reprinted with the publishers’ permission) that are relevant to this thesis.
Using Bourdieu to explore graduate attributes in two online Master’s programmes

Gillian Aitken1 · Derek Jones1 · Tim Fawns1 · Douglas Sutherland1 · Sarah Henderson1

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Abstract
Within the expansion of postgraduate educational qualifications for health professionals, graduate attributes have become important markers of outcomes and value. However, it is not clear how or when graduate attributes develop, or how they are applied in professional practice after graduation. We interviewed 17 graduates from two online Master’s programmes to explore their perceptions of how postgraduate study had influenced their practice and professional identity. Our thematic analysis produced three main themes (academic voice, infectious curiosity, and expanding worldview) which reflected changes in the participants’ confidence, attitude, perspective, and agency across professional and academic settings. We then conducted a secondary phase of analysis using Bourdieu’s concepts of ‘field’, ‘capital’, and ‘habitus’. While graduate attributes have been conceptualised as the context-independent acquisition of traits that can be employed by individuals, Bourdieu’s framework highlights their relational qualities: they are caught up in the cultural history and context of the student/professional, the reputation of the awarding institution, and the graduate’s location within a network of professional peers.

Keywords Online · Postgraduate · Bourdieu · Graduate attributes

Introduction
Taught postgraduate (PGT) degrees are increasingly seen by clinicians as a way of gaining additional skills key to future career development. This is reflected in a proportionately greater increase in PGT enrolments related to healthcare and education (Universities UK 2018). Many programmes are offered online, affording busy clinicians the opportunity to study part-time while continuing to work, and providing the potential for engagement with an international, multi-disciplinary academic community. In the increasingly crowded and expansionist higher education sector, academic institutions attempt to articulate what is unique about their offerings. Graduate attributes—those allegedly transferable skills and...
dispositions produced through engagement in programmes of study (Hager, 2006)—are referred to in the strategic plans of most universities. However, they are a contentious topic in the literature, with debate focusing on whether these attributes really can be transferred from one setting to another (e.g. from University to workplace), and whether the development of attributes should be considered a product that can be measured, or a developmental process (Holmes 2013).

Online PGT programmes are well suited to exploring the transferability of academic learning to the clinical workplace. Many students study part-time while working, creating opportunities to test their learning in practice, and then returning to share such experiences with the academic community. It is surprising, then, that little has been published on the experiences and motivations of clinicians engaged in PGT programmes. Obtaining a Master’s degree is seen as desirable in healthcare education leaders (Tekian and Harris 2012) and such qualifications are often cited as essential in job specifications suggesting that graduates of such programmes go on to undertake influential roles (Steinert 2012; Sethi et al. 2018). Sethi et al. (2016) and Cunningham and Dovey (2016) surveyed graduates from medical education and general practice programmes respectively, indicating changes in practice, self-efficacy, critical thinking and sense of belonging to an academic community. Sethi et al. (2018) reported that, independently of any gains in knowledge, the medical education postgraduate qualification itself was seen to aid career progression, indicating a potentially complex relationship between the benefits of what was learned on the programme and the status of the award.

Graduate attributes at the University of Edinburgh

The work of Sethi et al. (2018), mentioned above, leads us to further consider the different ways in which PGT programmes can create value and change in practice, identity and agency for graduates. Hager (2006) suggested that graduate attributes should not be viewed as homogenous, discrete entities that are acquired fully-formed, but as integrated elements of identity or practice that are modified and refined over time. As such, we were interested to explore how such attributes might evolve during and after programmes of postgraduate study, and how they manifest in professional practice. Like many higher education institutions, the University of Edinburgh lists a Graduate Attributes Framework containing a set of mindsets and skills that make up “What [it means] to be a University of Edinburgh graduate,” and that “set them apart” from students and graduates of other institutions (UoE 2016). They are applicable across all undergraduate and postgraduate programmes in all disciplines. We have listed them below as they appear on the University website.

University of Edinburgh graduates have:

- curiosity for learning that makes a positive difference
- courage to expand and fulfil their potential
- passion to engage locally and globally

University of Edinburgh graduates are:

- creative problem solvers and researchers
- critical and reflective thinkers
- effective and influential contributors
- skilled communicators
These attributes are categorised into things that graduates have and things that they are. In other words, these graduate attributes are portrayed as possessions or states of being; they are acquisitional or transformative. It is not clear to us how or when they are realised, or how this relates to curricular design. To better understand how these graduate attributes manifest in practice, and how they are acquired or developed, we sought to investigate the experiences of graduates of two online PGT programmes (M.Sc. Clinical Education and MSc Management of Pain) at the University of Edinburgh. A further aim was to examine the potential of graduate attributes to transcend disciplinary boundaries and ‘transfer’ to other social, intellectual and professional contexts. To aid in this examination, we drew on the work of French sociologist Bourdieu to assist our understanding of recent graduates’ engagement in, and outcomes of, postgraduate education. Bourdieu’s (1977, 1986) concepts of field, capital and habitus allowed us to conceptualise the ways graduates felt they had developed as a result of their studies, and the perceived impact on their careers. Varpio and Albert (2013) discussed how Bourdieu’s work could be applied to medical education but, to date, a limited number of studies have done so (Hu et al. 2015; Cleland et al. 2016; Wright 2015; Brosnan 2010; Brosnan et al. 2016).

**Methods**

**Sampling and recruitment**

Initially, we interviewed 13 graduates from the MSc Clinical Education. We recruited those who we believed would be information-rich (Sandelowski 2000) in relation to our area of enquiry; those we thought would have interesting things to say about ways in which their learning on the programme had transformed their identity or practice. This was based on interactions of members of the research team who are also teachers on the programme (GA, DJ, TF). Within this selection, we recruited from a mixture of professions, cultural backgrounds and geographical settings, as well as what we perceived to be a range of attitudes and perspectives. Through these characteristics, and the quality of information provided, the resulting sample size provided adequate ‘information power’ (Malterud et al. 2016) to meet the aims of our exploratory research. However, as we became confident in the themes identified and the appropriateness of applying Bourdieu’s concepts, we sought further data from another programme to test our analysis. We recruited a small sample (four) of additional participants from a second programme: the M.Sc. Clinical Management of Pain. While we were not aiming to generalise about the outcomes and effects of online PGT programmes on professional practice, we thought that it would be valuable, in reflecting on the University of Edinburgh’s stated graduate attributes, to consider similarities and differences brought about by a related but different programme context and group of students. Some details of these programmes and participants are given in Table 1. The local Medical School ethics committee granted ethical approval.

**Data collection**

Semi-structured interviews were conducted by DS, a post-doctoral research assistant with a social science background, using online conferencing software (Blackboard Collaborate™). DS had never met any of the participants, nor had any role in either programme. Three pilot interviews (not included in the analysis) were carried out to help refine the
interview questions. The interview schedule was structured around what was learned and its value in a clinical and career context. An emphasis was placed on graduate attributes, transferable skills, and career impact. Audio recordings were transcribed by a professional transcription service. Interview length ranged between 20 and 48 min, with an average of 30 min.

**Context**

Both programmes studied here are delivered entirely online, using a mixture of synchronous and asynchronous communication, based on a flipped classroom approach (McLaughlin et al. 2014). Delivery of content such as recorded lectures, via the University’s virtual learning environment (VLE), is followed by discussion at videoconference tutorials and on discussion boards. Both programmes recruit participants internationally from a wide range of health professions. Both have been established for over 10 years, with over 500 graduates between them. Current student numbers are 180 for the M.Sc. Clinical Education and 75 for the M.Sc. Clinical Management of Pain.

**Data analysis**

The data were thematically analysed using the process described by Braun and Clarke (2008). Initial coding from the first three interviews was carried out individually by GA, SH, and DS. There was good agreement and the resulting codes were combined and used to identify emerging themes and generate an initial coding framework. These were then compared collectively (by GA, SH, DS, and DJ), and iteratively refined across the
remaining data. While the other researchers were intimately involved in the running of these programmes, DS provided a degree of externality to both data collection and analysis. There was a high degree of agreement within the coding, with minor differences resolved by discussion. The emergent themes were strongly articulated by many participants. In the second phase of analysis, these themes were viewed through the theoretical lens of Bourdieu’s concepts of field, capital and habitus (discussed in the next section), with a focus on changes in capital or habitus in relation to clinical and academic fields. The resulting framework was shared with four participants, all of whom agreed it was a good representation of their own experiences.

**Theoretical framework: Bourdieu’s field, capital and habitus**

In the second phase of analysis, we used Bourdieu’s work as a theoretical framework for understanding our participants’ engagement in, and outcomes of, postgraduate education. Bourdieu used the term *habitus* to describe an individual’s unique characteristics; their tastes, perceptions, or ways of responding and thinking (Bourdieu and Wacquant 2013). Bourdieu (1977) was interested in the ways in which habitus both shapes and is shaped by practice. *Field* describes an area of practice (such as a medical school or clinical department) characterised by an internal struggle for limited power or resources (Bourdieu 1977, 1990; Bourdieu and Wacquant 2013). The distribution of power can be understood by considering the notion of *capital* or what is valued within the field (Bourdieu 1986). Capital is an acquired form of power or influence, taking many forms, all of which are ultimately resources that can be exploited. The academic skills developed during postgraduate study, and the confidence in using them, represent forms of embodied cultural capital. Other relevant examples of capital include social networks (social capital); valuable objects and materials (objectified capital), such as the qualification itself; and the association of value through the reputation of an awarding institution (institutionalised capital), such as a University.

**Results**

**Participants**

Seventeen graduates consented to be interviewed. To maintain anonymity, we have provided minimal biographical information (see Table 1). All participants were mid-career professionals, having been professionally qualified for at least 5 years.

**Interview themes**

Our initial thematic analysis resulted in three overarching themes: academic voice, infectious curiosity and expanding worldview (summarised in Table 2). The second phase of our analysis, using the lens of Bourdieu’s concepts, showed how these themes reflected changes in habitus, underpinned by particular combinations of different but interconnected forms of capital, and how they could influence a participant’s position within their field.
Academic voice

An important outcome of both programmes was the development of an academic voice, seen as integral to the development of professional identity. This involved the acquisition of new language and an ability to synthesise material and construct coherent arguments supported by evidence. Participant 10 conveyed the distinction this could bring to professional practice.

I gained a lot of self-confidence … you know, I’m the voice of clinical education in our organisation and to say I understand the theory behind this, I know best practice… and, you know, speak with that educated voice now on that topic. (Participant 10-CE)

“Speaking the language” built confidence in discussing theory in practice contexts, and enhanced legitimacy in both academic and practice settings. Awareness and application of theory could be profoundly practical, helping participants enact change in the workplace. In combination with “up-to-date” factual knowledge, theoretical knowledge could help to “bring people on board … and inform others of what you’re trying to achieve.” (Participant 17-MP). The capacity to articulate ideas and support them with sound, evidence-based arguments went beyond language. For Participant 6, “a vocabulary, some words and concepts to describe things or think about things” enabled him to develop a “framework for thinking”. Thus, the academic voice was underpinned by new ways of seeing and thinking, and these could be very empowering. For example, Participant 15 described a greater potential for analysis and problem solving, as not only could he express himself more effectively, he could also more effectively understand others.

… There’s times that I see patients that ten years ago I would have just scratched my head at. And part of that is the didactic input that I got from going through the course. But part of it also is a new way of looking at what the patients are saying and analysing it. (Participant 15-MP).

This allowed Participant 15 to be more influential across educational and clinical fields, with colleagues, students and patients.

It allowed me to organise what I already knew in a way that I could explain it other people, and by explaining it to my classmates and to the instructors I figured out a way to explain it to the patients. (Participant 15-MP)

### Table 2 Themes

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<th>Academic voice</th>
<th>Constructing arguments</th>
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For Participant 4, the development of an authoritative voice supported her capacity for leadership in the practice setting.

Before the course … I would never really have offered my own opinions…in terms of how things were organised…After having done the Masters, I definitely know the most within the practice now in terms of the language of education and the theory behind it. That, for me, has given me huge confidence and definitely I’m more willing to lead and I will put myself forward and put my own ideas forward. (Participant 4-CE)

The combination of confidence, the capacity to argue persuasively, and new tools for problem solving, analysing and learning combined to support a sense of developing agency and autonomy, even in the absence of formal authority.

I’m doing a lot of new roles without necessarily the authority to impose new direction. So some of that needs to come just from convincing people that this is a good idea.” (Participant 10-CE).

**Infectious curiosity**

Another important outcome that came through clearly in the data was a change in attitudes and approaches to understanding. The increased confidence described in the previous theme could produce a capacity to deal with uncertainty and complexity. This, in turn, supported participants to pursue their curiosity around previously inaccessible areas of knowledge, and to more easily question different points of view.

I suppose, by the end of the second year of the course, I was getting a bit more confident in thinking, well I don’t agree with what they said. And so I’m going to ask this question about it. (Participant 5-CE).

Participant 5 gained confidence in questioning and clarification, which was “definitely useful in medicine [where we] have to get clarification, or have a discussion about what is the right thing to do for the patient.” For Participant 14, the authority that came with the development of an academic voice was tempered by a recognised need to be open to questioning and to learning from mistakes. For her, postgraduate study had increased her awareness of the contentious nature and the personal and collective limitations of knowledge. She felt that evidence, the opinions of others, and also her own ideas, should all be subject to “external scrutiny” (e.g. by programme tutors and peers). Similarly, for Participant 13, the programme provided access to valuable, external points of view from a “learning community which was completely [outside of] the people that I would normally speak to about education stuff.”

Exposure to different ways of thinking, alternative epistemologies, different cultures and the varied practices of student peers, could provide ways into unfamiliar conceptual terrain. For Participant 4, the Clinical Education programme gave her the tools to “find her way into new areas” where “the answers aren’t so clear.” Participant 6 had deliberately chosen to pursue new ideas and perspectives through a supervised dissertation using qualitative research. Like many participants, Participant 6 had been trained in positivist scientific enquiry, but had learned to be able to see through a different epistemological perspective.

I suspect [my epistemological position has] changed, because I’m aware of alternatives. I think that alone is sufficient for it to have changed. I recognise that I do not
know enough to have a firm position... My approach to the world [is now] a little bit more accepting of the idea of discourse and discursive ideas, and is much less positivistic. (Participant 6-CE)

The result was not simply that he had learned about new things but that he had developed an awareness of the uncertainty and complexity of the areas of enquiry with which he was dealing. His expanding theoretical understanding and epistemological versatility had changed his practice across multiple fields.

Having a framework to think about thinking, has helped me... manage my clinical work, possibly even my personal life, and certainly how I teach others, and how I mentor others. (Participant 6-CE)

This enhanced capacity for reflecting on practices and ideas allowed participants to rethink fundamental concepts, opening up problematic assumptions that could be examined and redressed, as discussed by Participant 15.

...the whole concept of pain. I was reaching back to: “what is pain?”... I’d never really taken the time, I guess, to examine the first assumption, and the biggest problem we as providers, and scientists in general, [have] is a failure to question our first assumptions... [Before the programme], I pretty quickly decided, “oh, I know what’s wrong there,” and that doesn’t always work out... it’s broadened my perspectives. (Participant 15-MP)

In many cases, enhanced curiosity and reflection across academic and clinical settings continued beyond graduation. This was evident in an ongoing commitment to scholarship. Beyond staying abreast of research and developments in their respective fields, many participants became involved in the active generation of new knowledge. Participant 13’s aspiration, for example, “to contribute, rather than just recite” showed a desire for agency in the construction of knowledge and advancement of her field.

We have characterised this theme as “infectious” because the desire for scholarship and knowledge spread to the participants via engagement with peers, tutors and literature, and then also from the participants to their peers and students. For example, Participant 17 spoke of new possibilities for appropriately guiding students in their own pursuit of knowledge.

The Masters has made me realise I need to step up... I’m quite keen to try and spark an interest in the trainees that I work with regarding the importance of having an inquisitive mind, and just not accepting that people do things just because, and making sure that you have an understanding why people are doing things. (Participant 17-MP)

**Expanded worldview**

The theme of expanded worldview captures a change in perspective, as participants came to see the fields of healthcare and education as more complex and nuanced, with less clear-cut answers and borders. It reflects a shift from a narrow focus where specialisms, disciplines, teams, workplaces, cultures or epistemologies were often taken for granted and viewed in isolation; to a wider view in which they were seen as interacting. Both programmes recruit a range of health professionals from different
disciplines and countries, resulting in wide multidisciplinary and multicultural representation in discussions. Participant 8 gave a sense of what this was like for her.

Your thinking is broadened because you are not in a four walled classroom with people who you know from your town or city...We had different accents, everybody had a different background and different experiences, so when they used to share their experiences it was very engaging ... (Participant 8-CE).

Such discussion involved formulating specialised, disciplinary language into terms that could be understood by outsiders. The acquisition of new academic language and vocabulary, while allowing participants to articulate complex and nuanced concepts, also needed to be balanced by a recognition that simplified language was sometimes necessary within multidisciplinary dialogue to break down barriers to communication.

We talk about this a lot at work, saying we need the MDT approach. But, in truth, physios speak to physios and nurses speak to nurses. But, actually, what this course meant was that we had to stop using jargon. We had to actually use a language that was a little bit more accessible. (Participant 14-MP)

At the same time, for some participants, understandings shifted from absolute facts and clear right and wrong answers, towards negotiating and balancing different views. This required authentic opportunities for students to participate in dialogue.

One of the things I really valued about it was that it did bring together a whole bunch of people from all around the world from different disciplines all involved in different teaching activities... I found value in being able to kind of learn from them and ask relevant questions. So it wasn’t just about what I was getting from the presentations or lectures or necessarily the questions that came up during tutorials, it was more the learning community I was part of. (Participant 7-CE)

Enhanced understanding could generate a sense of agency, even as it increased the conceptual complexity of the field in which graduates were operating. Participant 6 commented that, before starting, applicants may not be in a position to understand what they are going to learn, nor the utility of learning about principles and theoretical frameworks to guide their own development of educational practices.

The types of transferable skills that I thought I would gain from the programme, were much more limited than the skills that I did gain... I think that I was under a common misconception, that I would learn a little bit more about some of the practical aspects of one on one education et cetera, and I think the focus was on the bigger picture and how things fit together, and the theoretical frameworks, and evidence that underpins some of the decisions that people make within medical education, and education in general, and I’m glad that it did. So, yeah, I think that the scope of my conception of education and teaching was much more limited and that my expectations fit within that more limited scope. (Participant 6-CE)

It may not be feasible to express the attributes that students gain from these programmes in ways that can be understood by those who have not yet been through the experience, since students may require an expanded, complex and nuanced view of education to grasp the possibilities and benefits of developing such a view.
Field, habitus and capital

In the second phase of our analysis, we synthesised the themes above in relation to Bourdieu’s (1977, 1986) concepts of field, habitus and capital. We see our three themes as reflecting changes in habitus, because they convey durable changes in dispositions and capacities from which practices are adapted and developed and which, in turn, enhance the participants’ agency within their fields. Learning, then, involves developing the habitus that is required to successfully operate within a particular field. As Schatzki (2017, p. 29) noted, “the more the habitus is acquired, the better someone can proceed in these fields, and in a greater range of situations.” However, it is important to recognise that these capacities and dispositions are not simply acquired by individuals, they are caught up in other forms of capital that are brought about by understandings of the institution and accreditation of qualifications (institutionalised capital), as well as the social connections generated through enrolment and engagement with the programme (social capital).

The acquisition of a postgraduate degree in itself represents enhanced cultural capital: it is a valuable resource, as reflected in its common appearance in job descriptions and promotion criteria and its potential for mobilisation to progress a participant’s career and professional status.

Working here, I needed a postgraduate qualification… the fact that I am now theme head, [as a nurse] it’s quite unusual, so I think having the Masters has given me that credibility. (Participant 3-CE)

Graduates are inducted into their new status through rituals of graduation and the wearing of robes that denote the level of the qualification and the awarding institution. One is left in no doubt that one has graduated and entered into a community of highly-educated peers. The association with an internationally-recognised University (“Edinburgh is one of the top universities in the world”, Participant 16) also adds value in the form of symbolic capital (i.e. the attribution of particular qualities to that resource simply because of its source) (Bourdieu 1986). In the following excerpt, the symbolic capital that this particular institution lends its qualifications through its reputation and its grand estate is given priority over the accumulation of embodied capital (enhanced skills and knowledge).

It was a really nice moment to graduate from the University of Edinburgh, to be honest and candid; it’s a beautiful building we graduated in. I felt very proud of myself and even now, when I mention that’s where my master’s was from, you get a different look and you feel quite chuffed…. (P16-MP)

Participant 16 portrayed the intertwining of different forms of capital within the perceived value that the Master’s had for her, not just in terms of advancing in her field but also in economic terms:

You get respect, recognition, people listen to you… you know what you teach, you have confidence. You are not teaching just because you [have read] something… No, you lived it, you are the professional, you are qualified, certified… you are a resource. And definitely in terms of your income, you are more [highly] paid than others. This is obvious: for something where you have worked hard and sweat[ed], you have to be paid. (Participant 16-MP).

The value of a Master’s programme also related to the cost of studying, in terms of money, time, effort, and emotion. For Bourdieu (1986) embodied capital implies a personal
investment of time, but the *appearance* of this investment also added to the available symbolic capital. Crucially, however, symbolic capital was, in turn, supported by the practical value of knowledge, attitude, and confidence. Thus, these Masters conferred “credibility” and “legitimacy” through a combination of skills and knowledge, status, social connections, and accredited qualifications.

What the master’s degree gave me really, was a bit of credibility, not only in name - people know I have it - but also in terms of skills and analysis and presenting arguments and scrutinising… (Participant 14-MP).

The different forms of capital could manifest not only as a greater sense of legitimacy, but also a greater actualisation of authority, a perceived competitive advantage, and an increase in effectiveness and influence. Indeed, developing an academic voice was sometimes seen as necessary for the development of effective practices and for career progression. Participant 5 described an occasion where her words were interpreted against the backdrop of the qualification.

I feel like it definitely made a difference in performing well at a Consultant interview.’ Cause they were all like, oh you’ve got an MSc, oh that’s great. Or you’ve got a distinction, well done… I think people recognise that coming out with a higher degree is… a firm commitment…. a really important bit of my CV that was impressive to people. Impressive enough to help me get the job that I wanted. (Participant 5-CE).

She felt that her “impressive” qualification, in combination with her knowledge, distinguished her in her field. Thus, cultural capital was enhanced not only by acquiring attributes, but also by having other people know about them. Another kind of social capital may have been even more important over the longer-term: valuable networks of supportive and influential colleagues were formed that lasted beyond the programme.

When we finally “met” in graduation, we felt that we belong to each other. We are truly classmates. We shared discussions and tried to remember our memories together which was wonderful. We felt that we are one family: we support each other, attend presentations for each other and we have… felt that we are not alone. We have family that support us.” (Participant 12-CE)

These networks could be mobilised in various ways that were advantageous to the individuals. However, becoming part of a network required the development of contextualised skills and practices, and a shift in understanding of the value of online learning communities. Early on in her studies, Participant 14, had reservations that her programme would not be “meaningful for [social connections], because you don’t meet people face to face.” Later, she came to recognise the value of social connections with people distributed across the world, indicating a need to develop more sophisticated conceptualisations of online interactions. The expanded worldview, generated through exposure to the variation in practices, disciplines and perspectives available within these online networks, created opportunities for thinking about new ways in which things could be done and, thus, the potential to change one’s habitus. Participant 2 commented on the benefit of comparing and contrasting practices with other students.

Meeting people who were doing essentially the same thing as me, but in much different settings and realising how it’s similar and how it’s different… it opened my eyes a little to how things could be done and are done in other places. (Participant 2-CE).
Such dialogue, developed and practised through these programmes, could have a lasting effect on practice. Further, by accruing symbolic, social and embodied capital through a Master’s qualification, and the knowledge and social connections that came with it, graduates could compensate—at least to some extent—for a lack of other kinds of cultural capital (wealth, prior education, social status, etc.). By completing the considerable challenge of postgraduate study, other graduates had transformed not only what they could do or how they were seen, but how they understood themselves and the nature of their professional role. This transformation can be seen as the development of habitus necessary to advance in academic and professional fields. For example, the combination of the forms of capital discussed so far enabled Participant 7 to overcome cultural obstacles and gain access to higher status and increased agency.

At the time that I chose general surgery, no girls or ladies were allowed to visit surgery in our university, it was a department for men only… I have exerted maybe… trebled the effort that my male fellows have exerted. That’s what made me get my Master’s degree, and I got the position of assistant lecturer in general surgery department at our university. … [This] got the professors and the senior staff to see that I can be a surgeon, it’s not for men only. I have opened the door for a lot of ladies to join the department afterwards. (Participant 7-CE)

Thus, significant agency could be required in order to amplify the capital derived from the qualifications. Another example was Participant 11, who actively lobbied for formal recognition of his qualification. He became “the first [doctor in his country] to get a Master’s degree in education,” opening up significant opportunities for career progression. It was interesting to see how the attributes gained through these Master’s could disrupt existing hierarchies, in minor and major ways. Participant 7 (above) demonstrated a significant shift in power and legitimacy, becoming recognised as a female surgeon in a male-dominated field. Participant 11 raised the profile of clinical education in his country. Participant 13 spoke of the Master’s qualification as necessary to accessing particular areas of the field of medical education that would otherwise be inaccessible to nurses.

Discussion

While our interviews revealed evidence of all of the University of Edinburgh’s stated graduate attributes, and while those attributes are apparently positive (though potentially very demanding), a number of aspects remain unclear. Within the accounts of our participants, there was no obvious way in which either the programmes or the institution had actively developed these attributes. It is not clear why the University should claim and promote these particular attributes, rather than others that might also be claimed. This, we suggest, is an area for further research: how do programmes and institutions work towards their particular graduate attributes? How could we assess the extent to which graduates attributes are realised? Are they aspirational, in the sense that our graduates will continue to work towards them across their careers (and then is simply imbuing graduates with these aspirations sufficient, or should institutions and teachers be responsible for facilitating their development, and to what extent)?

Participants indicated various ways in which undertaking these online Master’s programmes had enhanced cultural and social capital, and changed habitus. Through developing an academic voice, infectious curiosity, and an expanded worldview, they had...
developed a range of resources that they could employ across their educational and clinical fields. Thus, our results suggest the development of attributes, through postgraduate study, that can be mobilised in professional contexts. However, these differ in important ways from conventionally-defined graduate attributes, including those explicitly claimed by the University of Edinburgh. For example, the development of infectious curiosity reflected the proposed graduate attribute that “University of Edinburgh graduates have: curiosity for learning that makes a positive difference.” However, it is useful to separate curiosity from positivity, since putting this constraint (albeit a positive one) on curiosity is counterintuitive. Curiosity does not predetermine whether enquiry will lead to a positive difference or, indeed, any difference at all. Considering the second attribute of “courage to expand and fulfil their potential,” some of our participants demonstrated courage (e.g. to argue for recognition or an increase in authority or status), and there was clear evidence of particular forms of “expansion” (e.g. of world view, responsibility, influence, social networks). However, it cannot be proven or refuted that participants had fulfilled their potential. Further, courage is only necessary when one does not have full confidence, and we found confidence—supported by the accumulation of various kinds of capital that allowed graduates to gain an advantage within their fields—to be a stronger theme in the data. It should, of course, be recognised that developing confidence is contingent on various forms of historic, cultural capital that applicants bring with them when starting a programme. It might be, then, that courage is required to surmount obstacles that come about through a shortfall in capital. Both courage and passion (“to engage locally and globally”) were required for some participants to successfully argue for the funding they needed to start their programmes, and for others to argue for their qualification to be officially recognised.

Indeed, cultural capital is more difficult to acquire for some than for others. As Bourdieu (1986) argued, those who arrive with significant cultural capital (e.g. in the form of family support, a privileged background, or a solid grounding in the language of the new context) are in a significantly advantageous position to acquire yet more cultural capital. Thus, while these Master’s programmes did help those who faced cultural obstacles (such as “being a nurse” or “being a woman”) to overcome them, it cannot be said to have levelled the playing field, since those who bring cultural capital with them may have an advantage in completing the programme and in using it afterwards to progress their career. Therefore, we believe that confidence is a more relevant attribute for these programmes, while courage is required for those facing obstacles to participation due to a shortfall in various forms of capital.

This discussion shows that it is simply too easy to argue that the stated attributes have been developed, because they are ongoing achievements without any clear metric or benchmark. In contrast, Bourdieu’s concepts can explain the actual or potential impact on practice in the graduate’s own field(s). Our results suggest that participants were transformed by their studies; often in ways they had not anticipated. Indeed, we argue that the most important outcomes of these programmes were only understood when looking back over the journey taken, and it may not be feasible to use the themes reported here as promotional devices, since applicants may appreciate neither the possibility nor the need for this development. Nonetheless, participants had developed capacities, and ways of thinking and practising (McCune and Hounsell 2005), that could help them progress in their work and in their careers.

Bourdieu (1986) saw educational qualifications as an institutionalised form of cultural capital which made them more easily convertible into economic capital. As legally-sanctioned and guaranteed certificates of “cultural competence” (p. 20), they are relatively independent of the knowledge and abilities of the graduate. They distinguish graduates from
those who have learned through less formally-sanctioned means, but do not, by themselves, mean that the knowledge of graduates is superior to that of non-graduates. Nonetheless, institutionalised capital can allow graduates to act and be perceived as if their knowledge is superior, which in turn can advance their development in other areas.

Beyond the formal certificate, there are other ways in which postgraduate study can confer advantages. There is the actual learning of knowledge and skills in the form of embodied cultural capital. There are also the social connections, built up through the programme, that can continue beyond graduation. It is interesting to consider that, as their fellow graduates gain authority and status, our participants’ own social capital increases, since, according to Bourdieu (1986, p. 21), it “depends on the size of the network of connections he can effectively mobilize and on the volume of the capital (economic, cultural or symbolic) possessed in his own right by each of those to whom he is connected.” This suggests that it is in each student’s interest to be collaborative, rather than competitive, since the learning and enhancement of one’s peers is of potential value to oneself.

Bourdieu (1977) conceived of people (in our case, clinical educators) as vying against each other within a field for different forms of capital and status. However, we have shown that students can acquire capital within their field by using postgraduate programmes to learn about education, to obtain a relevant qualification, but also to generate valuable social networks. It is in this last issue that the greatest tension arises in Bourdieu’s position: significant value comes from the development of supportive partnerships and networks, and participation in a community of learners. Thus, our position, upon reflection on the findings presented here, is that graduates can become more competitive in their fields of clinical education and, indeed, clinical practice, by being more cooperative and collaborative within the site of their studies. It follows that postgraduate programmes should function not as sites of conflict, but of nurture and mutual support, and that may be best facilitated by pedagogies that actively work towards “lasting, useful relationships” and the fostering of a collaborative culture. We argue that postgraduate programmes will benefit from designs that actively encourage students to share experiences of professional practice and work with peers on problems that involve applying new knowledge to professional domains. Further, tutors and the institution should work actively to reduce perceived negative forms of hierarchy and competition between students (although we recognise the challenge that comes from assessment and the allocation of grades).

While Bourdieu’s concepts have been helpful in advancing our thinking, we do not wish to come across as overly cynical about the value or values of postgraduate education. While we have explored the acquisition of capital as a means to develop and exert individual agency within a field, we do not see the activities of our participants as entirely self-motivated, nor do we believe that it is always appropriate to emphasise self-motivation within what is a complex interplay of personal and social motivations. For example, when Participant 4 said that she was “very proud” of having used her Masters qualification to be appointed to be an examiner for “the next wave of new GPs,” we see this as both a self-motivated advancement of career, influence and status, and a socially-motivated aspiration to contribute to the advancement of the profession and those who are just beginning their careers. The political or social moves made by graduates to increase their power or capital in the workplace are not necessarily explicitly strategic or rational; they may be natural choices of a habitus that has preconditioned them in certain ways, of which they may be unaware (Bourdieu 1986). As discussed above, it is possible that the appropriation, through postgraduate study, of language and tools of reflection and analysis might make graduates more aware of these processes, and may empower them to manipulate them. It is for this reason that discrepancies between our results and the stated graduate attributes may come
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about: it is impossible to precisely define such outcomes realistically, because the complexity of definition exceeds the capacity of applicants to understand it (a problem that is only solved by studying).

Rather than attempting to determine how PGT programmes produce graduate attributes, it has been more meaningful to consider how changes in habitus and capital, emergent through and after PGT programmes, relate to desirable and durable changes in practice. This can form the basis for a more realistic and precise conceptualisation of graduate attributes. For example, we argue that “attributes” may be best seen as durable but not inherent or fully achievable. “Graduate,” then, could be taken as an indicator the person has gone through a formalised, structured process to begin the sustained (i.e. over the course of their career) development of that attribute. Our results support previous evidence of the transformative potential of postgraduate qualifications (Sethi et al. 2016, 2018). However, our theoretical perspective has also highlighted that Sethi and colleagues did not adequately consider the ways in which self-efficacy itself is contextual, or what is involved in maintaining self-efficacy across contexts. By considering how our participants’ developing agency manifested across clinical and academic settings, we advance understanding of the impact of online postgraduate programmes beyond identity and practice, offering an alternative explanation of the potential, interrelated and largely unpredictable benefits of PGT programmes.

Limitations

Mindful of criticisms of single institution research, we acknowledge that we could learn more by extending the study to a wider range of institutions and disciplines. For example, we speculate that changes in habitus, capital and practice are likely to be different between healthcare and other fields, professional and non-professional education, and between undergraduate and postgraduate students. Thus, further studies in different contexts will help researchers gain a broader understanding of the transformative potential of different kinds of education under different conditions. However, we are also aware of the criticism that medical education research is theory-light (Albert et al. 2007) and this paper represents an application of Bourdieu’s theoretical framework to a small group of Master’s graduates from two online PGT programmes in order to shed some light on how the attributes that they develop through their studies manifest in their academic and clinical practice.

Another important limitation is that we did not directly examine the habitus or cultural capital that our participants arrived with at the start of their postgraduate studies, instead focusing on perceived changes in practice and agency brought about through their studies. Bourdieu (1984) recognised that education was one of the paramount ways that privilege can be transmitted, and thus education is imbued with forms of capital in which it makes sense to invest (Frank 2013). However, while our results suggest that such degrees are beneficial to graduates in economic, social and cultural terms, Master’s degrees bring considerable financial cost and are, therefore, outside of the reach of many. Indeed, there is some suggestion in the sociological literature that postgraduate qualifications are the new frontier of social mobility (Wakeling and Laurison 2017), and studies have shown that forms of capital valued within medicine, for example, are not equally accessible to all medical students, particularly those from lower socio-economic backgrounds (Mather and Parry 2009). Bourdieu has been criticised for assuming that cultural capital is experienced in similar ways (Sullivan 2001), and future research, incorporating an examination of how the social, cultural and economic backgrounds of
students create challenges or opportunities for accessing and engaging in postgraduate education, could usefully extend his framework.

Conclusion

In this paper, we have considered the experiences and perceptions of graduates of two online Master’s programmes in relation to changes in agency and practice across academic and professional healthcare settings. In many cases, despite their varied reasons for undertaking postgraduate study, our participants felt that the benefits obtained were greater, and of a different kind, from those they had anticipated when starting their programmes. Despite the small sample (17), our results provide potentially interesting insights into the value and utility of these qualifications for those who hold them. The perceived increases in confidence and agency of our participants were largely built on a combination of developed knowledge and, at the same time, an enhanced capacity to appreciate and deal with complexity and uncertainty. This capacity underpinned the pursuit of intellectual curiosity and the crossing of disciplinary and epistemological boundaries.

The online delivery of both programmes afforded powerful opportunities for international communication and interaction, as practitioners from around the world engaged in dialogue around the similarities and differences between settings and practices. This was highly valued by participants, indicating the potential to develop social capital through global networks, as well as possibilities for opening up each graduate’s practices for reflection and refinement. The three resultant themes of academic voice, infectious curiosity and expanded worldview all benefited from a collaborative and discursive approach to online education. Our work, therefore, has implications both for those designing and delivering these programmes, and for prospective applicants: programme design should encourage collaboration and discussion, and this aspect of effective postgraduate study should be made explicit to potential students.

Through Bourdieu’s concepts of field, habitus and capital, we have been able to demonstrate how the completion of a postgraduate qualification can be used to advance the individual in their own field (i.e. clinical or academic context) and to consider how graduate attributes manifest in practice. In doing so, we have proposed that graduate attributes, as typically conceived by universities, are not sufficiently contextualised. Not only is their manifestation context-dependent, but changes in habitus and capital are difficult, if not impossible, to pre-determine. Nonetheless, it is clear that such programmes can enhance graduates’ agency in complex and multifaceted ways across academic and clinical settings.

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Compliance with ethical standards

Conflict of interest GA and SH are Directors of the programmes that are the subject of this study. Funding for this research was provided by a small institutional grant for educational projects. The lead author (GA) is a Registered Dietitian and clinical educator and the Programme Director of the MSc Clinical Education. DJ and SH are both experienced academic educators and Registered Occupational Therapists, SH is also the Programme Director of the MSc Clinical Management of Pain. TF is a lecturer on the MSc Clinical Education. DS is currently a Lecturer in Adult Education at the Royal College of Physicians, Glasgow.
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Experiences of staff new to teaching postgraduate students online: implications for academic staff development

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ABSTRACT

This study employed a phenomenographic methodology to explore the experiences of academic staff new to online postgraduate education in order to obtain a better understanding of their professional development needs.

We identified four categories of development: preparation, initial reflection, evolving awareness of the social aspects of online learning, and engagement. These categories show variation in three ways: the perceived role of the educator, the educator’s understanding of the online environment, and the nature of interaction between staff and students. These findings have implications for the increasing numbers of academic staff involved in planning and delivering online education.

Findings are discussed through the lens of a growth narrative rather than the traditional constraint narrative often considered when starting to teach online. The findings support previously published work but the novel framework suggested for the conceptualisation of online postgraduate teaching gives a more nuanced picture that will be of value to both those involved in online education and those supporting their development.

We recommend that academic developers consider teacher agency and empowerment rather than the delivery of packages of decontextualized skills and information. Support should be ongoing rather than front-loaded, with adequate time and space for reflection to allow educators to successfully undertake this new and evolving role.

Keywords: online education, faculty experience, scholarship of teaching and learning, phenomenography, growth narrative

Introduction

Growing numbers of postgraduate students undertake online study as a pragmatic solution to combining employment and academic study. Many taught postgraduate taught (PGT) programmes are aimed at those in established professions such as healthcare and law, with participants choosing to study for personal interest, career progression or to meet the requirements of professional regulatory bodies.

Whilst the motivations and experiences of postgraduate students have been reported (Ho, Kember and Hong, 2011), much less attention has been focused on the experiences of those who teach on postgraduate programmes that are delivered online (McShane 2004; Conceicao 2006) focusing largely on those teaching undergraduates. Debate has centred on trying to define the required competencies of online educators (Anderson, Rourke, Garrison & Archer, 2001; Berge and Collins, 2000; Coppola, Hiltz & Rotter, 2002; Goodyear, Salmon, Spector, Steeles & Tickner, 2001; and Salmon (2004). However, Rennert-Ariev (2008) warns that such an approach can have the effect of privileging technical-rational conceptions of teaching at the expense of an understanding of teacher agency. We sought to investigate how educators define and shape their practice in the context of ill-defined and rapidly evolving roles (Bennett and Lockyer, 2004). It is clear that educators moving to teaching online need new or adapted skills and knowledge. Importantly, they should not be required automatically to assume new roles without having the opportunity for ongoing reflection on their developing practice and to consider the impact on students’ experience and learning.

It has been acknowledged that there is a need for better support for educators who are new to online education. Baran, Correia & Thompson (2011:143) state that, to date, there has been limited success in “bringing the teacher’s voice” into the design and implementation of support and training for online education.
Moves towards a more nuanced, holistic understanding of teaching online are in tune with current ideas about authentic, practice-based academic staff development.

By authentic, practice-based development we refer to those activities that emerge from everyday work: they are embedded in the context of real-world relationships, opportunities and constraints. They derive their urgency from the fact that they are actual issues that need to be addressed. They connect with colleagues’ values because they concern things that really matter. (Loads & Campbell, 2015: 356).

We sought to address those things that really matter to educators, by gaining an understanding of the opportunities, constraints, relationships and real-life issues that shape their practice. Despite the association of online education with innovation, nevertheless there is a tendency for online skills training to uncritically represent old assumptions and orthodoxies that do not address the empowerment of online educators nor promote critical reflection (Baran et al., 2011). We wanted to bring the insights of online educators themselves into the debate about professional development for online teaching in the spirit of ‘adopting a stance of questioning, challenging and critiquing taken-for-granted ways of doing things in higher education’ (Quinn, 2012).

### Methodology

In this study, we define online education as the use of technology to allow learning at the same, and different times as other people, in different places (adapted from Coldeway, 1995). This study relates to the experiences of those delivering a PGT programme in Clinical Education. The part-time programme is delivered entirely online; students are all practising healthcare professionals with an educational role. Approximately 50% of students live outside the UK and do not have English as their first language. Students have a range of professional experience and are encouraged to share this experience as valuable learning.

The programme runs on a Virtual Learning Environment that contains a repository of course materials, discussion boards and a blog. In addition, real-time tutorials are held weekly during term time using Adobe Connect software. A flipped classroom approach is taken with recorded lectures available for students to view at their convenience and specific topics are then discussed with the lecturer at an online tutorial. The ethos of the programme is to encourage a social-constructivist approach to learning.

A phenomenographic approach was taken to understand the perceptions and experiences of teaching online. Typically featuring interviews (Kvale, 1996), phenomenography is useful in attempting to discover how different individuals experience the same phenomenon in a range of different ways (Marton, 1994) and provides a means of interpreting the structural relationships between these different experiences (Akerlind, 2004). It is this variation in perception that is of interest when considering how best to support staff development.

The study was also shaped by a deliberate turning away from a narrative of constraint, and towards a narrative of growth (O’Meara, Terosky & Neumann, 2008). In methodological terms, this led us to de-emphasise (although by no means to deny) the narrow instrumentalism, inadequate metrics and unsupportive climate of contemporary academia, and to bring back into view educators’ agency, commitment and potential for self-awareness and growth. We did not ask our respondents about skills deficits, productivity targets, inequitable reward systems or career blockages. Instead, we invited them to articulate their understandings, values and professional judgements drawn from years of teaching experience and reflection.

Ten educators were interviewed; this was the total number of staff involved in the programme at the time. Local ethical approval was granted with participants providing informed consent. Questions were broad and open-ended, inviting participants to reflect on their experiences of teaching online and hence define their own terms of reference. Unstructured follow-up questions were used to seek clarification or elucidate more information to allow participants to explore their experiences as fully as possible.

It is important to acknowledge the impact of the researcher on this research. At the time of the interviews the researcher undertaking the interviews (GA) was a colleague of those interviewed. As a newly appointed online educator, the researcher wished to improve their understanding of the issue and undertook the interviews in an open manner, allowing participants to frame the discussion. The interviews were audio-recorded and transcribed verbatim. Transcripts were collated into one document and were read with a hermeneutic approach to allow the researcher to understand and interpret the words of the participants to identify categories of description (Säljö, 1997). Similar statements were grouped together looking for meaning and potential relationships between the groupings. This process was repeated until the researchers felt confident with the resulting categories; these were then discussed with colleagues working in this area to increase the trustworthiness of the analysis.

### Results

Those interviewed varied considerably in their face-to-face teaching experience, from one to more than 20 years. Six respondents were women and four men all in the age range 40-60. All but one ranked their technical ability as ‘competent’, with one ranking themselves as ‘expert’.

### Categories of description

The unit of analysis was the individual’s perception of online education and the different ways this was experienced when starting...
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to teach online. Four categories of description were identified, related in a hierarchical manner, with categories A and B concerned with the experience of preparing to teach online and C and D relating to experiences as educators become more comfortable teaching online. Participants are conceptualised as passing through categories sequentially.

Table 1: Categories of description

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Preparation</td>
<td>Orientation and context of online teaching, consideration of time BEFORE TEACHING Educators begin to develop their understanding of teaching online and consider how best to develop and design teaching for online delivery. Focus on technology</td>
</tr>
<tr>
<td>B Reflection</td>
<td>Considers how online differs from face-to-face, and how this affects teaching BEFORE and AFTER TEACHING Educators reflect on their online teaching, consider contingencies in event of technical problems. And have clearer understanding of developmental needs</td>
</tr>
<tr>
<td>C Interaction</td>
<td>Evolving awareness of the learning environment, with interaction (not technology) as key Becoming more familiar with online teaching, develop a more collaborative approach. Emphasis moves from technology as a ‘thing’ to a place</td>
</tr>
<tr>
<td>D Engagement</td>
<td>Emotional engagement/reward As educators develop more online skills this mode of teaching becomes more rewarding</td>
</tr>
</tbody>
</table>

A Preparation for online education

During the preparatory phase participants were looking for more support and orientation into the online world than they currently received, including both technical support and contextual information from the programme team. The need for more training, specifically in the use of technology for teaching purposes was identified, e.g. “staff development or training in how to make best use of this particular format because I effectively went in cold”. This is a useful reminder that online teaching can be a disorientating experience.

B Reflection that online differs from face-to-face

There was clear acknowledgement that teaching online encouraged educators to plan teaching in a different way from face-to-face teaching: “there is a conception that online takes less time, but I actually think it takes more time, than face-to-face”. Much discussion focussed on running online tutorials and recording lectures, and the skills required to do this effectively. The tutorials have webcams, audio and text chat all running at the same time, which does require time to master. Comments suggest there is a competency-based element to orientation in online education including the development of new skills, seen as useful when teaching online. These skills were seen as distinct from the initial planning for online delivery. For example, educators have to become proficient in paying attention to the screen and filtering out distractions.

I found it quite disorienting at first to have the multiple streams of communication going on ……that’s a hell of a lot to be going on at the same time and you kind of lose thread of your responses half-way through.

There was also some comparison of how teaching online differed from face-to-face, specifically relating to interactions between staff and students. Educators expressed awareness of the need to run online sessions differently to their face-to-face teaching:

…the way you have to speak is slightly different with the tutorials….I find I need to be slower and clearer

Equally, this factor may be related to the international nature of the student body, for many of whom English is not their first language.
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Generally, educators perceived their first experience teaching online to be disappointing, encouraging them to strive to improve the next time. Staff reported how they planned to overcome the challenges encountered and were not discouraged from teaching online again; discussion focussed on getting better next time.

It’s another form of teaching and there is a learning curve with all these things.

C Interaction

There seemed to evolve an understanding that online learning was more about a place where learning could occur rather than a tool, with the personal, human interaction afforded by technology considered key to successful online education:

... all of that [technology] doesn’t matter, or whether you are in the same room as people physically, it’s about the relationship you have with people.

Educators differed in their opinions of the synchronous tutorials; some educators relished the relinquishing of control to a more student-centred approach, while others felt this was an abdication of their responsibility and preferred a more structured approach.

I suspect the other tutors run a much more kind of passive style and get the students to do the actual work.

... these are adult learners and their meeting and they should drive the agenda ...

However, there was agreement that the tutorials afforded an opportunity for interaction that required the development of new skills

You need to develop some skills and techniques for managing the discussion. Not to control it, but to ensure that people’s ideas don’t get ignored or lost.

Despite differences in approach all found the tutorials to be a valuable teaching opportunity; real-time tutorials added an extra dimension to the online communication.

D Engagement

Teaching online was considered to be rewarding; largely due to the sense of community that was established. Educators expressed surprise at this and had not previously considered it a possibility. Enthusiasm and excitement overcame the initial anxiety as educators became more practised:

... what was good was the informality and enthusiasm of the tutorials...there was genuine warmth and a kind of community sense of people being together as a group, which you don’t curiously get in face-to-face.

The rewards were acknowledged as a two-way process. The discursive aspects of the learning space ensured that educators could see that students were making use of their learning in their professional lives. Weekly tutorials allowed students to test their new learning/insights out in practice between tutorials:

... discussion is important for deep learning and enabling people to transfer their learning from one situation to another.

Dimension of variation (relationship between the categories).

The dimensions of variation give a richer view of the experience of new online educators and help to describe the relationship between the categories. These dimensions are the perceptions of the role of the online educator, the educator’s conception of the online space and nature of student-staff interaction. The perceptions of the role of the online educator describe a change in focus from content, to delivery of content and then to interaction. In category A, the educator is focusing on how to adapt their teaching for online delivery, with a clear focus on what the educator is doing. In category B, the educator is still focusing on their own actions but now reflecting on their initial online teaching. In category C, the focus of the educator shifts towards the interaction afforded with students online and in category D, the educator appreciates that the online space can enrich their teaching and
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The educator’s conception of the online space also develops as they become more experienced online. In category A, the educator has not considered the online environment as a space: the focus is on the development of teaching materials. In category B, after an initial teaching experience, the educator begins to reflect on the differences between online teaching and their previous experiences teaching face-to-face, and in categories C and D the educator expands their focus from their own use of technology to a consideration that new types of interactions with students can occur.

The nature of student-staff interaction is considered from the perspective of the educator. Again, there is an expansion in focus from a transmission-based model of education where the educator is providing information in categories A and B. In category C, educators begin to see the online space as a place for interaction and discussion, whilst category D described it as a place for collaboration between both staff and students, but also between students.

The relationship between the categories and dimensions are summarised in table 2. This highlights the hierarchical nature of the ways in which educators new to teaching online experience the process. Preparation is the most limited way of experiencing online teaching, with the educator focussing on their own role and teaching resources and not considering interaction with students. Engagement is the highest category of description in the hierarchy as it describes a more complete and complex understanding of the experiences of teaching online. The category goes beyond educators’ own actions and considers the online space as somewhere to allow two-way interaction, between staff and students, and collaboration between students. This interaction is beneficial to both staff and students.

Table 2: Resultant outcome space

<table>
<thead>
<tr>
<th>Categories of description</th>
<th>Dimensions of variation</th>
<th>Perceptions of educator role online</th>
<th>Educators’ conceptions of online space</th>
<th>Nature of staff-student interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>Reviewing materials for online delivery</td>
<td>Unformed</td>
<td>Transmission</td>
<td></td>
</tr>
<tr>
<td>Reflection</td>
<td>Understanding dimension and context of teaching</td>
<td>Appreciation that it is different to face-to-face</td>
<td>Transmission with some consideration of difference to face-to-face</td>
<td></td>
</tr>
<tr>
<td>Interaction</td>
<td>Begins to consider online as a social space</td>
<td>Consider social aspects/ collaborative approach</td>
<td>Discursive</td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>Considers how can facilitate interaction</td>
<td>Two way communication/ students are considered partners</td>
<td>Collaborative/ Peer</td>
<td></td>
</tr>
</tbody>
</table>

Discussion

Some interesting findings emerged:

1) The respondents’ unexpected sense of community and ‘humanness’ of the online environment.
2) The comparatively late emergence of a sense of engagement with online teaching (not a prerequisite for development, but the result of experience).
3) A suggestion that effective academic development should be offered to online educators in two ways: initial technical instruction then additional developmental support after the initial online teaching has occurred.
4) No threat to their academic identity was expressed by this group of educators when moving to teaching postgraduate students online.

These results can be framed within the narrative of faculty growth proposed by O'Meara et al. (2008) that educators are central ‘players’ in the design of activities that will aid their development. Whilst such opportunity may (or may not) be afforded by academic institutions, educators have a responsibility for their own ‘developmental trajectories’. The results presented here clearly describe the importance of educator agency in developing into a new role, and specifically the importance of reflection in this
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development and putting educators firmly at the centre of their professional development.

In terms of academic development, if we better understand what is being learned (in this case becoming an online educator) we are better able to support learning (Neumann, 2006), putting learning and development at the centre of the academic role and highlighting the constantly evolving nature of academic work. These results provide a helpful example of educators’ commitment to teaching in being prepared to undergo this potentially difficult transformation.

Results from this study are broadly similar to previous work describing the role of both the online educator (Gonzalez, 2009) and the face-to-face teacher (Akerlind, 2004), evolving from teacher-focused to student-focused. Prosser & Trigwell (1999) suggest that educators with a teacher-focus tended to have students who focus on surface learning, whilst educators who focussed on what students were doing resulted in students adopting deep learning strategies. This work supports the findings of Gonzalez (2009) that an educator’s approach to their teaching will vary with context. The process described above illustrates this with an initial focus on a teacher-focused approach moving to a student-focused approach as educators became more comfortable in the online environment.

**Student-staff interaction**

This work supports the suggestion of McShane (2004) that online education is democratising educator and student roles, to the benefit of both groups. The traditional view of the academic in the ivory tower unsullied by the demands of the market economy is no longer credible. These findings suggest that it is the very nature of interaction and discourse with students that adds to the sense of reward described by this group of educators, with the online educator adopting a collaborative role, resulting in a ‘more intimate’ relationship with students (Conceiceo, 2006).

This insight will be valuable in training and supporting new online educators. It may also reassure and encourage those who have previously been reticent about teaching online, and fear that the personal interaction of the classroom would be lost online. Educators new to online teaching expressed surprise at the personal and sociable aspect to this type of learning, this insight largely afforded to both tutors and students by the webcams, and the locations from which students chose to log into tutorials during the synchronous sessions.

*There’s something really touching…it feels in a way that you build a stronger relationship with some of the people because you see their kids or their cats on screen... and I feel totally charmed by it.*

The social aspects of online learning can be easily overlooked, with a focus often on technology; however these results emphasise the importance of social interaction in successful online programmes with synchronous communication offering exciting possibilities for interaction with students and building international learning communities (Golden, 2016). This point is key in the development of effective programmes of professional development.

**Nature of the students**

The nature of the students taught will have a significant impact on the delivery and planning of teaching. Educators were asked about their experiences of teaching postgraduate students in this study, while their previous teaching experience was mainly undergraduate face-to-face teaching experience. There are likely to be differences in approach to teaching on this basis but this was not mentioned in any of the interviews; it is unclear if the experiences would be mirrored when teaching undergraduates online and this is worthy of further investigation.

This group of postgraduate students are working professionals who could be considered as the educators’ peers. Postgraduate students in the programme are actively encouraged to share their experiences and engage in a reciprocal learning environment and this can initially be an unexpected challenge to some staff (and students). This is not only in online programmes, with Leung and Kember (2005) reporting that part-time, face-to-face postgraduate students felt they had better relationships with staff and were more engaged with learning than full-time students, suggesting these students were more willing to engage with educators as equals and discuss real-life experiences, so enriching the learning environment for all. These findings suggest this relationship exists online.

**Training the educator**

Koehler and Mishra (2005) state that it is not so much technology per se, but the ways in which educators are using technology that is transforming online teaching. These findings highlight this important distinction that should be considered when creating development activities for online educators. Many online programmes rely on a number of external tutors who come in to deliver a few sessions and new training will result in educators with a better understanding of the possibilities and challenges of teaching online. Results suggest that this should include contextual information about the programme and consideration given to an understanding of the teaching process as well as the actual methods of teaching online (Akerlind, 2004). It is important that this is an ongoing process as our findings suggest that as staff become more familiar in the online environment they become more aware
of its potential in their teaching.

The outcome space described by this study supports the notion that the online educator has a number of different roles and the importance of these roles will alter as the educator gains experience. These participants articulated a desire for support; this requirement is more complex than can be satisfied by the delivery of ‘new to online teaching’ courses currently offered by many academic institutions. Certainly, there is a continuing need for such courses but also a need to supplement them with ongoing follow-up support allowing staff to reflect on their evolving understanding. De Gangne and Walters (2009) describe this transition as staff moving from a provider of knowledge to a facilitator of learning but also a need to supplement them with ongoing follow-up support allowing staff to reflect on their evolving understanding. De Gangne and Walters (2009) describe this transition as staff moving from a provider of knowledge to a facilitator of learning but also a need to supplement them with ongoing follow-up support allowing staff to reflect on their evolving understanding. De Gangne and Walters (2009) describe this transition as staff moving from a provider of knowledge to a facilitator of learning but also a need to supplement them with ongoing follow-up support allowing staff to reflect on their evolving understanding. De Gangne and Walters (2009) describe this transition as staff moving from a provider of knowledge to a facilitator of learning but also a need to supplement them with ongoing follow-up support allowing staff to reflect on their evolving understanding. De Gangne and Walters (2009) describe this transition as staff moving from a provider of knowledge to a facilitator of learning but also a need to supplement them with ongoing follow-up support allowing staff to reflect on their evolving understanding.

Overcoming challenges

We must remember that several of those interviewed had many years teaching experience and they were prepared to engage with a completely new way of teaching which was initially challenging. This may differ from the experience of those with less teaching experience. Educators in this study alluded to the fact that they initially found online teaching to be challenging; such challenges were initially technical and contextual with a clear need for staff to be better supported during the initial stages. While these challenges were disconcerting there was a realisation that online education was not only a new way of teaching but also provided an opportunity to move to a more discursive relationship with students. This challenge could be seen as a potential threat to the educator’s established academic identity; leaving a position of security when teaching face-to-face and becoming a novice online educator, but participants did not express this shift as a threat to their academic identity as has been alluded to elsewhere (Copploa, Hiltz & Rotter, 2002). This dissonance in educator identity is well described in the literature (Maggio, Daley, Pratt & Torre, 2018). Participants in this study expressed concern about the physical use of technology but did not see this as a threat, rather a challenge to be overcome, further supporting the growth narrative.

The practicalities of teaching online/ evolving pedagogy

Synchronous communication is the focus of the educators’ reflections, suggesting it has a bigger impact than asynchronous communication, in their experience. Both staff (from this study) and students (anecdotally in programme evaluations) have highlighted the sense of belonging and connectedness that these real-time sessions offer; whilst acknowledging that problems with internet connections could detract significantly from these benefits on occasion. When the technology worked well it enabled educators and students to have a brief glimpse, through webcam, into each other’s lives; important in the formation of the online community. Online postgraduate programmes that do not currently offer such modalities should consider doing so. Reflection is key to the evolving pedagogy of teaching online. This is explicitly discussed in category B, but is implicit in the whole model as the educator reflects on the process and considers their additional insights as their experience grows. Baran et al. (2011) stress the importance of reflection to educators, in a process of continual critical analysis that allows transformation of their understanding of their online teaching.

Online as a social space

Whilst initial anxiety at putting oneself ‘out there’ in a highly visible way online (Golden, 2014) was described by participants, there was a general agreement that moving to online teaching required a shift in the planning and delivery of their teaching. This shift largely related to the social and discursive aspects of teaching online that surprised participants, but this sense of online community influenced greatly the perceived satisfaction with online teaching. It is interesting to consider the teaching environment as an online space rather than merely a repository of information (Redmond, 2011) and this evolving consideration of online teaching challenges the roles and expectations of educators. Redmond also suggests that online can be a more intellectually challenging teaching space that requires educators to be willing to move from a place of comfort to challenge in their teaching:

... anything that takes you out of your comfort zone and away from what you have done all your life is going to be a challenge.

Conclusions

Based on these findings, we make the following recommendations about academic development activities for those new to online teaching.

1. Support educators’ agency focusing on the social and community aspects of online teaching and how to foster this.
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2. Take into account that the educators’ needs for academic development will evolve from technical to pedagogical as they become more experienced in teaching online. This learning while doing is likely to be of value to peers and this should be a shared process with others.

3. Make the most of opportunities for disruption in re-imagining academic staff development to empower online educators to more critically engage with this role and confront existing assumptions about learning and teaching, taking into account that a standardised approach will not be sufficient in addressing the complexity and diversity of online programmes in existence.

4. More work should be carried out to publicise how educators are teaching online, celebrating the innovation and creativity adopted in this dynamic and evolving area.

The model of developing as an online educator described here is a useful illustration of growth narrative in academic development; whilst acknowledging the constraints that adopting a new mode of teaching can place on educators, adopting a counter-narrative of growth can help overcome challenges and make new and valuable contributions to teaching and learning. This insight will be of value to those involved in online teaching and academic development more broadly.

Satisfaction with online programmes has generally been found to be related to engaged and motivated staff who are visible online; this framework suggests a means by which staff can be supported in this development. Limited information is available on staff perceptions of teaching online; previous research has focused on educators’ conceptions of teaching rather that their actual experience of teaching. This work considers the under-researched area of synchronous online communication with postgraduate students.

It is important to consider the limitations of the study; firstly, the study does not consider any markers of the quality of the teaching delivered by the educators nor any student perceptions of this teaching. Secondly, these results apply to one online programme and to a small group of respondents, however nothing specific to clinical education was raised, suggesting that there may be similarities in the experience of those teaching in other disciplines. This is worthy of further investigation. Thirdly, the participants all work at one UK institution, although several have worked at other academic institutions, raising the question of whether these findings would translate to other settings and it should be stressed that this is one model of online programme where technology is used in a specific way. It should be remembered that the participants in this study were those for whom online education makes up a small part of their work. There may be important differences between the experiences of this group and those for whom online teaching is their main mode of teaching delivery.

Biographies

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Academic identity and crossing boundaries: the role of the Programme Director in postgraduate taught programmes

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ABSTRACT

Taught postgraduate programmes (PGT) exist in a competitive global market and those leading such programmes have to chart a way through complex and often conflicting demands. Twenty-two Programme Directors (PDs) from one research-intensive university in the UK were interviewed individually about their experiences of leading PGT programmes. Interview transcripts were thematically analysed using Braun and Clarke’s method and we consider results in relation to circus acts, chosen to conceptualise the complexity and diversity of activities undertaken by the PDs, specifically: clairvoyant, conjurer, blindfolded tight-rope walker, trapeze-artist, contortionist and seasoned performer. PDs described the diversity of the role and high levels of autonomy needed to successfully perform it, but also perceived the role to be under-valued and not well understood or supported. Academic identity was considered to be fluid and permeable, largely related to PGT programmes often being situated on the boundary between academic and professional organisations, leading to many boundary-spanning behaviours. Teaching and student contact were the most rewarding aspect of the role, albeit with a strong sense that these senior teaching roles were less valued than research posts. In the absence of obvious support structures, a clear sense of trust and academic citizenship was reported in the provision of mutual support of others in the same position. There is a need to mobilise this nascent community to establish a strong coherent voice for this academic role to inform planning both for the support of postgraduate students and for those delivering the teaching.

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Academic identity; programme leadership; postgraduate study

Introduction

Expansionism in higher education has led to debate about the relationship between the academic role and the marketplace, we consider PGT to be particularly susceptible to marketisation given its close relationship to the professions and its income-generating potential. The growth of such programmes can challenge the perceptions, and redefine boundaries, of traditional academic roles. Some academic roles, such as PDs, will be subject to the increasing commercial imperative of becoming ‘weapons of mass attraction’ (Patten, 2003, p. 8).
The growing number of students engaging in taught postgraduate study in the past three decades is well documented (Morgan, 2015), with 29% of all qualifications earned in the UK in 2014/2015 being PGT degrees (UK Council for Graduate Education [UKGCE], 2018). PGT programmes offer a valuable income stream to academic institutions as there is no centrally imposed restriction on recruitment and fees. Any drive to increase postgraduate recruitment places pressure on those delivering these programmes to maintain quality while accommodating more students. With an increasing number of PGT programmes, the number of academic staff undertaking this role is increasing, yet the scope of the activities undertaken and the key elements of the PDs contribution have not yet been clearly articulated.

Programme Directors often find themselves at the boundaries of academic work and the professional field in which their programme is delivered. Milburn (2010) reported that the PD role suffered from a lack of recognition, describing the role as being uniquely placed at the interface of teaching delivery and policy in undergraduate programmes. Mitchell (2015) interviewed seven PDs of PGT programmes along with 54 postgraduate students and described the pivotal, but ill-defined role of the PD, utilising Krause’s (2009) description of a ‘boundary-spanner’; whether between the university and the student, or the university and the student’s workplace. The need for the PD to act as a visionary as well as the ability to undertake the more functional aspects has also been described (Mitchell, 2015). Cahill, Bowyer, Rendell, Hammond, and Korek (2015) discussed the diversity of the post in one post-92 institution, finding that staff felt ill-prepared to undertake the role highlighting a need for training and support. PDs have been described as being situated between ‘a rock and a hard place’ (Macleod, Barnes, & Huttly, 2018).

Those working in areas with conflicting pressures occupy what Boud (2006) termed an ‘in-between’ space. Academic work can no longer be considered simply as a teaching: research dualism, this oversimplification leads to omissions and gaps in organisational knowledge that can impact on the recognition and professional development of staff. We suggest that the PD can be considered to have adopted an entrepreneurial role, with the academic programme akin to a business start-up, with PGT programmes at the interface of academia, the professions and commercial pressures. The challenge of reconciling the conflict between academic identity and the commercial drivers currently in ascendance in higher education is an example of role strain, described as pressure on staff when their beliefs are compromised by organisational imperatives they may find problematic (Churchman, 2006).

Gieryn (1983) referred to the actions of individuals in defining the autonomy of their role as boundary work. Work boundaries are affected by external socio-political factors (Beck & Young, 2005) and can be uncertain and blurred, particularly in roles where a wide range of skills are required. Studying the identities of professional services staff, Whitchurch (2008) considered the fluidity of identity and developed a conceptual framework, categorising staff as being bounded (those who function within existing institutional boundaries); cross-boundary (those who work over boundaries and utilise their knowledge of both sides of a divide) and unbounded professionals who largely disregarded existing boundaries. The terms are not used pejoratively but we feel there is an association between the perception of being bounded and potential resultant role strain, particularly in cross-boundary and unbounded roles where there is a more fluid conception of identity.
Whilst change and uncertainty can be challenging they can also provide opportunities. Whitchurch’s framework allows us to examine the niche that PDs have established for themselves in seizing the opportunity to define this emergent role.

Working professionals increasingly view PGT degrees as a means to advance their careers. Many PGT programmes run part-time to allow students to combine work and study, crossing the boundaries of professional and academic settings in a recursive manner. While teaching occurs in one setting (the academic institution) it is likely that learning will occur both in the university and the workplace as the student moves between settings, conceptualised as a horizontal process (Engeström, Engeström, & Kärkkäinen, 1995). Boundary practices are conceptualised by Wenger (2000) as emerging from the interaction between two sites, in this case the workplace and academic institution. The potential of learning at boundaries has been recognised previously (Akkerman & Bakker, 2011), with Wenger (1998) suggesting that it can afford a degree of externality and boundary practices offer a useful way to consider the learning opportunities that occur where boundaries are blurred.

There is an increasing amount of work regarding the experiences of PGT students (Aitken, Jones, Fawns, Sutherland, & Henderson, 2019; Kember, Ho, & Leung, 2016; Sethi, Schofield, Ajjawi, & Mcalleer, 2016) but as recently noted (Macleod et al., 2018), less attention has been given to those staff involved in delivering such programmes. There is a need for these staff to actively engage with this debate and contribute their experience to this development in understanding of the role and its contribution to PGT study. This understanding will inform the development of appropriate support structures for current and future PDs.

Methods

The aim of this study was to explore how PDs negotiate the demands of a little understood role. An exploratory qualitative study was undertaken with experienced PDs, individual interviews were chosen to allow individuals to explore the role and discuss their own perceptions of the dimensions and responsibilities that the role entails and the support required.

The researchers are a PD of a long-established online programme in Clinical Education (GA) and a PhD intern (SO). A small educational grant was obtained by a group of PDs to employ SO to undertake the interviews. Institutional ethical approval was obtained and emails were sent to all those involved in the leadership of PGT programmes with an invitation to participate. Twenty-two PDs agreed, gave informed consent, and were interviewed. Interviews were audio-recorded and professionally transcribed. All data in transcripts and recordings were anonymised, with participants assigned a unique participant code: PD01-22.

Context

This work was carried out at the University of Edinburgh, an ancient, research-intensive institution. A recent Universities UK report (2016) suggested that research reputation was an influencing factor in the choice of institution in 94% of international PGT students. In
2017/2018 almost a quarter of all students at the University of Edinburgh were PGT students (University of Edinburgh, 2018).

The PDs represent a wide range of programmes relating to business and management, biomedical sciences, design, nursing, dentistry, medicine and veterinary medicine and education. Programmes varied in terms of total students enrolled: the average number of students in the programmes within our study was 40, with the largest programmes recruiting up to 100 students per year. Further information is provided in Table 1.

Data analysis

Transcripts of the interviews were subject to thematic analysis to identify recurring themes within the data. Braun and Clarke’s six-phase approach was employed (Braun, Clarke, & Terry, 2014). The first stage of data analysis was familiarisation with the data. Transcriptions were read over by both researchers with notes being made in the process, this was followed by the generation of initial codes, descriptive codes were created from the transcripts followed by a list of themes generated from, and expanding on, the initial codes. This was done by reading through the codes and finding areas of overlap to create a comprehensive list of themes that identified meaningful features in the data. The list of themes was reviewed alongside the data to ensure that the themes adequately captured the information in the data. Two participants agreed the themes were representative of their experiences. Themes were named and defined, aiming for succinctness and accuracy. We acknowledge that this characterisation does employ a degree of inductive reasoning more commonly associated with narrative inquiry.

Results

It is clear from our interviews that the role of Programme Director is multifaceted and requires considerable professional experience, suggesting that a functionalist view of the role is likely to be problematic when considering the complexity and dynamic nature of

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<td>Inherited an existing programme</td>
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<td>On campus programme</td>
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<td>Delivered both as online and on campus offering</td>
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*those from health-related programmes are referred to as having clinical backgrounds, non-clinicians are referred to as professional.
the post. Therefore, we have avoided the temptation to produce a list of tasks as might be found in a job description, and instead portray the intricacies of the role and the tensions inherent within it.

In an ill-defined position such as this, individual PDs had moved beyond what might be considered typical boundaries of academic work necessitating a more commercial approach. Our interviews illustrated significant variability in professional experience before coming to work as a Programme Director. The diverse skill-set acquired over many years was seen as advantageous in a role with a considerable degree of autonomy.

The PDs interviewed described their involvement in numerous capacities including: programme development, curriculum development, teaching, technical support, financial planning and management, quality assurance, marketing, human relations, line management of staff, pastoral care of students, and innovation within the programme. It was clear that most felt a degree of isolation, largely relating to perceived ambiguities in perceptions of the role. Being a PD was seen as intimately related to the individual’s academic identity:

*It’s a massive part of who I am as well. It’s not just a job … You don’t just leave at 5 o’clock. You know this follows you about everywhere.* (PD05)

Given the diversity of tasks undertaken and the complexity of the role, the analogy of circus performers has been used to conceptualise the activities undertaken by PDs to illustrate the convoluted nature of this work to those unfamiliar with it. Superficially, the PD might be considered a Ring Master, yet we consider that this role is actually realised through the negotiation of multiple and, sometimes, conflicting ‘acts’: clairvoyant, conjurer, contortionist, acrobat, blind-folded tightrope walker and seasoned performer.

**The clairvoyant**

Developing an overarching vision for their programme was seen as vital but requiring the skill of a clairvoyant, partly due to the ill-defined terrain within which programmes sat. There was an acknowledgement that part of this ‘visioning’ meant programmes were in a constant state of evolution and adaption to ensure they remained current and competitive, reflecting the volatile marketplace that PGT programmes inhabit. It is not clear if, or how, this vision is shared within the wider institution.

*I think as Programme Director you have to have a vision, and you can’t leave your programme still, so it has to keep evolving … in order to survive, it has to keep evolving and moving, and that takes a lot of time.* (PD06)

PDs were required (without training) to have good market awareness, credibility to attract students and were under commercial pressure to succeed.

*I don’t think people understand this academic entrepreneur aspect, they still think it’s another teaching job and it’s so much more than another teaching job because you’ve got to generate income and you only do that by having an exceptional education experience, not only generate income but generate more each year.* (PD05)

PGT programmes were considered a work in continual development in response to perceived student need, with little or no central strategic oversight. However, PDs enjoyed the autonomy and flexibility implicit in this aspect of the role. PDs considered
financial issues carefully, seeing programmes as a discrete entity, in many regards treating programmes as business start-ups.

_I feel like you can shape it in a way that you feel is much more relevant for the students who want to come here, and for our UK students as well, as can shape it in a way that is much more cutting edge._ (PD11)

Many of those questioned did not have traditional academic career trajectories, half came to the PD role after a previous career, often within the profession that they now taught, thus affording a unique insight into the students’ needs, helpful in ensuring the continuing currency of the programme offering.

_I think that’s what the students like about what we do …… credibility in the real world._ (PD06)

The visioning aspects of the role were rooted in PDs’ perceptions of the needs of students in their area and their own professional expertise, however this was tempered by a large degree of uncertainty common to anyone trying to predict the future.

**The conjurer**

Similar to those performing magic tricks, like pulling a rabbit out of a hat, those interviewed spoke of the seemingly endless tasks they had to accomplish, often without clear institutional guidance or training.

_It’s an impossible request that is put on you. Having to try and sort of accommodate, but also explain yourself to people that don’t really have a clue what your job is …… [they]view it as a simple black and white business model where if you get x students in and you get x amount of money in and you get this coming out._ (PD08)

Strategic management skills (often without specific training) were necessary to set and maintain a clear direction-of-travel for the programme, with the ability to translate this to day-to-day management and delivery.

_I’m responsible for the academic trajectory, I’m responsible for the administration of academic standards, I use the administration word carefully there, so that I’m also managing and encouraging colleagues who are contributing to the course. I also deliver quite a lot of the course myself._ (PD19)

Many PDs expressed surprise and feeling unprepared for the range of tasks involved.

_The main thing I was a little bit less prepared for was the breadth of tasks that you’re expected to accomplish when you have kind of no real qualification to do so …… similar to asking an academic administrator to come in and do a bit of dissertation supervision, you wouldn’t expect that, so I don’t know how I could be expected to be a marketing expert or a businessman._ (PD08)

Despite the clear enthusiasm and commitment for teaching expressed, this teaching focus was not considered to be helpful to the individual’s career progression.

_They’re happy to take the money but …… that money gets filtered off to everything else; it doesn’t come back into the teaching. There are no teaching posts; they don’t reward teaching particularly._ (PD01)
There was a sense almost of embattlement within the group with the perceived tension again seen to relate to the perceived limited value and power associated with teaching roles in the institution.

So, the university right now, is a place where it’s desperately trying to engage with teaching, but doesn’t have the institutional knowledge and capacity to make anything like the informed decisions to actually improve teaching, rather than desperately firefighting a problem that they have ignored for decades now. (PD19)

The blind-folded tightrope walker

The surefootedness of the tightrope walker was required to negotiate the complexities of the role. Balance was needed when making difficult decisions, often without a clear sense of the direction of travel, hence the reference to being blind-folded. All PDs interviewed discussed the pressures of the role, with much of the work considered to be unseen leading to a very limited external understanding of what responsibilities the position entailed, along with a lack of institutional visibility. This opacity led to the expression of considerable frustration.

As just a teacher, you have over summer to carry out your own research and such. As a Programme Director you don’t necessarily have the time to do that because you’re either reflecting on what’s gone well, what needs to be improved, you’re getting ready for next year, you’re dealing with enquiries with student admissions, you’re dealing with also writing references and such. So, people don’t really see necessarily the time it takes. (PD04)

All of the participants had similar headline experiences of acting as a PD but variation in the role was apparent and there were reported differences relating to the local school context, highlighting the problematic issue of providing centralised support for the role

I think to a great extent there is really no support or training for the role of Programme Director, and it’s probably a somewhat ill-defined role, and it probably does change substantially, depending on the departmental environment. (PD09)

Relating to observations that the role was not well understood was a concern that the role was not accorded sufficient recognition, related to perceptions of this being a teaching, rather than a leadership role, in a research-intensive institution.

I do think being a Programme Director has to be taken seriously … there’s a real danger that people don’t take it seriously and just go through the motions and sort of think, well, I’ll only be doing this for four years, and I think here I have noticed with some of the younger academics that there is a sort of conservatism and maybe a thought of, ah, research is still the thing. (PD17)

The contortionist

Certain university processes were perceived as inhibiting creativity in design and innovation, often leaving PDs to jump through hoops to comply. Considerable frustration was expressed about what were often considered unhelpful academic regulations and policy developments that did not seem to be a natural fit for PGT provision. For example, policies regarding special circumstances or assignment extensions.
There are things happening at central university level that we only get to hear about as a fait accompli, and sometimes you’re left thinking, well, why the central university is trying to make my job harder. (PD09)

PDs reported trying to work out what to do with policy decisions coming from an undergraduate perspective. This reactive position is at odds with the more proactive nature of the post-holders.

They take all of the feedback from the undergraduates that they get because they’re the main market and then they try… they roll all these things out saying that this will impact the whole of the university. (PD01)

PDs often find themselves in delicate positions between two conflicting stakeholders. This could be between university policy and the individual needs of a student, or a preferred way to develop a programme that does not comply with current academic regulations, or it could be translating the demands of a professional body into a deliverable academic programme.

The trapeze artist

The trapeze theme conveys the sense of trust and mutual reliance that had built-up between PDs and trusted colleagues that compensated for perceived deficiencies in institutional support. The role felt like it required performing challenging feats (e.g., increasing student recruitment) in the face of policy and administrative decision-making not always sufficiently informed by PGT student’s needs. All those questioned reported that they could be better supported within the role, particularly at the outset. This can be likened to the provision of a safety net until proficiency is achieved. Whilst there were a lot of commonalities some key differences emerged suggesting that the required support is unlikely to be a one-size-fits-all training programme. There was, for example, a clear difference in perspective reported by those who started programmes as opposed to those that inherited the role from someone else.

Now I also know that there’s other types of Programme Directors who don’t start the programme from a blank sheet of paper and that’s a huge difference and I think sometimes the university doesn’t understand, or people in the university, don’t understand the difference between inheriting somebody’s programme and actually starting from that blank sheet of paper with nothing. (PD10)

PDs who inherited the role from someone else were often able to tap into a source of mentorship and guidance from their predecessor in the role. This not only helped them prepare for the role, but also allowed for a realistic view of what the day-to-day responsibilities and work would look like.

… for that year before I officially took over, I kind of acted as a co-director of the programme with the existing, at the time, Programme Director, so it’s kind of… I went through the motions of things for that year, which did help a lot, because you get an idea of timescales for things and again, the volume of administration that’s involved, the crazy early deadline things have to be done by before they actually come into play, and just those more intricate and detailed things that you’re not really aware of until you start doing them… it allowed me to feel more confident when I started. (PD09)
Not all PDs had the opportunity to shadow their predecessor (if they had one) and training, or lack of it, was mentioned frequently in the interviews, with many participants expressing frustration at feeling ill-prepared for the scope of the role.

So, I’d say there’s so many different aspects to it that you’re just not trained for, and certainly for the first few years you’re sort of scrambling around trying to work out what’s happened, but it gets easier every year, but again all of your time’s taken up with stuff that you’re just not trained … initially trained to do. (PD07)

Specifically, participants mentioned a lack of training in business management aspects of the role including marketing and financial management.

I think the areas that I feel lacking in are general management and financial matters, financial processes, and I think although the university does have management training and does have financial training, it’s … a lot of it is more dedicated towards research activity, PI training, managing your research group, all this sort of thing. And actually, something that was more bespoke to managing within a teaching organisation context or within a graduate school context would be interesting, would be useful. (PD09)

Those delivering teaching were considered not as well catered for as those primarily engaged in research in terms of staff development. In the absence of formal training for the role and a crucial need for support, many relied on colleagues or other PDs for informal support. Participants mentioned that it was often easier to rely on colleagues in similar roles who better understood the intricacies and particular issues encompassed within the role.

Colleagues … could not be more helpful, so there’s a lot of public spirit, lot of good citizenship, academic citizenship around. (PD09)

The seasoned performer

Those undertaking the PD role tended to be well-established professionals who were committed and enthusiastic teachers keen to pass on their knowledge to the next generation. Teaching was viewed as not only paramount to the success of the programme, but also as the most enjoyable aspect of the role – it is clear that PDs value the relationship that they have with their students. All participants mentioned the importance of maintaining positive and interactive relationships with students and its impact on their job satisfaction.

The best part of the job is always going to be the students, definitely. I enjoy the students, it makes me happy when they’re happy, and it makes me incredibly sad when they’re not happy, so I would say that’s probably … I mean, that’s supposed to be all about. (PD07)

Development of meaningful, trusting relationships was consistent across participants, irrespective of whether the programme was on-campus or online.

I know everything about the students because I get countless emails, discussion board [posts] so you’re speaking to the students seven days a week. I know more about those students than I think probably most lecturers would with on-campus students. (PD07)

The student contact was something all participants referred to and indeed, many were drawn to the role because of the teaching and the challenges of a senior teaching role. There was a clear sense of delight and enthusiasm in engaging with students:
I mean, it’s relentless but it’s dead exciting in September when you meet with these new people with all these different backgrounds and their different needs and you get to know them a bit over the year. (PD18)

While PDs were unanimous in their enjoyment of teaching, there were also concerns expressed at a perceived change in the needs of postgraduate students leading to some ambiguity within the teacher-student relationship. Specifically, some mentioned that PG students were not displaying the same level of autonomous learning and initiative that was apparent in previous years, requiring more support, with this pressure felt acutely by the PDs.

They want to know exactly what do I have to do to pass this rather than coming in to explore the subject and to read around it; to be looking at all the different research that’s going on. They’re really not interested in that, they want the facts and it’s, sort of, the bare minimum. They also have quite a high expectation of staff. Anybody that’s involved in the programme they do expect, even over weekends, for you to answer. (PD05)

It is unclear if this perception is related to any change in student characteristics or an increase in student expectations related to increasing PGT fees leading to students demanding what they identify to be value for money.

You could use the word demanding or you could use the word motivated, or you could use the word – I don’t know – you could use lots of euphemisms for … yeah, for asking a lot more of us which isn’t wrong. You know, I think that’s what we’re here for and again they pay us a lot of money, but I think those two things do go hand in hand. I think there is a much greater sense of people wanting value for money. (PD12)

Discussion

This group of PDs are clearly committed and enthusiastic teachers all reporting considerable job satisfaction in a post largely intertwined with their own academic identity, but this was tempered by frustration largely related to feeling ill-equipped to undertake the role initially nor feeling supported or valued. The PD manages numerous, often contradictory, demands whose successful navigation communicates the innovative and creative nature of this group of academic staff. Describing the various roles undertaken as circus acts illustrates this creativity and the challenging roles undertaken. By articulating the scope of PD activities, we shed light on the boundaries of their practice, examining boundaries (Akkerman, 2011) and making them explicit allows a better understanding of the interactions that occur here.

PDs reported difficulties in negotiating the complex environment in which PGT resides complicated by the lack of understanding of the role and necessitating a need to cross boundaries or stray into territories where there were no existing conventions. Academic work is diverse and complicated and a reductionist approach is unlikely to capture the inherent complexity of academic labour. Fanghanel (2007) calls for a more sophisticated approach when considering academic endeavour to avoid disempowerment and trivialisation. This group of experienced PDs articulated a clear understanding of the role but this had not been apparent to them when they started, thus it is unsurprising that the role is not widely understood. PDs need to do more, individually and collectively to describe the role and its value; scoping responsibilities and accountabilities is likely to be fruitful and ameliorate some of the reported role strain.
With the activities of universities increasingly aligned to wider economic growth (Olssen & Peters, 2005), the entrepreneurial spark apparent in this group of academic staff is to be nurtured. The entrepreneurial challenge for PDs outlined above could be informed by the business literature on internal start-ups. See, for example, Govindarajan and Trimble (2010) who consider why internal innovations (such as PGT) described as NewCo, inevitably run into conflicts in their institutions (CoreCo). The PDs questioned felt this pressure acutely and there was clear tension reported in balancing the tightrope of student demands and pressure to increase student recruitment along with inexorable increase in fees. Difficult conversations are needed about the wider institutional drivers for postgraduate study and how this should be financed.

It is interesting to note the spirit of collegiality within this diverse group challenges the notion of individual and institutional competitiveness championed in neoliberal policies. Success of individual programmes is undoubtedly related to the efforts of individual staff members but also the generous sharing of the tacit knowledge of how to run an academic programme. The visioning and future-gazing undertaken by PDs could usefully be shared internally, as well as externally, to afford a better understanding and appreciation of the role. The degree of isolation that many programmes operate in, combined with the relatively small programme teams suggests that a more concerted voice of PGT within the institution could lead to enhanced visibility.

These interviews highlight the diversity of the role but also that it is one pivotal to the success of the associated programme. PDs are experienced and committed teachers but they feel that they are swimming against the research tide in terms of recognition and reward for their efforts. This supports previous work discussing the current dominance of research in defining professional identity within universities (Barnett, 2003). Conceptions of teaching as secondary to research in terms of interpreting existing knowledge rather than creating it prevail (Badley, 2002). PDs occupy a unique position in this regard, as they have a clear understanding of their students’ needs and the expertise to build academic communities to develop shared understanding in new areas.

While the PDs relished the autonomy that the role afforded this was qualified by a desire for greater support, particularly when new to the role. Further articulation of the PD training needs would allow a clearer understanding of the role. A one-size-fits-all training programme is unlikely to be helpful given the diversity of the group but a rolling programme of events for learning and discussion would be beneficial. Given the perceived need expressed for training in business planning this might be a fruitful place to start.

These PGT programmes are primarily based on social pedagogies, recognising the horizontal nature of student learning between the academic and professional workplace, so it is perhaps unsurprising that PDs have developed support structures along similar principles. Any initiative aimed at supporting the role should harness the existing academic community in its development. There is a considerable amount of expertise, particularly in the larger, longer established programmes (the ‘seasoned performers’) and sharing this expertise more formally in the mentoring of colleagues would be a helpful innovation. Given the growth agenda apparent in most academic institutions it is important that staff groups such PDs in teaching leadership roles be supported in their development with a clear need for more senior teaching appointments to lead this process.
Almost half of the PDs interviewed had professional backgrounds and came late to a career in academia. These individuals come with a maturity and diverse skill-set that enabled them to juggle this complex role successfully but this is likely to have implications for any support for this group. Inherent in this change in career are potential difficulties in navigating the academic landscape, the move into academia from the professions is likely to remain attractive to those who wish to give something back (developing the professionals of the future) and HEIs should consider how best to support this transition.

The visionary role described by all PDs is important to ensure the continuing relevance of their programmes, particularly in the absence of financial and managerial safety nets. PDs understand the needs of PGT students but expressed concern that this appreciation is not shared by those making strategic decisions that have a potential impact on their programmes. As the numbers of postgraduate students increases there is a need for staff involved in such programme delivery to have a greater influence on policy.

Concerns expressed by PDs about perceived increases in student demands is supported by work looking at the transition to postgraduate study (Tobbell, O’Donnell, & Zammit, 2010), the completion of an undergraduate degree does not necessarily result in expert students who are ready to undertake postgraduate study. Bamber, Choudhary, Hislop, and Lane (2017) extend this, suggesting students need to be better prepared for postgraduate study, with the setting of explicit expectations and the provision of sufficient support to realise these expectations. The PD has a key role in managing this transition and resultant student experiences by planning and innovating curricula to better support their students’ needs. This takes skill and experience and PDs need both academic and professional knowledge and credibility to undertake the role successfully. It is incumbent on PDs to lead this conversation within their own institutions and continue the development of appropriate support structures for postgraduate students.

Limitations
This work discusses the PDs in one institution and no claims are made about the generalisability of these findings. However, the size of the institution and the diversity of the programmes, coupled with the similarity to previous findings suggests there are likely to be commonalities with PDs in other institutions who run PGT programmes.

The conclusions are based on one data source and we make no claims about the effectiveness of the PDs questioned or their leadership abilities attempting instead to better understand the complex range of activities post-holders undertake.

It should be acknowledged that the motivations for undertaking this work largely came from a group of PDs who feel that the role is currently not well understood and has been written from the stance of an experienced PD (GA).

Conclusions
Many PGT programmes have grown organically over time, often through the efforts of small numbers of committed and enthusiastic staff. With the expansionist nature of the higher education sector, and the increase in non-university providers of learning resources, the competitive marketplace that PGT programmes find themselves in is resulting in pressure on those who lead these programmes. This pressure comes not only from
increasing student numbers, but also a perception of students’ growing expectations of their studies.

It is too easy to rail against what PDs perceive as injustices but it is incumbent on this group of senior educators to co-ordinate themselves into a coherent body and speak with an authoritative voice to lead the debate on the value of taught postgraduate programmes. Working across existing academic boundaries is a privileged position, offering a unique understanding of the needs of PGT students and a united approach will help advocate for this group of students.

Our results articulate the complexity of one academic role and suggest that those undertaking it do not feel well supported personally, or that their role is well understood. They are largely motivated by their enthusiasm for teaching and the enjoyment they get from engaging with students. The desire to engage with the next generation of professionals and support them in their learning is key to academic practice (Rowland, 2006). Given the visibility of the role, and its importance in any growth and development, better understanding and support for those in the role is required. This applies to those currently in the role and should also include the establishment of formal structures to support those new to it. This should be a two-way conversation as PDs function at a unique level at the boundaries of policy and teaching, but also teaching and the workplace. PDs are well placed to support students in dealing with complexity and ambiguity in the workplace as they are negotiating these themselves on a daily basis.

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Participatory alignment: a positive relationship between educators and students during online masters dissertation supervision

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ABSTRACT
The expansionist nature of the higher education sector has led to an increase in the provision of online Masters programmes. Many of these programmes are offered part-time attracting working professionals. The dissertation component that can be the culmination of many of these degrees is largely unexplored. A constructivist grounded theory investigation of the relationship between online Masters dissertation students and their supervisors was undertaken. Five supervisors identified a recent graduate and each were interviewed independently; interviews were undertaken online and audio-recorded. Transcripts were analysed and resultant themes considered in terms of establishing, and then maintaining, the relationship. A model of participatory alignment is proposed to describe the relationship that developed online in this group of supervisors and graduates, based on aligned expectations and behaviours, building on the idea of supervision as a partnership. We propose there is a zone of participatory alignment with both under and over-alignment becoming potentially problematic.

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Introduction
The expansion in online postgraduate education provides the opportunity for professionals to gain higher-level degrees with the flexibility of remaining in employment. The needs of these students are likely to be very different from those of undergraduate students, and even on-campus masters students. This group is typically older, bringing their professional expertise to the academic environment and are encouraged to examine and reframe their assumptions and existing knowledge through critical analysis and reflection, resulting in potentially transformative learning experiences (Mezirow 1997) and potential impact on professional practice (Aitken et al. 2019). As the number and reach of online programmes expand, online educators have been challenged to reflect upon their assumptions of pedagogical practices and develop new skills to meet the needs of a growing, and diverse, student population (Baran, Correia, and Thompson 2011).
Relationships between academic staff and students have been widely researched. However, there is a paucity of literature investigating relationships between educators and masters students (Schwartz and Holloway 2012), and even less is known about connections between educators and online postgraduate learners. Chikte and Chabilall (2016), suggest that supportive environments and trusting relationships are necessary for effective supervision. However, the ways in which Masters supervisors and students go about developing trusting, honest yet critical, mutually respectful relationships remain poorly understood.

The concept of ‘social presence’ relates to characteristics that connect individuals, like empathy, caring and disclosure of personality (Schutt, Allen, and Laumakis 2009), that positively influence the supervisor-student relationship (Oztok and Brett 2011; Richardson and Swan 2003). Gorsky and Blau (2009) reported online supervisors who responded promptly achieved high student ratings in social and teaching presence, enhancing the perceived learning of the students. Creating a positive social presence is key to effective online supervisory relationships, however it is unclear if the relationship can be perceived as too close, potentially negatively affecting learning outcomes. As we will see, our own model of participatory alignment, described later and visualised through Figures 1 and 2, suggests that this can be the case, and that social presences and friendliness need ongoing management in order to maintain positive and productive alignment of the supervisory relationship.

O’Shea, Stone, and Delahunty’s (2015) work alluded to online students reporting that their supervisors appeared inexperienced in using technology to communicate effectively, or not having reflective awareness of verbal and non-verbal communications via online media. Their assumption that supervisors were more skilled in face-to-face interaction led these online students to feel like an inferior population within the university. Supervisors that ‘transcended the online environment’ (2015, 49) were considered to have

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**Figure 1.** Participatory alignment.
adopted high levels of pedagogical practice. Yet, while technology is the vehicle that allows the interaction between educator and student, affording individuals from all over the world the opportunity to interact, the professional nature of these students may be even more pertinent to the supervisory relationship. These students often come with a very clear idea of what it is they wish to study and this is often situated in their own professional practice. Academic staff must recognise the experience and expertise of postgraduate students and there is a suggestion that such students enjoy a more equal relationship with academic staff (Kember and Leung 2005), interacting as fellow professionals.

Establishing a positive relationship during a dissertation can have its challenges and requires commitment from both the supervisor and student. Cornelius and Nicol (2016) suggests that the online relationship begins with an open discussion on expectations of both supervisor and student roles. This clarity of expectation can also facilitate the shift of power from the supervisor to a more equal distribution. Anderson, Day, and McLaughlin (2006) explored the ‘task orientated’ relationship between on-campus postgraduate students and supervisors during the dissertation process. They suggested that supervisors are required to perform a double duty: as gatekeepers and as teachers with a personal commitment to supporting students to develop autonomy within their research practice. This group of students can also be considered to be performing a double duty, not only undertaking a dissertation but also as working professionals undertaking study to advance their understanding of their professional practice.

The developing neoliberal discourse of supervision in higher education positions students as consumers, and has profound implications for the supervisory relationship and the balance of power within the relationship (Grant 2005; Regan et al. 2012; Cornelius

Figure 2. Establishing and maintaining participatory alignment.
and Nicol (2016). Lee (2017), for example, suggests that supervisors are increasingly seen as providing a contractual service, a pressure that may be particularly acute in postgraduate degrees which are often paid for by individual students or their employers. While there is clearly a power dynamic between the individuals, the supervisor and student as a pair can be seen in terms of Dysthe’s (2002) suggestion of supervision as a partnership (rather than the alternative ‘apprenticeship’ or ‘teaching’ models she proposed). Schwartz and Holloway’s (2012) grounded theory research concluded that supervisors and students had the capacity to be ‘partners in learning’ during an on-campus, taught Masters programme with supervisors reporting being rejuvenated by their supervisory experiences in ‘giving something back’; with students reconstructing (their prior knowledge), suggesting that a space for collaboration and connection can occur. The findings of this work prompted our curiosity to broaden the conversation, by exploring the supervisory relationships that developed over the course of the final year of an online Masters degree, from the perspectives of both the student and the supervisor.

Methods

Constructivist grounded theory (CGT) is a popular research methodology within health and education (Mills, Bonner, and Francis 2006). It is a useful methodology for investigating undertheorized areas, such as in the present study. While helping researchers stay close to the data, CGT allows acknowledgement of their impact on the study, and of the inter-relationships between researchers and participants. This is an important consideration for our study, since all authors were actively involved in dissertation supervision at the time of the study (three as supervisors, one as a student).

Starting with a question, CGT is a structured method of data collection and analysis, allowing the generation of theory constructed from the data. Our starting question was:

What are the factors mutually perceived as a positive influence on the supervisory relationship in the master’s degree dissertation?

CGT is not concerned with uncovering universal truths but searching for meaning within the data. It involves an iterative process that embraces the researcher’s experiences, position and disciplinary perspectives, acknowledging that researcher participation is inevitable and necessary in the development of theory (Charmaz 2014). This does not need to be a limitation and can, in fact, support understanding of the data (Glaser 1978). Thus, theory is a co-construction emerging from the interaction of the participants, context, data, and researcher (Charmaz 2008). Two of the authors, (KS and GA) were in a supervisory relationship (around a Masters dissertation) when this work was undertaken and their personal experiences of the research naturally influenced the development of the research, findings and discussion. Cognisant of the importance of self-awareness and the influence of preconceived ideas, we remained mindful of this during data collection, analysis and interpretation, each keeping detailed research diaries. These were also used as a form of sense-checking the themes constructed during analysis.

This work was undertaken in a research-intensive university in the UK that has an increasing number of online taught postgraduate programmes. Typically, these programmes culminate in a dissertation in the final year of study, the format of this work varies throughout the institution but academic regulations state that it should form a
significantly piece of work, accounting for 600 hours of notional effort. Students are allocated a supervisor from the institution and are encouraged to undertake a study of relevance to their own professional practice. Contact between the student and supervisor varies on a case-by-case basis and, due to the geographic spread of students, generally occurs online, either using video-conferencing or email. There are no clear institutional guidelines about how many contact hours are required throughout the dissertation, or how the supervision should proceed.

In this initial exploratory investigation, five experienced supervisors were approached and all agreed to participate. Supervisors came from a diverse range of programmes, including biomedical sciences, digital education and public health. Supervisors were asked to contact a recent graduate that they felt they had a positive relationship with. We chose to investigate positive relationships in the first instance to identify salient factors that could then be tested more broadly. Participants were interviewed individually rather than in pairs to mitigate any perceived power differential (although the supervisor had judged it a positive relationship, we did not yet know the student’s perception) and encourage an honest and safe environment for each participant. Ten interviews were undertaken in total, five supervisors and five graduates. The graduates were all working professionals with various backgrounds and included a medic, vet, learning developer and educational consultant. The Institutional Review Board Ethics Committee at the School of Education, University of Edinburgh approved the research. All participants gave informed consent.

Supervisors were chosen by our perception that they were information-rich (Sandellowski 2000) and experienced in online Masters supervision and would have insightful opinions on their experiences. The University of Edinburgh is a large institution but the numbers of staff experienced in online Masters supervision is relatively small, we therefore recruited staff we felt would provide key informant samples (Marshall 1996), coming from a mix of professional backgrounds. We make no claim about the generalizability of the findings but offer our model of participatory alignment (see Figures 1 and 2 within the Discussion) as a tentative way of explaining what we saw as the factors underpinning positive relationships between faculty and online postgraduate dissertation students.

Data were collected via in-depth interviews that began with open-ended questions, focusing on the supervisory relationship and what influenced its development. Questions started with an invitation to describe the participants experience of supervision and move on to consider what work well and not so well. Finally, participants were asked to consider what they considered to be helpful and unhelpful behaviour in the supervisory relationship. The researcher probed participants to delve deeper into their experiences as the interviews progressed (Tavakol and Sandars 2014). As transcripts became available, they were sent to each participant. This process of ‘member checking’ (Ringsted, Hodges, and Scherpbier 2011) invited the participant’s further contributions once reflection on the interview had taken place. No amendments were proposed.

Data were analysed through an iterative process of constant comparative analysis, reading and re-reading transcripts line-by-line. New participants were interviewed concurrently with data analysis, allowing the researcher to formulate questions based upon insights from previous interviews. Once the initial set of codes was identified, KS reviewed all transcripts to develop core concepts to explain our developing understanding. These
were discussed with GA, who had independently read and coded four transcripts. Throughout this process, KS and GA wrote reflexive memos which informed our thinking about broader categories and the overarching theory. Once preliminary categories and a theoretical model had been developed, these were refined in collaboration with DJ and TF, who undertook a final comparison with the data.

Results

Since there was considerable commonality of themes across supervisors and students, the two groups are discussed as a whole. Quotations originating from supervisors are prefaced with SP and ST is used for students. Participant numbers are not paired to ensure anonymity. Supervisor numbers run from 1–5, and student numbers 6–10.

Establishing the relationship

Beyond the basic expectations outlined in handbooks provided to the students prior to the commencement of their studies, our student participants reported having come to the supervisory relationship with their own unique expectations and experiences. All supervisors alluded to the need to forge a trusting relationship that would allow for open and honest communication and feedback, without removing accountability and ownership from the student. The data suggested that the students generally led the narrative of interaction throughout the year but the supervisors tried to establish its initial tone by adjusting their behaviour to cues they identified from the student. There was agreement that the first contact should be via Skype or a similar platform when the participants could see each other and this initial contact was considered vital in establishing the relationship.

"I think it is quite important to get a sense of the visual, and in terms of their voice early on, and to kind of break the ice by having a synchronous conversation …. I think it takes a long time to get to know someone just through emails’ SP5"

"It is about establishing a really good relationship from a very almost, a kind of pastoral relationship from the beginning, you establish, they know that you’re approachable, quite often they start thinking they have to call you doctor this, or whatever so you immediately make sure that it’s the first name terms, that you have a very open and friendly relationship with them, from the beginning SP2"

Interaction between supervisor and student was considered key in relationship building, both in setting the tone initially but also in expressing commitment. The online environment was found to help this communication, because online meetings were seen as dedicated time where the supervisor and student could concentrate on the task-in-hand, with time constraints ensuring that conversations were very task focused.

"We always started with “how’s work” “what are you doing” … and then after those pleasantries we sort of got into business … she had limited time and I was always stretched for time, so we were conscious that we had to talk about what we said we were going to talk about within the 30 minutes or the hour that we had together ST7"

Whilst there was some suggestion that purposeful relationships could be established quickly online, challenges were also identified, particularly when communicating by
email, with a need to be clear and explicit; but also, gentle, as it is difficult to determine a person’s general wellbeing and stress levels at a distance.

Actually, the being friendly and supportive, and gently coming at things is quite important when you’re at a distance, if somebody becomes nervous or worries, … so, I think it’s hard at a distance because you can’t always pick up on that SP3

The supervisor comes to the relationship with greater experience of supervision and could be considered to have the initial power in the relationship, but both individuals bring knowledge to the dissertation. The supervisor has academic expertise and it was not considered necessary for them to be an expert in the specific subject being researched in the dissertation, because the student comes with their own professional insight and expertise. The skill of the supervisor is supporting the student in developing and undertaking an appropriate research study.

It is important to recognize that, that, you know, yes, we are both experts, but in different things and my expertise will guide them towards the formulation of the final product SP4

In this regard, these students have very different needs from undergraduate dissertation students, and full-time, on-campus masters students, who tend to be younger with less, or no, professional experience to draw upon.

The supervisor is much more of a, kind of, advisory role than a teaching role. So, it’s very often the discussion is unpicking problems or issues to discuss with the student and working out the appropriate way forward together SP1

The importance of timely communication and the sense that the other participant could be relied on was clearly articulated in the interviews, speaking to the participatory nature of the relationship, in which both partners were responsible for establishing and maintaining expectations. Sometimes even brief communication could have profound effects in establishing relationships. This was often in response to an unforeseen event and our data showed examples of a sensitivity that went beyond contractual responsibility.

My supervisor was supposed to be on holiday at that point, and he just sent me an email saying “I’ve seen the feedback …” … So he knew I was going to be really upset by reading it and he was “don’t worry, it will be fine,” ST10

**Maintaining the relationship**

Once established the positive relationship was maintained by staying within particular boundaries of convergent expectations and behaviours of both the supervisors and the students. As part of this negotiation, confidence to communicate openly was considered vital so that the other party understood any potential problems being faced.

A level of probably self-confidence that you need, an element of self-discipline … to be able to make sure that the conversation is around what you need it to be. If you aren’t articulating what you need done, then it’s difficult for them to kind of guess ST9

This was particularly important when things were not going well, for example if a supervisor is unaware of problems they cannot pick up on struggling students, with the possibility of the relationship breaking down.
The importance of trust in building and maintaining the relationship was stressed, with participants discussing that reliability and visibility helped to build confidence in the relationship. Trust was manifested through timely and effective communication, ensuring that the project remained on course for completion.

People keeping in touch, so not disappearing, that is a really important thing … and it’s kind of, yeah it doesn’t work with the relationship when that happens SP4

Again, this was seen as a bi-directional responsibility requiring honesty as well as visibility, focusing not just on the giving or receiving of feedback but the perceived quality and responsiveness of the feedback. Feedback is conceptualised in this setting as not just conscious consideration of the task in-hand, but also subconsciously alerting the person to the level of commitment of the other participant.

One student expressed disappointment at the quality of the feedback provided which weighed heavily on the overall experience of the relationship, as there was an inability to decipher if the feedback was genuine or the lack of critique translated to a lack of commitment from the supervisor. This example shows how easily trust can be damaged.

I would present a draft and then she’ll be like yeah, that’s good, go on and I’m like okay, well my mom could have said that. ST6

There was universal agreement that students should ‘own’ the process, utilising the experience of the supervisors to guide that ownership. Communication between the pairs remained regular and purposeful throughout the year, with the autonomy demonstrated by the students, and their ability to express their needs and wants contributing to this positive perception of the relationship.

I was going to do the work … I have to work hard … I would bring all the information and the only thing I was looking for from her was her input. ST6

The supervisors responded positively to students taking the lead, with some indicating that they felt this was appropriate at Masters level. One supervisor described how students who confidently communicate the direction of the dissertation exhibit ownership of the project.

So, I think you know it’s just that confidence, and thinking actually it’s okay if they turn around and say, no I don’t want to do it like that SP3

Ultimately, the accountability for completion of the dissertation lay with the student. SP5 employs the metaphor of the ‘back seat driver’:

It’s a funny kind of ‘we’ because you have to make sure that you are (not) influencing the work in the wrong kinds of ways, and that you have to make sure that you are influencing the work in the right way, so to me it always does feel like ‘we’ but it’s like the student is at the wheel and the supervisor is perhaps the annoying back seat driver who’s saying “watch out for the truck”, and “make sure … that you’re changing gears” … so it’s a ‘we’ in a sort of … they’re definitely in control but you are trying to help them be in control. SP5

The supervisor provided avenues to ensure students remained accountable for the work, deadlines and completion through open and timely communication, however a common thread was the supervisor’s wider responsibility to support the student’s development to achieve their academic potential.
Part of the responsibility of each party was to respect the boundaries of the relationship. Both supervisors and students come to the relationship as adults with various other commitments outside of the dissertation. The awareness of both participants of the other’s situation and commitments provided a space for respect and trust to develop, which helped to ensure the time together was purposeful and meaningful.

Respect, because I think it’s very important to respect that she has other things to do besides supervise you … It is important for her to understand that I’m doing other things besides my dissertation, so that would also create a positive relationship ST3

There was a strong sense of self-awareness from the students that they understood the time constraints on supervisors and that they were responsible for ensuring that deadlines adhered to. Healthy relational boundaries were a key theme and most of the students had a sense of the importance of appropriate boundaries with their supervisors. There was some small-talk but work was the main focus. If the relationship developed into a friendship, boundaries could become blurred and this inhibited one student receiving what she felt she needed from her supervisor. The student felt unable to express her needs honestly and this created a barrier to open communication.

She’s kind of a friend of mine I feel … I don’t think it affected my project, but I don’t think it helped either, because I care for her feelings so I won’t be … as I said too direct or straightforward, I think that might have hindered a little bit of the communication … if I were ever in this situation again, I would prefer to work with someone I had a professional distance with. I will feel more comfortable as there is not an emotional attachment ST6

Willig (2013, 7) warns it is important for researchers to look for cases that do not fit neatly into their analysis, defined a negative case in grounded theory, to allow for elaboration of the emerging analysis, ‘adding depth and density’ to findings. In this instance, it reminds us that this is a professional relationship and whilst congenial, boundaries should be maintained. When two people are similar in personal attributes, experiences, and humour, it would be naive to think that a deeper connection could not occur. However, if this occurs, it is vital to be able to have insight into what is happening and how this can affect the working relationship. While some relationships will be friendlier than others will, it is important that there is mutual negotiation of the appropriate boundaries of that friendliness.

Negotiation of such issues was seen as necessary in moving the dissertation forward to completion. The supervisors and students appeared to be cognisant of their roles, and the ability of the supervisor to help navigate certain aspects of the process allowed the student to take ownership and gain confidence. Key here was the supervisor’s ability to guide, support and influence whilst allowing the student to remain in the ‘driving seat’. Part of this was trying to keep to agreed milestones, but with the clearly articulated understanding that adverse events could, and did, happen, causing a temporary disruption in alignment. The need to adjust to such challenges was evident in the interviews. Students’ life events required the supervisor’s support, encouragement and ability to negotiate solutions to problems, motivating students to move forward and succeed. At the same time, the participation of supervisors could also be disrupted by unexpected circumstances, and this, too, would require a process of re-alignment.
I realised how true the Mike Tyson quote is, you know, everyone has a plan until they get punched in the face, and every single time the plan would go out the window. SP4

**Discussion**

**A model of participatory alignment**

Consideration of these findings, in relation to the literature, led to a proposed model of ‘Participatory Alignment’ (Figure 1) to describe how successful supervisory relationships developed. The term ‘participatory’ was chosen to emphasise the dynamic nature of the relationship that does not remain fixed but is in constant evolution, and the requirement of active engagement on the part of student and supervisor. ‘Alignment’ describes the convergent nature of the relationship. Together, these terms stress the dependence of this convergence on mutuality, requiring on-going effort from both partners. Where expectations converged between supervisor and student, negotiated by the behaviour of both, the relationship moved beyond a contractual agreement and develop into a partnership.

The supervisor and student come to the relationship with their own unique experiences and then mutually negotiate the alignment of these in the zone of participatory alignment (ZPA). The boundaries of the ZPA are flexible and constantly shifting as a result of the actions of both supervisor and student. Figure 2 provides a graphical representation of the establishment and maintenance of a positive relationship. We propose that supervisory relationships can develop quickly online, at least with older, part-time, professional Masters students, and can be maintained at an acceptable level. However, there is also the risk that the relationship becomes overly aligned with the result that neither party feels they can provide honest feedback. Alternatively, the alignment can reduce as circumstances or approach changes for one or both parties. An effective supervisory relationship exists when the degree of alignment is neither too great, nor too little.

We have proposed a model of participatory alignment to explain the positive relationship that develops between online supervisors and postgraduate students. Within our model, the supervisory relationship is continuously negotiated by both student and supervisor, to establish and maintain an appropriate balance of trust, presence, and critical distance. The relationship slips out of the zone of participatory alignment, either where there is too much distance (in terms of social presence, or a shared understanding of the project or research process) or where the relationship becomes too close, making constructively critical feedback more difficult. This is a complex balance: consider the supervisor who pre-empted their student’s pastoral needs, overstepping the bounds of the productive relationship into a non-critical space.

As Guitierrez (2008) points out, it is the productive tension between individual and collective sense-making that gives rise to expansive learning (Engeström 1987). The ZPA, illustrated in Figure 1, resonates with Guitierrez’ (2008) conception of a third space, in which horizontal learning, alongside the ‘ahistorical and vertical forms of learning’ typical of academic programmes (149), is encouraged. Horizontal learning concerns expertise that develops not only within but across the settings of individuals. In our model, crossings of subject, discipline, institutional, and geographical boundaries by both student and supervisor help to develop repertoires of skills and practices, along with the development of new knowledge (Guitierrez 2008). This is accomplished, in part, by the supervisor acknowledging and respecting the expertise and agency of the
student. It also requires the student to navigate the professional domain under study, the academic regulations of the institution, the academic guidance of the supervisor as an expert in the rules of this particular epistemic game (Markauskaite and Goodyear 2017), and their own role in leading the direction of the project. The successful meeting of the supervisor’s and the student’s contributions involves, in one participant’s terms, the coordination of ‘back-seat’ and front-seat driving.

We agree with Guitierrez (2008) that this productive space of learning will not appear via a ‘one-size-fits-all’ model. The professionally mature nature of this student group means that they come to the relationship with expertise and knowledge. A fact vital to understanding the nature of this relationship, and the third space as a discursive construct, where dialogue between teachers and students moves away from a focus on institutionally understood knowledge and traditional organisation of learning, to more authentic and meaningful interactions. Through the creation of this space, participatory alignment transformed relationships from contractual and obligatory to trusting and transforming. Thus, in online postgraduate education, not only do educators have to understand the academic requirements of the dissertation process, they must also have insight into the professions of their students, with resultant implications for the development of supervisors.

The difference and distance between student and the supervisor shown in Figure 2 create the productive supervisory zones shown in Figure 1, and our model suggests that both parties must work to maintain a healthy balance of convergence and divergence, and an appropriate, critical separation. In contrast to Nasiri and Mafakheri’s (2015) findings that spatial and temporal distance were barriers in online supervision, with technical challenges making it difficult to see beyond the task, our participants highlighted the positive aspects of online communication. For them, the online mode did not inhibit the creation of meaningful relationships. In this instance, online communication could be helpful in focusing conversations and allowing both parties to dedicate time to supervision, while still allowing the development of trust and knowledge of the other. This relationship might be thought of in Wenger’s terms as a ‘duality’, ‘formed by two inseparable and mutually constitutive elements whose inherent tension and complementarity give the concept richness and dynamism’ (Wenger 1998, 66). Each party brings different but dynamically negotiated and intertwined contributions, generating a productive yet constraining tension.

While supervisors and students may already know each other from previous courses (as was the case with four of our pairs), dissertation supervision alters the nature and focus of this relationship from one-to-many to one-to-one. As supervisor and student each moves from their established social networks, the different forms of professional expertise brought to the supervisory relationship can lead to the development of new insights in both parties, while forming new bridges between academic and professional fields. Such relationships, where there is limited overlap between networks, might be said to comprise of ‘weak ties’ (Granovetter 1973), rather than the ‘strong ties’ of relationships situated within established networks. Granovetter’s work suggests that weak ties are vital as a
means of sharing ideas and creating new understandings precisely due to their tenuous and ephemeral nature. Again, this is suggestive of the importance of different but complementary ideas and areas of expertise. Participatory over-alignment might result in a strong-tie (i.e. where supervisor and student are too closely affiliated within an immediate network) where the potential for generating new understandings is reduced.

This interpretation is consistent with Wenger’s work on communities of practice (1998). Considering professional groups as communities of practice helps us to understand the development of professional expertise, but there is a danger that such groups may become too insular, one approach to ameliorating this proposed by Wenger is the notion of boundary crossing. Figure 1 shows the ZPA as a space in which both student and supervisor have crossed a boundary, without travelling too far across. In Wenger’s terms, the dissertation might be seen as the ‘boundary object’ that mediates such crossing, but, ideally, the student might also come to act as a ‘broker’, participating across settings and moving ideas and practices between settings (Roxa, Martensson, and Alveteg 2011). Conceiving of students as brokers helps us to understand the potential impact of postgraduate study as they move (in this instance, virtually) between systems, sharing and carrying information with them (Aitken 2020).

**Implications for practice**

Firstly, it is important to acknowledge that strong supervisory relationships, with a similar level of reciprocity reported in face-to-face postgraduate degrees (e.g. Karpouza and Emvalotis 2019), can occur online. We have argued elsewhere (Fawns, Aitken, and Jones 2019) that trusting, socially-rich and valuable educational relationships can be fostered through online programmes. However, understanding the factors that contribute to positive relationships is increasingly important. As the number of online students grows, increasing numbers of academic staff will require the knowledge of how to supervise effectively online, will be required.

Our model of the zone of participatory alignment can inform such understandings. It further develops Dysthe’s (2002) Partnership Model for online supervision, where the thesis is considered to be a joint project between student and supervisor. Positive supervisory relationships are built when the supervisor finds ways of fostering independent learning and thinking without dominating the process or inhibiting the student’s experience, and when the student is able to make use of the supervisor’s expertise while gradually increasing independence and agency. This complex task requires supervisors to recognise the dynamic nature of the relationship, and the importance of the ongoing negotiation of appropriate expectations and communication practices with each student. Similarly, the balance of social- and task-oriented communication must be carefully and reflexively managed in order to establish trust and enable honest and critical feedback, without either party crossing too far into the social sphere of the other. Understanding the professional and personal background, motivations and life circumstances of the student is important.

It must be stressed that this study (and, thus, our model) is about the perceived quality of relationships, rather than the actual quality of dissertation produced. While we believe that a positive relationship is an important element in the production of a good research dissertation, the academic quality of student work is contingent on a variety of factors. By
choosing to look at positively and not negatively experienced relationships, we have con-
strained our understanding of the factors that are important in supervision. Even within
our positive sample, both students and supervisors may have been reluctant to discuss
aspects of poor communication or behaviour and we hope that we, and others, will
build upon the model of participatory alignment proposed here in further, related
research.

**Conclusion**

Despite the increasingly neoliberal drive that has led to the increase in postgraduate pro-
vision (Fawns, Aitken, and Jones 2019), our findings suggest that positive and collabora-
tive relationships can evolve online, bringing supervisors and students, as fellow profes-
sionals, together to form meaningful supervisory relationships. Supportive, trusting,
and social supervisory relationships require mutual, ongoing monitoring and negotiation.
To this end, we have proposed a model of participatory alignment, in which student and
supervisor continually negotiate and maintain an appropriate and critical distance. Tra-
ditional supervisory models focus on an apprenticeship model with the power
firmly in the hands of the supervisor (Grant and Graham 1999). Our data suggest that there may
be a more even distribution of power in the online postgraduate supervisory relationship,
formed when expectations and behaviours are aligned between participants forming a
positive relationship.

Previous explorations of a more even partnership model of supervision (Dysthe 2002)
consider the thesis as a joint project. We suggest that the model of participatory alignment
offers a more nuanced understanding of the online supervisory process, with the thesis
seen as the student’s responsibility, but the supervisory relationship being of joint respon-
sibility. The potential problem of over-alignment (where the relationship between student
and supervisor is too close) is novel within the supervision literature. While we advocate
establishing a transformational, rather than a transactional, relationship, care must be
taken to ensure this relationship does not become too familiar and sociable as there is
the risk that this over-alignment may lead to perceptions of a loss of criticality. We
suggest that supervisors and students should have direct conversations about their expecta-
tions of the online dissertation process at the beginning of the dissertation year, but they
must also continue to negotiate a mutual alignment in behaviour and expectations as the
dissertation progresses. Of course, increasing student fees and pressures on academic sta
to increase postgraduate student recruitment may make such positive relationships more
difficult. The challenge for supervisors and institutions is to sustain the necessary pedago-
gical space for discussion and discovery.

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Online Learning as Embodied, Socially Meaningful Experience

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If there is no soul in computer-music then it’s because nobody put it there (Bjork 2019)

Two common views about online learning are that communication and relationships are inherently poorer online and that online learning can be scaled up without significant additional cost. Online learning has been identified as a key growth area for the higher education sector, often without a realistic consideration of resource requirements or an appreciation of the transformative value that online education can have for students.

In our context of taught postgraduate programmes, ‘online’ is a place where meaningful relationships, based on trust, can develop. Our students, through dialogue with an interdisciplinary and international online community, have developed critical and analytical ways of thinking that have extended their capacity to influence practice and policy in their local settings (Aitken et al. 2019). However, building an academic community takes time and becomes increasingly difficult amidst a global, market-led, neoliberal drive for universities to dramatically increase numbers of students (Jones 2019). This puts considerable pressure on teaching staff and poses risks for the quality of education. In this commentary, we take a critical postdigital perspective (Fawns 2019), in which all forms of education must account for a complex integration of digital, social and material elements, to reject reductionist approaches to growth in online learning.

We challenge the perception that the experiences of online learners are limited by distance or technology. Rather, we argue, the limiting factors are time, policy, infrastructure and pedagogy. The blunt depiction of online learning as a unified concept, with

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inherent properties, can be seen in policies, advertisements, blog posts, social media comments and even in educational research. Take this statement from Bergstrand and Savage on why, according to them, online tutors treat students with less respect: ‘‘…by separating students from teachers in space, online classes prevent the face-to-face interactions critical to the student-teacher relationship’’ (Bergstrand and Savage 2013: 303).

We are aware of many cases in our programme (the MSc Clinical Education), and others, where face-to-face interactions are absent, yet there are still strong and trusting student-teacher relationships. We have developed practices over time that make use of our technologies and their accumulation of digital traces (email trails, online discussion postings, printed lists of student names, photos, occupations, locations, websites and search engines), to support social presence, communication and understanding of our students.

On the other hand, the assumption that face-to-face is inherently social and supportive is easily refuted by cases where on-campus students have not managed to build meaningful relationships with their teachers. We suspect that everyone reading this can imagine many such cases. Of course, even the claim that there are no face-to-face interactions in online learning is problematic, since communication through videoconferencing, Skype, FaceTime, etc., could be described as face-to-face, even if the faces are not present in a shared physical space (Fawns 2019). Where then does the material boundary lie between meaningful and meaningless interactions? We suggest that there is no boundary.

We would not argue that teaching online is the same as teaching face-to-face. Published literature (Kebritchi et al. 2017; Ryan et al. 2005), and our own interviews with staff new to teaching online (Aitken and Loads in press), shows that there is a significant adjustment and learning curve involved. However, the differences are often oversimplified. The primary challenge is in adapting principles and practices of teaching to encompass new and multiple contexts, rather than because online is a separate domain or because it is inherently more socially impoverished, isolating or flexible than face-to-face teaching. For us, the instrumental views highlighted above signal a need for the development of a wider repertoire of approaches and practices and a more critical conception of teaching. We see teaching, not in terms of crudely categorised approaches such as ‘traditional’, ‘problem-based learning’ or ‘online learning’ but as a potentially unbounded mix of diverse, subversive and unpredictable, digital and non-digital interactions. This is as true for a face-to-face, lecture-based, ‘traditional’ course as it is for a ‘fully online’ course (Fawns 2019).

Just as our online teaching is not temporally or spatially bounded, ‘online learning’ is not a separate domain, because learning does not really happen online. True, some of our students may sit alone at a desk with a computer in a room that is thousands of kilometres from the nearest physical campus of our institution, but their learning is still physical and embodied. Furthermore, our students do not do all of their learning at such desks. Learning carries on, away from the virtual learning environments of the programme (Fawns and O’Shea 2019). It filters into the physical settings of home, cafes, and workplaces and in transit between them. For example, it is not unusual for some of our students to engage with materials whilst on call in an emergency department or during family dinner time.

The material aspects of education are easily forgotten (Fenwick 2015; Hetherington and Wegerif 2018), even in face-to-face classrooms, and so it is not surprising that online learning is often discussed as if it is a disembodied experience that happens in a separate reality. Yet material objects and environments make significant contributions to online
learning. There are, for example, many subtle acts of material configuration that play an important role in how students learn. In our video tutorials, we can see some of the ways in which students do this: the positioning a fan nearby to cool the air; the pre-tutorial ritual of making a cup of tea; the closing of doors to mute the sounds of children or pets; the moving from one device to another to work around technological constraints. Others can see and react to these material elements, even if the view of them is limited (e.g. by two-dimensional video, photos or, in some cases, textual descriptions). These experiences make it clear that online learning happens in physical spaces (Bayne et al. 2014), and understanding the contribution of both social and material elements of online learning will help our students get the most out of their programme (e.g. by engaging in discussion with peers, or learning to configure their technologies).

The assumption that online learning can be unproblematically scaled up without significant additional cost or increased pressure on staff is implicit (or, sometimes, explicit) in a number of policies and initiatives in higher education (Selwyn 2007, 2010). In our experience, such instrumental conceptions of teaching do not fit many of the practices that happen in online learning. Whilst the same applies to face-to-face teaching, policies relating to workload, ‘contact time’ or appraisal, often based on a traditional, lecture-based timetable, can significantly misrepresent online teaching activity (Tynan et al. 2015). Whilst online courses are likely to feature a timetable, teaching is often not structured in such formal, scheduled terms, as either happening or not happening at a particular time. Online teaching is potentially always happening, in the sense that teachers can dip in and out of fora, respond to emails and post guidance or prompts that can be engaged with at any point in time.

The astute observer might argue that this has always been the case; teachers have always had to communicate with students about some aspect of their studying outside of scheduled teaching hours and formal communication channels. Perhaps this is just part of the job, for which teachers do not get much credit. Indeed, the thinking that we have to do as we develop online spaces prompts us to reconsider issues that have, in fact, always been there, surfacing largely hidden practices of teaching. Perhaps most importantly, this includes foregrounding the extent to which teaching involves activities of preparation and pre-configuration before scheduled activities (design) and of reaction, reconfiguration and subversion during them (orchestration) (Fawns 2019). However, pedagogical approaches that have developed alongside the evolution of technology in education shift the balance of the formal and informal (McWilliam 2008) such that elements that do not fit neatly into the official record may actually constitute the majority of an academic’s teaching activity.

If the current success of our programme is to be maintained, our teaching must respond as much to the contexts of our students as to the online spaces in which our interactions take place. We must give them opportunities and appropriate support, to adapt their learning practices to suit the constraints of their settings (e.g. internet bandwidth, working environments, job demands and time zones). Elements of infrastructure can help or hinder, by changing teachers’ and students’ capacity to act effectively with the social and material resources available to them. As such, inflexible systems and tools, and standardised policies that do not account for the different needs of a diverse range of part-time, mature, professional or international students, compromise our ability to develop meaningful relationships and communities.
In our view, successful online programmes are the result of students, teachers and administrators learning to work effectively within and around the constraints of infrastructure and policy. It follows that these collaborators should be supported to develop practices that work for them, both individually and collectively. The effective running of programmes requires a range of complementary expertise, and so the support and development of staff, along with the time requirement for that development, needs to be taken seriously. As such, evaluations of teaching, or of courses or programmes, should not only include but also foreground developmental aspects (Fawns et al. forthcoming). Further, evaluation should not only be focused on individuals and their particular performances but also on how different people, technologies, resources, environments and structures come together in social, material and digital activity. On our programme, we work hard to engage in regular, ongoing dialogue to reflect on emerging ideas, discuss approaches and practices, support each team member’s development and develop a shared vision and values. All of this takes considerable time and expertise.

In online learning, just as in any other context, shared histories of practice foster emotive interdependence (Sutton 2018). Through a rich constellation of past encounters, a learning community is established in which embodied, emotive experiences take place and teachers transcend the mode of delivery, becoming ‘authentic’ (Kreber et al. 2007) through meaningful dialogue with students. This kind of online learning cannot be scaled up without significant additional cost because whilst technology can replicate resources and provide rich (or poor) possibilities for communication, it cannot solve the fundamental requirement of skilled staff spending time on, and with, each student.

Taking a view of all education as consisting of experiences in which material and digital activity combines in social and embodied encounters (Fawns 2019), we can guard against attempts to position online learning as a ‘cash cow’ (Feenberg 2019), where technology is seen as the solution to problems of scalability (Selwyn 2007) and where human meaning is incompatible with the logic of efficiency (Feenberg 1999). A critical postdigital perspective helps us to make judgements, not about ‘online learning’ in general but about the particular combinations and configurations of diverse elements that make up an online learning programme. By understanding how these configurations create rich or impoverished communication and relationships, we can see how increasing student numbers might change the parameters of design and influence our capacity to respond to the situated practices of students.

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A Postdigital Exploration of Online Postgraduate Learning in Healthcare Professionals: A Horizontal Conception

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Abstract
Holistic evaluation of educational quality necessitates considering novel and theorized measures of quality as well as more instrumental metrics. Online learning is increasingly valued by working professionals as a means of gaining a postgraduate qualification while employed, but this area of education is undertheorized and investigated. Online learning is often discussed in instrumental terms, as if abstracted from the social and material settings in which learning and work take place, but my own conversations with student and graduates about the impact of their studies contrast strongly with such views and motivated this work. Adopting a postdigital perspective, I present an activity theory analysis of interviews with students and staff about the value and perceived impact of online postgraduate programmes in healthcare professions. Four themes are identified that describe how students learning moves horizontally within and across academic and clinical settings: crossing boundaries, ripple effect, eroding structures and hierarchies and expansion. Teaching is delivered online, but learning occurs as the students move through the various contexts they inhabit. The pedagogical approaches required to realize the potential value of these programmes should not be based on the online delivery or the technologies used, but the particular needs of the student group.

Keywords Postdigital · Postgraduate · Online learning · Activity theory · Healthcare professional · Holistic evaluation

Introduction
Conversations with students, both during and after their studies, offer a rich source of data that can provide helpful insights into the impact of studies beyond the academic

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institution. Theorized considerations of quality can support data and analysis needed in holistic evaluation. Such data are particularly important in online postgraduate taught degree (PGT) evaluation as instrumental views of online learning put online postgraduate degrees at risk of being regarded solely for their income generating potential by academic institutions, rather than valuing the potential educational benefits. The commodification of higher education in the current neoliberal, expansionist and market-led agenda (Jones 2019) is well-illustrated in this area with staff under pressure to increase recruitment.

Postgraduate degrees are increasingly seen as a means of career advancement in increasingly competitive professional promotion processes. Increasing student demand and online delivery offers the potential to expand student numbers and thus income. Online delivery also allows individuals to access education from anywhere in the world while continuing in gainful employment, but the part-time delivery and professional nature of the student group are as important as the mode of delivery to the learning environment. Such degrees can be considered to operate at the boundaries of academic and professional settings (Aitken and O’Carroll forthcoming 2020).

Part-time study allows learners to move backwards and forwards between academic and professional environments over a number of years affording the opportunity for relationships to build. In this way, they are very different to traditional taught 1 year on-campus masters’ degrees that often follow on straight from undergraduate study. This part-time mode of study is potentially as important as the online delivery to any potential impact on learning but has received little attention to date in the literature (Jamieson et al. 2009). Kember and Leung (2005) reported that part-time postgraduate students on applied professional programmes generally see academic staff as fellow professionals, hinting at a more equal relationship between educators and students. While superficially online postgraduate programmes may be considered only in terms of their online delivery, this overly reductionist view fails to consider both the length of time such studies take as students work and study concurrently and that students tend to already be established professionals. A postdigital view considers that the online world is not separated from other aspects of human life but is interwoven in messy and unpredictable ways (Jandrić et al. 2018).

The development of expertise is often conceived of vertically; see, for example, Miller (1990) or linear progression through stages to achieve expert status (Dreyfus 2004). Expertise can be gained by an individual in a bottom-up approach, shared by those considered as experts in a top-down manner (Collins 1990) or some combination of both. Considering expertise to have a horizontal as well as vertical aspect acknowledges that professionals rarely operate in one context and increasingly need the ability to navigate, negotiate and manage various, often conflicting, contexts and systems, referred to as polycontextuality (Engeström et al. 1995: 320). Such horizontal conceptions are useful when considering professional education to appreciate the more egalitarian nature of such education.

By definition, online learning requires technology for its delivery, but it is not technology that facilitates the collaborative and questioning approach adopted in some programmes. Educators encourage interaction, sharing of experiences and understanding of the wider social, cultural and environment students inhabit. Given the cultural and professional diversity within the students in online programmes, this can be challenging, and technology alone cannot deliver this; human endeavour is required.
Online postgraduate teaching is designed, delivered and curated in the academic setting by academic staff, but learning potentially occurs in many settings as learners move through the various environments that they inhabit, making connections between their academic and clinical experiences. This dynamic conceptualization allows us more clearly to appreciate the potentially expansive learning nature of online learning, particularly in this group of working professionals. While this makes intuitive sense, there is a lack of information on how this works in practice. This paper explores some of the factors required to successfully facilitate this process by exploring the experiences of both students and staff currently involved in online postgraduate education, focusing on human interaction allowed by the use of technology through an activity theory lens.

**Theoretical Framework**

Activity theory has been proposed as a way of ‘transcending the dualisms’ present in much philosophical thought (Engeström and Miettinen 1999: 5), for example, between theory and practice or thought and activity. While social scientists have traditionally separated socio-economic studies from those of individual’s behaviour, activity theory attempts to link individual and social structures.

This is an evolving area of research, and several generations of activity theory exist. In its simplest conceptualization, first-generation activity theory conceptualizes interactions between three elements, a subject that interacts with the environment through materials or artefacts to produce an object leading to an outcome. Within online postgraduate study, the subject could be a student or teacher, the artefact a computer or virtual learning environment, and the object the award of an academic degree or development as an educator. First-generation theory has been extended to further consider the community in which the activity takes place, the rules governing the activity and the division of labour within the community (second-generation) (Engeström 1987). Engeström’s third-generation activity theory allows a more expansive systems approach that considers factors such as the potential impact of cultural differences in a minimum of two activity systems.

**Methods**

**Data Collection**

Fifteen members of academic staff, from three UK institutions who are currently involved in delivering online postgraduate courses to healthcare professionals, were asked about their experiences of teaching this group. Thirteen work at the University of Edinburgh. Preliminary results from these interviews were shared with colleagues from other institutions as a means of sense checking, and two further interviews were undertaken, one with a colleague from the University of Newcastle and one from the University of Glasgow. The Edinburgh interviews were carried out in person, the other interviews conducted online. Programmes represented included Surgical Sciences, Pain Management, Public Health, Clinical Psychology, Internal Medicine, Global Health, Veterinary Studies and Clinical Education. Interviews were undertaken by a PhD intern whose time was paid for by a small institutional educational grant. Staff were invited to
participate by email to all staff thought to be in a relevant role, the numbers of staff in
the institution involved in delivering online PGT is unclear.

Those interviewed had a mean age of 47 years, with considerable teaching experi-
ence. Ten participants were female, all had professional backgrounds relevant to the
subjects they taught: nursing, clinical psychology, medicine, basic science, physiother-
apy and veterinary medicine.

All students completing the first year of the MSc Clinical Education at the Univer-
sity of Edinburgh were also invited to participate, and eleven students from the
academic year 2017/2018 and seven from the academic year 2018/2019 agreed to take
part. Intake to the first year of the programme is currently around ninety students.
Interviews were undertaken online. Students are all qualified in a health profession and
are actively involved in clinical teaching. Four were male, 11 were based in Europe, 3
in Africa, 3 in Asia and 1 in North America. Age ranged from 25 to 60 with
considerable variation in clinical experience from 2 to 30 years. Most (11) were
medically qualified with 3 nurses, 1 pharmacist, 1 dentist and 2 educationalists.

Data Analysis

Institutional ethical approval was obtained, and participants gave informed consent.
Interviews were audio-recorded, and recordings were professionally transcribed and
thematically analysed using the approach described by Braun and Clarke (2006). Initial
coding from the student interviews was carried out, resulting codes were combined and
used to identify emerging themes and generate an initial coding framework. These were
then compared and iteratively refined as the data from the staff interviews were
collected. Two interviews with academic staff from other institutions were undertaken
to ascertain if the themes had relevance beyond the institution. The emergent themes
were echoed between the two groups of interviewees and strongly articulated by many
participants. In the second phase of analysis, these themes were viewed through the
theoretical lens of activity theory to allow a more expansive socio-material consider-
ation of the data. Within this second phase, a postdigital sensibility (Fawns 2019)
informed the way in which digital technology was seen within each activity system (i.e.
as embedded within social and material activity, rather than separate from it).

My role as Programme Director of the MSc Clinical Education must be acknowl-
dged. While not involved in data collection, I am the senior academic staff member
responsible for the programme that the students are being asked about and a colleague
of those in study 1. Recognition that the resultant analysis is a co-construction of my
impact as the researcher and the participants’ experiences and perceptions is necessary.
This is aligned with the premise of activity theory that individuals construct their
activities through discussion and interaction and constructive results will be obtained
by the hearing the researcher’s voice in dialogue with the activity system under
investigation (Engeström and Miettinen 1999).

Results

All students interviewed were clear about the benefits of their studies, and these were
considered not only to result in personal transformations, impacting on individual
practice, but also resulting in wider influence within workplaces, seen as extending beyond the academic award obtained. Staff were enthusiastic about their teaching, and this was largely related to the interaction with students and the effects they saw their teaching was having. Results very clearly described a perception of learning as a recursive process as students moved between the different activity systems they inhabit, with four clear themes identified:

- Crossing boundaries (explicitly between academic and practice settings).
- Ripple effect (influencing people beyond immediate course interactions).
- Eroding structures and hierarchies (building confidence to engage more, questioning the status quo, a perception of enhanced legitimacy).
- Expansion (of one’s own thinking and one’s collective networks of participation).

Conceptualizing learning as a horizontal process with students moving backwards and forwards over academic and clinical boundaries helps us to understand both the distributed nature of online postgraduate learning and its potential impact.

Each theme is explored from the student perspective (quotes attributed to the prefix S) and supported by a description of the actions by academic staff linked to the facilitation of the process (quotes attributed to the prefix E). Each theme is then explored through an activity theory lens. I represent the activity system of the postgraduate online programme in Fig. 1. Activity theory was applied in a deductive manner to the identified themes.

Figure 1 depicts my exploratory model of a postgraduate online learning system. Triangle 1 represents the activity system of a clinical environment, such as an anesthetics department that each individual student inhabits. Triangle 2 represents the activity system of the online degree programme, and Triangle 3 represents an academic department, in which the programme staff operate. Activity systems 1 and 3 represent professional workplaces and system 2 where differing professional groups come together online. This allows a clear representation of the relevance of the boundaries
of the various systems. The conceptualization of work allowed by activity theory allows us to see it as a collaborative activity with inherent tensions and contradictions, inherently messy with ill-defined boundaries. Clinicians engaging in online study still work within clinical and professional boundaries; thus there is a need for a separate activity system. Teachers work in academic institutions and are bound by their own activity systems which include their professional affiliations and academic regulations and conventions. They meet in the online setting crossing out of their professional context and meeting in a new educational environment then cross back into their professional system. The flexibility of online learning allows this movement to happen repeatedly.

This paper reviews activity system 2 from the lens of the student as the subject and the interaction between systems 1 and 2. While the focus here is on student experiences (as seen through systems 1 and 2), the views of staff are presented in relation to their participation in system 2. This is as members of the community and as contributors—through design choices and facilitation—to rules, divisions of labour and the mediating tools and artefacts that feature as structural elements of the programme.

Mediating tools and artefacts within the online programme might include course documentation, computers, internet, reading lists, course discussions and other methods of interaction. Importantly, these tools and artefacts do not have effects or actions in isolation of the context in which they are used. Rather, they are embedded in particular postdigital ecologies in which students and staff integrate them into established practices and cultures (Fawns 2019). As such, tools and artefacts will vary in the different activity systems and may impact multiple activity system. For example, feedback on an assignment (artefact in the online activity system) may encourage the student to alter their teaching thus affecting the community or division of labour in their clinical activity system.

Rules include curricula and academic regulations; for staff, this will include role modelling of informal programme conventions. Staff will also be subject to institutional drivers and policies, as well as students who may be studying as a result of regulatory body policies. Rules are not only important in individual activity systems but also can be understood to be carried between systems in the professional behaviours of staff groups.

Community includes students on the programme, programme staff, tutors, administrative staff (clinical colleagues for students) and other university staff or teachers.

Division of labour describes who is doing what, students learn individually and in groups, students complete assessed work, staff deliver content, staff engender an open environment, staff assess work, and staff provide constructive feedback.

It should be recognized that this is a highly stylized representation of what is a dynamic and evolving process, recognizing that all students and staff come with their own individual needs, aspirations, concerns and motivations. Adopting an activity theory lens allows this interpretative framework to achieve a simplified representation of a complex area that illustrates how movements can occur between the various systems. At the same time, the postdigital perspective reminds us that each division is fluid and messy, since the agency, responsibility and activity of these tasks and relations are distributed across not only students, staff and other stakeholders but also policies, technologies, infrastructures, etc.
Crossing Boundaries

Online study allows flexibility for students to dip in and out of their studies at different times and places as their schedule allows, accessing people and resources from multiple settings. It crosses boundaries because it is not located within either setting but spans both, so allowing professionals to move not only between academic and clinical settings contemporaneously but also spanning digital and non-digital settings. This is not seamless and requires considerable effort from the student and the staff supporting them. Knowledge does not move across boundaries in some disembodied way but is embodied in people as they move between contexts while reflecting and reconstructing their understanding. Understanding this division of labour (whether between staff and students or between students and students) in activity systems is key to ensuring a constructive learning environment is provided.

I liked the way the course allowed me to use discussions or learning that I’d done in the course and then bring it across to my own work and my own institution, so I think that was a huge benefit for me. It did not feel like it was separate to my work or my kind of academic work, so I think that was a huge benefit, just being able to integrate it into my kind of life, rather than have it as a separate component. I think that was really useful for me. (S07)

In this way, mediating artefacts in the online system, in this instance discussion board posts, were seen to influence the student’s professional system.

Teaching staff were clear about the need for curricular design to be relevant to the clinical workplace, remaining cognizant of rules and division of labour in the clinical environment and also any specific requirements of relevant regulatory bodies.

So, when we are teaching clinicians, it’s got to be relevant to their day-to-day world, it cannot be about what we think’s interesting. It’s got to be about what the clinicians find interesting, what will help them in their day-to-day world? (E02)

There was a clear focus on helping students’ professional development, not merely delivering academic knowledge, with a sense of encouraging students to think creatively and question more. Consideration was shown by staff in choosing mediating artefacts that would more clearly encourage criticality in students. In this way, an outcome in the programme system has the potential to become a tool or object in the student’s professional system, with mediating artefacts in system 2 influencing system 1.

Linking it back to professional groundings and seeing how this gaze enables you to do things differently, impact on a pathway, looks at innovation, making you into an agile professional. So, curiosity, I think it’s a skill that you have, you can nurture. (E09)
The challenges of combining work and study were acknowledged with a clear need to consider the needs of this particular student group in programme design. Flexibility of delivery was considered key, with the ability to adapt to the needs of students that come with very different skills and experience, making a careful consideration of the rules of the programme activity system important.

**The Ripple Effect**

While learning is often perceived as an individual process, the benefits obtained often extend to the student’s clinical activity system, clearly showing the importance of community in both activity systems. Examples were given of how the learning from these programmes is mobilized in the practice setting and that this is a collective mobilization rather than an individual one, with the student’s enhanced voice influencing practices across their wider professional group.

My colleagues were...I think in one respect, they were happy for me to do the course because it’s actually allowed them to have new ideas for their own classes. So, I could discuss with them about the things I had learnt or the things I had thought about, and then I think it gave them some interesting points as well. (S07).

Academic staff discussed designing mediating artefacts such as assignments and learning activities that challenged students to question their assumptions, reflect on practice and consider how best to utilize this new understanding in their own professional contexts. In this way, their impact was seen to extend beyond the individuals they taught.

Our whole ethos is really about moving people away from drinking up straightforward textbook learning, which doctors are quite good at that because there’s an awful lot of it. But to start questioning what’s going on out there and the kind of truths which are handed down to them from medical school. (E07)

Reinforcing that these programmes are bound up in real-world contexts and that postgraduate education is not just about technology or content delivery but encouraging an ethos of questioning and criticality and encouraging students to adopt a less individualistic approach. An important part of the teaching was inspiring students to see the bigger picture, form connections and ask better questions supported by the collective, discursive approach modelled in these programmes. In this way, the rules and division of labour of the programme activity system can be seen to have a clear impact on the professional activity system of the student.

**Eroding Structures and Hierarchies**

The focus on connections and discussions rather than technology resulted in academic staff being considered by students as mentors or more experienced colleagues rather
than as more senior members of a hierarchy, and there was a clear sense of academic staff encouraging this near-peer perception of their role to encourage a more egalitarian relationship.

But I feel I like the long-term relationship where we can have a lot of back and forth. I would see them more like a mentor (S10)

Staff were very open to working in a collaborative way with students and allowing an open and democratic study environment and impacting on the division of labour and community within the activity system.

So, it’s not seeing a student as a student, and you are the lecturer, just this, sort of, academic community, where conversations occur and people are learning. (E13)

I do not see them as students, I see them as colleagues, because they add a lot of value to our experiences on the programme. And actually, they help shape the development of the programme. (E08)

Programme development was seen as an iterative process, in a constant state of evolution. Partly this relates to knowledge not only being seen as fixed but also the acknowledgement that professional practice was perceived as being in constant evolution. In this way, mediating artefacts are continually reviewed and refined, and rules and division of labour is deliberated. Considering the ways in which students applied learning to their practice conveyed important elements of the practice context that could be incorporated into teachers’ conceptions of the contemporary workplace and are an important way that lecturers stay up to date with professional developments.

So, we are geared towards enabling students to give us feedback and have a sense of power, that they can make changes. So, this kind of learning from previous students and understanding what fosters professional curiosity, that gives us the guide to develop current courses and have the understanding of how to do things better for future courses. (E09)

As alluded to earlier, the benefits of the study were considered often to spread to colleagues in the workplace. This was not just those at a similar developmental level, but participating in the programme resulted in enhanced confidence when interacting with more senior colleagues leading to a suggestion of flattening established professional hierarchies within the wider communities that students inhabit.

And when I first got my job and I met her and I was meeting up with the other senior educationalists that make up this faculty and, you know, manage all of the funding. They do a huge amount of work in the hospital with training and supporting the newly qualified staff and existing staff. And I felt deeply out of
my depth whenever I was around them. And so, it’s helped me on that level. I mean it really has. I do feel completely different when I’m in a room with them. (S06)

**Expansion**

The expansiveness theme can be considered both at an individual level and more widely within the clinical environment, by allowing students’ space to think and also encouraging them to build relationships and links with others on the programme.

**Space to Think**

Interaction is encouraged in these programmes, and students’ views are shared on discussion boards, and in other ways, this allows students the opportunity to make explicit what may previously only have been internal thoughts. Staff have a key role in facilitating this process and designing learning activities to encourage this. The opportunity for public rehearsal was considered key in developing confidence, while the act of writing ideas down or discussing them was seen to strengthen student’s commitment to, and further develop of, these ideas. Such ‘performativity’ has been criticized for making a personal journey of learning into a publicly assessable artefact, but here this public rehearsal was considered to enhance individual self-efficacy. Careful consideration by educators was required to ensure the most appropriate mediating artefacts were employed. While space to think was valued, the need to consistently submit work (a tool) for assessment and feedback was also considered a necessary stage in the student’s development.

It was the sitting down and writing it that made me commit to what I thought and be more reflective about what I actually do and whether those were intentional and in line with what I believe or whether I was just doing something out of rote practice. Yes, so it was the writing it made me identify what I believed. (S04)

I did the first essay, the one that was about teaching and learning theories, it felt as though it had opened up a huge doorway almost. It felt like everything started to make a lot more sense (S06)

Written work in this way can be considered a tool of system 2 that has an impact on system 1. Students can put their burgeoning theoretical understanding directly to use in their workplace, thus fuelling further developments of these insights. The outcomes of this experience, either positive or negative, can then be shared with others on the programme in system 2, again reinforcing the potential of the boundary-spanning nature of postgraduate study. By considering the division of labour element here, it can be seen that the onus is on the student to apply educational principles and methods to their professional context; the staff cannot do this for them. To facilitate this process, academic staff were clear in their view
that postgraduate study should provide the space and opportunity to develop a questioning mindset.

Pick an assignment that’s going to be relevant to your work, you know like, actually, do something that’s going to be useful to you after you finish the course, rather than as a purely academic exercise. So, I think, there’s that but also encouraging people to, maybe, it’s a bit about encouraging people to question what their own profession does and, like, assumed knowledge within their profession. (E10)

Interestingly the assignment here was not only considered a tool but also a means of changing objects and questioning established rules inherent in the restrictive notion of assignments only for academic credit. There was a clear recognition that this questioning and open mindset applied equally to those delivering the programmes. It is relevant that most staff interviewed had come to an academic career after a previous career in the professions they now taught, so they themselves have personal experiences of moving between settings and challenging themselves in new areas, such as teaching online. The emphasis on scholarship in these programmes can be considered a tool but also a rule. The commitment to scholarship that is role-modelled by the staff in encouraging an open and questioning mindset suggests that staff do not see their role as merely passing on knowledge as defined in the curriculum.

And it is about scholarship as opposed to learning because there are more facets to scholarship than just learning. It is about teaching others. It is about accepting challenges, being challenged yourself, learning in a different environment.(E09)

**Community Building**

Students also considered the academic networks that these programmes of study provided to be advantageous. Members of an individual student’s communities will vary but are likely to include programme staff, other students, administrative staff and clinical colleagues. In this way, online postgraduate study can be seen to expand the activity systems of individual students.

it’s kind of broadened my network, my professional network of people whom I know, so I think that’s a huge advantage. I feel I know people in other countries and people with experiences similar to my own, and people who have experiences completely different to my own. So, I think this is, in terms of career progression, a huge advantage. (S07)

This relates to the discursive nature of postgraduate study with students encouraged by rules and division of labour to bring their experiences to the academic environment, reflect, share and build on them. Online study was seen to offer opportunities to bring
people together from very diverse backgrounds and locations in a way that is not possible in a traditional classroom, creating community. The powerful potential of online learning to build relationships was also acknowledged by staff, with further recognition that much of the learning occurred through sharing within the student group, reinforcing the need for activities that supported community development and encouraging students to see peers as a rich learning resource.

But what does surprise me is how much of a relationship you do form as well, especially when they come to graduation, you know, you feel like you have been their colleague for years, you know, so and what I find a lot is the peer to peer interaction is infectious because they are learning from each other’s different health professional backgrounds as well and their day to day kind of, you know, journeys. And that’s one of the biggest bits of feedback that we get is that they learn more from each other sometimes than they do from some of the, you know, some of the leaders on the programme even. (E08)

**Discussion**

Activity theory (Engeström 2005) was identified as a helpful framework to study the learning in online postgraduate programmes, due to their situation at the boundaries of academic and professional practice. By definition, activity systems have boundaries, and the potential for learning at boundaries has previously been described as profound (Akkerman 2011), introducing an externality that can facilitate new ways of seeing things, apparent in the experiences of this group of students. The experiences students bring to the academic environment can be used as valuable sources of learning and mechanisms to allow sharing and discussion of these experiences which are key to successful online postgraduate learning. While technologies provide structure and mediating artefacts for the learning environment, it is the efforts and interaction of individuals in combination with materials and technologies that result in the rich learning experiences discussed here. Rather than seeing the technologies and infrastructures that underpin these programmes as separate from educational activity, they are more productively seen as considerations that feed into design and teaching.

Crossing boundaries has been described as a process allowing ideas and experiences to be conveyed from one setting to another (Engeström et al. 1995). In this way, those from different professions can come together, as described by Cannon-Bowers et al. (1993) to develop ‘shared mental models’, developing a community of practitioners, or the ‘contact zone’ proposed by Kramsch (1993) to describe the learning and sharing between those from different cultures. The challenge for educators is to structure their teaching to allow the pedagogical space that Su (2014) refers to, allowing students’ freedom and agency to engage actively in their own learning while building community.

The criticism of online learning as inherently impoverished in terms of the relations and interactions that occur there has previously been challenged (Fawns et al. 2019) suggesting that meaningful interactions can, and do occur online, but require creative
pedagogical design and sufficient academic time to support community building. These results reinforce this view and consider how curricular design can encourage academic interactions that have direct benefits in the clinical workplace by allowing time and space for discussion and reflection. Technology is not determinate and requires social structures within which to operate (Woolgar 2002), and by considering the clinical environment and the academic setting as activity systems, individual student agency in their learning can be better understood by considering recursive movement between systems. The appeal of activity theory in this area is to very firmly foreground human endeavour in the postgraduate online activity system. Too often, technology is referred to uncritically when applied to educational settings, as evident in terms such as Technology Enhanced Learning that suggest that technology itself in some disembodied way enhances learning (Bayne 2015). At the same time, a postdigital perspective reminds us that the boundaries around and between activity systems are dynamic and ill-defined.

The role of technology in blurring boundaries between academic and social spheres has been discussed (Conole et al. 2008). Part-time online learning and the movement of students between settings that this allows does the same for professional and academic settings, developing students’ identities as educators through dialogue (Thorpe and Edmunds 2011), pedagogical space and performativity. Recent work with online students (Aitken et al. 2019) specifically noted that the discipline required to produce assessments on a range of topics at regular intervals was a transformative experience amongst postgraduate students. However, this focus on assessment that fails to recognize that the whole learning experience is a formative one. Considering the wider activity systems allows us to see that it is not just production of written work but also the contributions to discussion boards, engaging in tutorials and other conversations as well as the ongoing dialogic feedback on work that all combines and contributes to this transformative experience. Bracketing assessment off as an ‘event’ downplays all the other interactions and runs the risk of downplaying the effort and time involved on both sides. Good pedagogical design maximizes opportunities for interaction and encourages students to reflect and link clinical and academic work enhancing their confidence in their own practice as clinical educators. This enhanced confidence results in a more questioning approach to clinical education which can help challenge existing structures, orthodoxies and hierarchies. Acknowledging and celebrating this diversity are in stark contrast to the current ‘student experience buzz phrase’ (Zepke 2014: 697) prevalent in higher education policy, which implies student experience as a singular, and not plural, entity. In this way, student engagement is reduced to a commodity that can be marketed by universities (Hayes 2018).

Reductionist standardization of quality by what is perceived as easily quantifiable means, focusing on student satisfaction and outcome measures as instrumental metrics, miss the potential value of the collaborative elements as reported here. This ecological, activity-based framework addresses some of the deficits common in more instrumental approaches (Fawns et al. forthcoming 2020). Considering, for example, the value of the collaborative nature of part-time, postgraduate study as described here both in terms of academic programme development and on longer-term outcomes, as practiced by graduates in the workplace offers such a holistic approach.

Exercises such as the Teaching Excellence Framework (TEF) represent an expansion of a measured market in the higher education sector (Tomlinson et al. 2018), in an
attempt to enhance and develop the transparency of teaching quality. The current weight given to easily measurable outcome measures such as grades says very little about the quality of the teacher-student relationship, other than a tacit assumption that good relationships lead to good outcomes.

Similarly, standardized questions about teaching cannot deal with the ecological complexity described here, where teachers act at the interstices of the structural elements (rules, mediating artefacts, division of labour) inhabited by students. In doing so, good teachers aim to maintain an appropriate balance between structure and agency both for themselves and their students, knowing that too much direction constrains opportunities for students to develop autonomy, while too little leaves students to flounder, unsupported. These aspects of teaching are not always visible to students, and perhaps their quality can only be judged theoretically, as here. Conversations with students understanding their motivations and challenges in relation to their studies are important in planning and evaluating academic programmes. Programme leaders have to understand why students choose their programmes and what graduates do with their learning to ensure the continuing relevance of their programmes in an increasingly competitive market (Aitken and O’Carroll forthcoming 2020).

Here, technology offers opportunities in supporting the development of online communities that transcend the physical reach of the individual, allowing the sharing of experience and expanded worldview that offers insights far beyond that which could be experienced within the physical constraints of one individual. Thus, supporting the potential of an online learning community as a site for sharing disciplinary knowledge and discussion that can affect individual agency beyond the direct impact of the academy (Ferreday et al. 2006).

Taking an activity theory lens to online learning allows us to see some of the shortfalls in considering the learning that occurs here in merely socio-constructivist terms. Online learning communities can be referred to as communities of practice (Lave and Wenger 1991), but this fails to consider both the material and temporal insights that an activity theory exploration can offer. An individual on the periphery of a community and described as engaging in legitimate peripheral participation (Lave and Wenger 1991) intuitively helps us to understand the journey from novice to expert; however, the horizontal and recursive representation of the learning on online PGT programmes allows a more nuanced picture of the acquisition of professional knowledge, key as individuals move between settings. Considering the expansive nature of online learning highlights the importance of exposing students to critical discourse in their studies to enhance their curiosity and criticality and the potential impact on their wider professional group, described here as the ripple effect.

The distribution of power within the academy is undoubtedly weighted in favour of academic staff, despite the trend in recent decades towards the symbolic and actual reinvention of students as customers. This imbalance is moderated somewhat in postgraduate education by the fact that tutors and students are often fellow professionals (Kember and Leung 2005), enjoying a more equal relationship and thus allowing this horizontal conceptualization of online postgraduate education. While this can be seen to have clear educational benefits, it does take time and effort both from the student and the staff supporting them and cannot be seen as a seamless process. A factor often overlooked requiring wider acknowledgement within higher education institutions when considering the resource implications of online learning (Fawns
The current ascendency of the neoliberal agenda in higher education means the income generated by postgraduate programmes and their growth potential can result in institutional pressure to expand. There is a clear need to consider educational benefits as described here to ensure decisions are not made on purely financial grounds and more educators working in this field should be encouraged to share their experiences.

Activity theory is not without its critics, specifically that the triangular representation is at risk of reifying the constituent factors into distinct parts rather than a holistic focus on the whole (Langemeyer and Roth 2006); by looking at the system from the perspective of more than one subject, this pitfall has been avoided, and adopting a postdigital perspective helps resist the view of technology as being isolated from the expansive social and material activity of students and staff or from the wider ecologies and infrastructures in which these programmes are embedded. While the lack of prescription and clear guidelines may be considered a weakness of Engestrom’s work, in undertheorized areas such as this, lack of prescription can be interpreted as allowing flexibility to interrogate complex areas of activity.

By considering the importance of individual agency, this exploration offers insights into why the effects of online postgraduate education can be so profound, both on individuals and the wider hierarchies which they occupy. The passivity inherent in the view of a student as someone who merely wishes to receive information as transmitted by a teacher (Hager and Hodkinson 2009) does not account for internal motivations and the desire to engage often present in postgraduate students. Similarly, the teacher’s desire to educate and interact might be tempered by institutional drivers and policies that attempt to reduce teaching to measurable metrics as the teaching approach described here does take time and effort not easily quantified. These factors highlight the complexity of the area, and considering online postgraduate education as an area where traditional boundaries between academic staff and students are collapsing is a helpful conceptualization that is worthy of wider dissemination and appreciation, both in terms of the potential of individual learning in this area but also the expansive nature of such learning.

Conclusion

The motivations to write this paper came from conversations with many students who had anecdotally reported the value and impact of their studies in ways that differed from the kind of information captured in standard evaluation metrics, leading to questions as to why this might be the case. A theorized evaluation of quality rather than an instrumental one as described here recognizes the need to go beyond evaluations of the course and into evaluations of how students apply their learning (and continue to learn) within the workplace. This exploration suggests that both the part-time and the online delivery are important elements allowing the boundary crossing necessary to span different activity systems; however, this is contingent on appropriate pedagogy. Careful design of assignments, learning activities and other mediating artefacts that allow dialogue about practice encourages the linking of academic and clinical learning. By considering the recursive movement between the activity systems, we can more clearly see the ripple effect and online postgraduate education’s potential impact. Building online community and allowing dialogic space to think are the
pedagogical underpinnings that facilitate collective expansion in online postgraduate students. Despite the emphasis on efficiency and standardization in many implementations of educational technology, our results show that the promise of technology can be redeemed through pedagogical approaches that create sufficient space and agency for students to engage in the horizontal processes described here.

This conceptualization is not offered as a one-size-fits-all, and this will not be common to all those studying postgraduate degrees. Just as there is not one version of online learning (Fawns 2019), much will depend on the motivations of individual learners and curricular design of individual programmes of study, but the potential impact of online postgraduate should not be underestimated with these exploratory results offering important insights to those designing and delivering online postgraduate programmes, where existing literature is scarce. They also offer insight to those about to embark on such programmes of study of what might be expected of them and the potential benefits.

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