

Understanding (professional) learning
in online and distance work-based
university degree courses: an
exploratory study
Implications for curriculum design

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Acknowledgement

I dedicate this thesis to my wife, Nahid, and my children, Kayvan and Yasmin, who supported and encouraged me throughout my long doctoral journey and the many nights, weekends and holidays sacrificed in the pursuit of knowledge.

As the first in my family to achieve a doctorate, I am also grateful for my family and parents-in-law who spurred me on and kept me going when times got tough and the light at the end of the tunnel was hard to see.

I would like to express my gratitude to ARU who agreed to fund my EdD.

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Declaration

I, Uwe Matthias Richter confirm that the work presented in this thesis is my own.

Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

This research investigated two online, distance, work-based learning (ODWBL) courses to identify how learning takes place in such courses and (related) workplaces, and which factors affect learning. The two courses were the Postgraduate Certificate in Learning and Teaching in Higher Education (LTHE) and the Postgraduate Certificate in Medical and Health Care Education (MHCE), both taught at Anglia Ruskin University (ARU).

The research aimed to identify, what facilitated the knowledge transfer from the course to the workplace, specifically how students learned on an ODWBL course and then applied, used and shared the course knowledge in the workplace.

The literature review positioned these two courses within the field of work-based learning, distance and online curriculum models, and teacher development in Higher Education (HE). I analysed how learning takes place in online courses and the workplace informed by Evans *et al.*'s (2010) recontextualisation framework. The research used a case study methodology and qualitative research (i.e., surveys, interviews, and participant reflections).

My research findings which have implications for the design and delivery of ODWBL courses are:

- All four types of Evans *et al.*'s (2010) *recontextualisations* are interlinked.
- Learner engagement patterns and needs vary between different learners and activities which need to be considered in course pedagogic design and facilitation.
- While a virtual learning community is important for some learners it should not be the only pedagogic design focus.
- The transfer of knowledge from the online course to the workplace can be scaffolded and enhanced through authentic activities and assessments.

While learning journeys can be scaffolded, the responsibility for learning success is ultimately the learners. The findings suggest a range of skills and approaches for learners to succeed. Finally, the depth of impact the learner achieves with recontextualising course knowledge in their workplace depends on whether their workplace culture is restrictive or expansive.

Impact Statement

The focus of my research was on distance and work-based learning (WBL) both of which have been strategic priorities of my university for more than ten years (ARU, 2011; 2014; 2017; 2018). Over the past six years, my doctoral research has informed the design of distance learning courses I was involved in and taught. The most significant impact on the design occurred due to my extensive contribution in facilitating my institution's rapid transition to fully online and HyFlex teaching during the COVID-19 pandemic (2020-2022). This involved developing guidance and delivering staff development across the university. As part of my professional activities, I have shared and disseminated my research findings at internal and external conferences alongside other projects and initiatives I have led or supported.

More recently (Trimester 1, 2021 and 2022), I developed and delivered an online undergraduate module as part of a new initiative of introducing interdisciplinarity, sustainability, and employability across all degrees through Ruskin (breadth) modules (ARU, 2021c). As part of the development and delivery of these Ruskin modules, we formed a community of practice to which I contributed my expertise in online, team-based, and authentic learning informed by my doctoral research. We are planning to publish a book about these experiences to which I will contribute a chapter.

The most recent ARU Education, Research & Innovation and Operating Strategies 2022-2027 (ARU, 2022b) continue to focus on WBL through growth in degree apprenticeships and embedding employability into all degrees. The Strategies state:

We are a leader in innovative degree apprenticeships where education and employment are closely integrated (ibid., p. 8) [and aim to] engage our students and employers in the co-design of courses that address environmental and societal challenges, and prepare our students for the world of work. (ibid., p. 14)

The pandemic has reinforced the need to cater for our diverse student body by 'creating pathways to higher education for the diverse communities across our regions' (ibid., p. 8) and 'us[ing] technology to offer high quality, personalised learning and development for our students' (ibid., p. 12).

My doctoral research provided me with opportunities to feed into and support these new strategic objectives by continuing to work with Degree at Work, the team

supporting degree apprenticeships at ARU, and providing staff development in approaches to online and distance learning in a rapidly changing post-pandemic higher education environment.

Furthermore, embedding employability into the curriculum will provide more opportunities to explore and research the link between learning at university and the workplace through authentic activities, Live Briefs (ARU, 2021d), placements, and knowledge exchange.

My research and experiences during the pandemic indicate that more research is needed to develop and provide digital spaces for formal, informal and social learning to compensate for the unavailability of the equivalence of physical spaces during online learning. Similarly, more research into the increase in remote working post-pandemic and its impact on WBL, the workplace, networks, and work and social spaces would inform how my findings can be applied, extended, or further developed.

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1. Introduction

1.1. The research

For my thesis, I undertook research into the learning taking place in Online Distance Work-Based Learning (ODWBL) courses at Anglia Ruskin University (ARU). I defined online in this context as courses being delivered entirely using a virtual learning environment (asynchronous engagement) including virtual resources and webinars (synchronous engagement) using virtual classroom applications such as Adobe Connect, Zoom, or Microsoft (MS) Teams. Students studied remotely hence at a distance and were not attending face-to-face classes on campus. My main focus was on learners' interface between the university course and workplace and explicitly on how learning takes place on the course and how course knowledge is then transformed and applied to the workplace and finally reflected upon as part of course activities and assessments.

My research questions are informed by Eraut's work (2004; 2007; 2011):

1. How is learning taking place on a university ODWBL course and in the (related) workplace?
2. Which factors affect this kind of learning? (e.g., pedagogic design, learner environment and context, learner profile and motivation, support)
3. How do the findings apply to the curriculum design of ODWBL courses?

The third research question reflects my aspiration to make recommendations on how to design and deliver ODWBL courses based on the findings of my research.

While many studies on work-based learning (e.g., Eraut, 2004; 2007; 2011) and online distance learning (e.g., Kirschner, 2001; 2006; Kirschner & Lai, 2007; Kreijns, Kirschner & Vermeulen, 2013; Laurillard, 2007; Salmon, 2011; 2013; Wasson and Kirschner, 2020) exist, I found that a research gap remains at university-level work-based learning courses delivered online and at a distance. Additionally, the findings of my Institution-Focused Study (IFS), as well as a similar study at the University of Westminster (Pokorny, Oradini & Carballo, 2014), suggested that the pedagogic design of these courses, based on social constructivist learning centred around active engagement and a virtual learning community, may need to be further investigated.

While there is research (see Chapter 2 *Literature Review*) on how learners learn on WBL, distance learning and teachers' training courses, there is a knowledge gap in identifying how learners engage in an online distance learning university course and then transfer course learning into their workplace. My research focused on the holistic learning journey of learners engaging in ODWBL courses in university teachers' training, and how learners recontextualised and applied the course knowledge to their work practice.

I investigated the research questions based on two Higher Education (HE) ODWBL courses (see Appendix A: *Course Descriptions*) using a case study methodology and mixed methods. The courses I selected were:

- PGCert Learning and Teaching in HE (LTHE)
- PGCert Medical and Health Care Education (MHCE)

1.2 The institutional and national context

The context I work in is a post-92 university that delivers several work-based and work-related degrees. My university has a longstanding history of working with employers and many degrees still reflect the more applied nature of ARU's background (Mumford & Roodhouse, 2010, p. 26).

In 2007, ARU secured funding through HEFCE's employer engagement fund as part of the then government's intention to promote HE engagement with employers (Arnot, 2007; Mumford & Roodhouse, 2010, p. 34; Kewin *et al.*, 2011). Degrees at Work (originally called Higher Skills at Work) was formed as a new central service to build relationships with employers and the university and develop WBL degrees and Continuing Professional Development (CPD) provisions in conjunction with the faculties. Most of these degrees were delivered online and at a distance. Besides other activities, in 2017 Degrees at Work took on the management of degree apprenticeships which have replaced most of these initial online work-based learning degrees (ARU, 2022a).

My research was initially informed by the *Corporate Plan 2011-14* objectives to increase the university's distance and work-based learning provision, diversify ARU's offer, and develop markets that do not rely on HEFCE funding (ARU, 2011). The following *Corporate Plan 2015-17* (ARU, 2014) reinforced the continuing importance

of distance and work-based learning as an area of growth for ARU. The current University Strategy, *Designing our Future 2017-2026*, continues the theme but focuses on ‘substantially increas[ing] the number and range of degree apprenticeships we offer’ (ARU, 2017, Theme 1). The *Education Strategy 2018-2022* also refers to ‘develop[ing] opportunities for our students to learn in a variety of contexts and settings, inside and outside the classroom, including work placements and internships’ (ARU, 2018, Theme 3) and ‘using state-of-the-art education technology, we’ll develop flexible ways of delivering our education, incorporating a range of methods of access and delivery, including blended and distance learning’ (ARU, 2018, Theme 4). Since then, ARU has grown into ‘one of the UK’s leading providers of degree apprenticeships’ (ARU, 2021a) as well as increased its distance learning provision with ‘more than 4,000 students in 96 countries hav[ing] studied online with ARU over the past ten years’ (ARU, 2021b). As with other UK HE institutions, ARU’s strategies and policies responded to changing government initiatives and policies such as the *Leitch Review of Skills* (Leitch, 2006), the Browne Report: *Securing a sustainable future for Higher Education: an independent review of Higher Education funding and student finance* (Browne, 2010), the Wilson Review: *Business-university collaboration* (Wilson, 2012), and more recently the Augar chaired *Post-18 review of education and funding* (Augar, 2019).

1.3 My role and the research - epistemological position

Since 2001, I have worked for Anglia Learning and Teaching (AL&T), ARU’s central learning and teaching unit, with responsibility for online and technology-enhanced learning. AL&T is part of a central Professional Services department called Learning Development Services which also includes the Degrees at Work and ARU Distance Learning (ADL) teams. The latter was formed in 2010 as a response to the challenges of developing and delivering distance learning as a mainly classroom-based university. I currently work with both Degrees at Work and ADL as part of my AL&T liaison role.

I have been involved in developing, supporting, and delivering distance learning for several years as part of my brief to develop and support technology-enhanced learning. As online distance WBL continued to grow, the EdD offered a means to develop my knowledge in this area. More recently, this expertise became crucial in

response to the COVID-19 pandemic, requiring universities to move to remote and online learning during lockdowns. I made valuable contributions to supporting academic staff's transition to online, hybrid/HyFlex, or blended learning during the pandemic through staff development and support. My most recent experience (Trimester 1, 2021 and 2022) was designing and delivering an online institution-wide, interdisciplinary breadth module at Level 5 (second year, undergraduate studies).

My doctoral research investigated two ARU ODWBL courses with a particular focus on the LTHE, which is mandatory for new academic staff at ARU. I developed and taught the LTHE and the MA Education from 2011 to 2020, including the period during which I collected the data for this research. The design of the LTHE was strongly informed by Salmon's Five Stage Model (Salmon, 2000; 2011) and e-tivity design (Salmon, 2013). Therefore, the research queried the suitability of Salmon's model for the design and delivery of ODWBL courses.

This study was mainly insider research encompassing research into my teaching on the LTHE and other activities related to distance learning. As an insider researcher on the LTHE, and as a colleague of the course leader of the MHCE, as well as many participants on the LTHE, I was aware of my role in the research, my motivation, and the political context of the university.

The LTHE used a Patchwork text assignment which consisted of short self-contained tasks, called patches, which were 'stitched' together in a reflective final patch, which I used as data. Winter (2003) defined patchwork text assignments as:

a variety of small sections, each of which is complete in itself, and that the overall unity of these component sections, although planned in advance, is finalised retrospectively, when they are 'stitched together'. Thus, a 'patchwork text' assignment is one that is gradually assembled during the course of a phase of teaching and consists of a sequence of fairly short pieces of writing, which are designed to be as varied as possible and to cover the educational objectives of the teaching (ibid., p. 1)

The Patchwork Text assignment was written for markers and would therefore emphasise students' successful learning outcomes.

I, therefore, agree with Merriam's (1998) view that 'the key philosophical assumption upon which all types of qualitative research are based is the view that reality is constructed by individuals interacting with their social worlds' (cited in Yazan, 2015,

p. 137), and ‘that reality is not an objective entity; rather, there are multiple interpretations of reality’. Furthermore, ‘the primary interest of qualitative researchers is to understand the meaning or knowledge constructed by people. In other words, what really intrigues qualitative researchers is the way people make sense of their world and their experiences in this world’ (Yazan, 2015, p. 137).

As part of my IFS (the 20,000-word assignment completing the taught phase of the EdD) I researched distance and blended learning focusing on the distance learning LTHE which this research built and extended on.

1.4 Linking to my Institution-Focused Study (IFS)

In my IFS, *What makes effective online learning? An inquiry into learning activity design and online learning communities* (Richter, 2014), I explored the role of virtual learning communities and learning activities in distance and blended learning courses concerning student engagement. The main subject of my IFS was the online distance learning version of the LTHE at ARU (2012-14). The most interesting result was that, while the engagement in the online activities, and thus the virtual learning community, was relatively low (10-20% participated actively throughout the module), the pass rate was almost 100% (depending on the cohort). I defined active participation in this context as making and replying to contributions, such as posting to a discussion board, blog, or wiki-based learning activity. Furthermore, the (patchwork text) assessment clearly showed that learning had occurred, that participants had applied their learning in their context, and reflected on the outcomes. Therefore, this formed the basis of the research questions in this thesis investigating how and where the learning happened if not through active engagement in the pedagogically-designed online learning community. Further investigations suggested that, for most participants, learning took place as part of engaging with the workplace rather than in the online learning community of the course.

While advocates of social constructivist approaches, such as Kirschner (2001; 2006), Kirschner and Lai (2007), Salmon (2011; 2013), and Wasson and Kirschner (2020), tend to define online learning as effective learning through active engagement in the online learning community of a course, Lave and Wenger’s (1991) concept of

legitimate peripheral participation supports the outcome of my IFS study, confirming that learners can learn just as effectively from passive engagement in an online course (i.e., 'lurking') than from active engagement (Taylor, 2002; Orton-Johnson, 2007). Research into the PGCert HE at the University of Westminster (Pokorny, Oradini & Carballo, 2014), using White and Le Cornu's (2011; 2017) *Visitor and Resident typology for online engagement*, arrived at similar results. This leaves a gap in knowledge around how learners' engagement with the workplace contributes to the learning in these courses. This research, therefore, extended my IFS findings to consider in more depth how students engage and learn in ODWBL courses.

2. Literature Review

Building on the findings of my IFS, the focus of this research was on the learning experience of ODWBL courses taking place both at the university and in the workplace and the resulting curriculum design implications. In particular, this involved a critique of the curriculum design approach taken for the two courses and specifically Salmon's Five Stage Model and the assumption that effective online learning is based on active participation with peers and the development of a learning community.

To inform my research, I conducted a literature review of definitions of WBL, curriculum models and frameworks for online and distance learning, and WBL teaching development in HE, particularly online PGCerts for new HE teaching staff, and their experiences of distance learning.

Nixon *et al.* (2006), who reported on work-based learning across UK HE for the Higher Education Academy (HEA), identified a similar gap when they argued that 'given the limited nature and amount of pedagogical research into this mode of learning across the HE sector, there is a lack of readily accessible substantive evidence to support the identification of effective practice' (*ibid.*, p. 38).

While there has been further research on WBL since then (e.g., Lemanski, Mewis & Overton, 2011; Malloch *et al.*, 2011; Helyer, 2015; Garnett, 2016; Nottingham, 2016; Talbot, 2019), the main focus was not on online distance WBL.

In the first section of my literature review, I identified the main characteristics and the type of learning expected to take place in ODWBL courses which are relevant to this research. The literature review on WBL focused on different WBL definitions, delivery, study modes and pedagogic approaches to situate the two ODWBL courses in this research. This part is followed by concepts of how learning takes place in the workplace. The WBL pedagogic approaches informed the conceptual framework (see Chapter 3 *Conceptual Framework and Research Questions*). In the third part, I considered curriculum models and frameworks for online and distance learning. In the following part, I focused on online distance learning with specific attention to teachers' training for university lecturers and those Professional Services staff supporting learning, teaching, and assessment. In HE, this type of training is commonly provided as PGCerts LTHE or Academic Practice including MHCE. This

part identified similarities and differences between the PGCerts in my study and similar courses in the literature. Finally, I included a short excursion on the impact of COVID-19 to update the latest findings on ODWBL.

2.1 Work-based learning

In the following sub-sections, I explore different aspects of WBL:

1. Definitions
2. Elements of WBL
3. Modes of delivery
4. WBL pedagogic approaches and characteristics

2.1.1 Definitions

In the literature, I found a wide range of definitions for work-based, workplace, and work-related learning. Coldham and Armsby (2016), for example, defined work-related learning as ‘an umbrella term in the UK for curriculum design to support both professional, discipline-specific learning and the general development informed by the employability agenda’ (ibid., p. 187) with the main difference being the location of learning – either in the university or in the workplace.

Conversely, Harris and Chisholm (2010) as part of a European project delineated work-based learning in a wider sense against workplace learning, work-related learning and lifelace learning defined as:

Work-based Learning: Learning arising from undertaking study directly connected to an individual’s own work duties or directly related to their organisation or industry for the benefit of their work-related career or for the organisation within which they work.

Workplace learning: Learning which is indirectly related to a person’s work duties, or which takes place using the workplace as the learning environment.

Work-related learning: Learning that is associated directly or indirectly with work of whatever nature but not necessarily done in the workplace.

Lifelace Learning: Learning that encompasses knowledge, skills, behaviours and attitude acquired, being acquired or to be acquired throughout life, irrespective of when, where, why, and how it was, is or will be learned (ibid., p. 10)

The results of my IFS suggested that the courses I investigated for this research align with Harris and Chisholm's definition of work-based learning.

Work-integrated learning, a term predominantly used in Australia (Patrick *et al.*, 2008; Cooper, Orrell & Bowden, 2010; Orrell, 2011; Ferns, Campbell & Zegwaard, 2014;), is defined by Atkinson (2016) as 'learning that comprises a range of programs and activities in which the theory of the learning is intentionally integrated with the practice of work through specifically designed curriculum, pedagogic practices and student engagement' (ibid., p. 2) contrasting it with work-based learning defined as 'learning that occurs in a work environment, through participation in work practice and process, and is integral to vocational education and training' (ibid., p. 2). Work-integrated learning relates to Harris and Chisholm's (2010) definitions of workplace learning and work-related learning as

'work-integrated learning (WIL) at university aims to intentionally integrate work and educational experiences. Work-integrated learning integrates the theory of the learning with the practice of work. This is done through specifically designed curriculum, teaching activities and student engagement and it should be purposefully linked to curriculum and assessment' (ibid., p. 4).

Work-based learning (WBL) is defined in different ways in the literature. Boud and Salomon (2001) defined WBL in universities as:

a class of university programmes that bring together universities and work organisations to create new learning opportunities in workplaces. Such programmes meet the needs of learners, contribute to the long term development of the organization and are formally accredited as university courses (ibid., p. 4)

Gibbs and Garnett (2007) described WBL as:

a learning process which [that *sic*] focuses University level critical thinking upon work (paid or unpaid) in order to facilitate the recognition, acquisition and application of individual and collective knowledge, skills and abilities to achieve specific outcomes of significance to the learner, their work and the University (ibid., p. 410)

Garnett (2016) defined WBL as 'programmes of study where the learning which takes place is undertaken primarily at and through work and is for the purpose of work' (ibid., p. 305).

At the heart of the courses, I investigated, was the application of theoretical concepts, models and theories to practice and reflection on practice (Evans *et al.*, 2010). Therefore, they involved a university-level 'learning process which focuses university-level critical thinking upon work' (Gibbs & Garnett, 2007, p. 410).

Key elements of Garnett's (2016) interpretation of WBL are that reflection is central:

for individual knowledge to become organizational knowledge, and thus fully contribute to the intellectual capital of the organization, it must be shared and accepted by others. Individual knowledge forms the basis for communication of information to others who will then make sense of it in the light of their own personal knowledge. For individual knowledge to be effective at work it must be shared and accepted by others (*ibid.*, p. 311)

To support their argument, Garnett quoted Durrant, Rhodes and Young (2009), stating that:

Work-Based Learning programmes are designed to promote professional and personal development and intended to benefit both learners and the workplace. A major aspect of work-based programmes is the relationship between individual learning and organizational change (*ibid.*, p. 311)

The point here is that WBL is not just for an individual to gain a qualification or meet probation requirements, but that colleagues and the organisation should also benefit from the learning through sharing. Both PGCerts in this study aligned to the Advance HE's UK Professional Standard Framework (UKPSF) (Advance HE, 2020), and the LTHE was also informed by ARU's strategic needs.

While Gibbs and Garnett (2007), Garnett (2016), Talbot (2019), and Costley (2021) defined WBL mainly as negotiated, learner- and employer-centred learning programmes or 'shell' courses, a study by Nottingham (2016) identified three WBL perspectives: 'discipline-centred, learner-centred and employer-centred' (*ibid.*, p. 790). Nottingham's research was based on '20 purposefully selected WBL lecturers and senior academic staff using interviews, documents and observations' (*ibid.*, p. 794) and found that:

there seemed to be a number of WBL practices concurrently operating which represented a range of underpinning philosophies, conceptual positions and learning theories from which academic practice was structured. To understand existing WBL provision, there needed to be greater understanding of the range of practice and how this range was interpreted in terms of pedagogy and academic discourse (*ibid.*, p. 792)

This confusing picture was not unexpected as WBL can include everything from university-based teaching through authentic activities such as real-world scenarios, case studies and simulations, Live Briefs (i.e., 'integrating real world professional experiences within the curriculum' (Janes & Boz, 2022)), to work-based modules, placements, sandwich courses, and degrees where the learning takes place in the workplace, or between the workplace and the university, such as the more recently introduced degree apprenticeships (ARU, 2021a).

Nottingham's three WBL perspectives can help to identify the focus of a specific WBL offer. In a discipline-centred approach, 'the disciplinary context of the learning remained a focus in the curriculum and disciplinary knowledge remained a large part of the WBL pedagogy' (ibid., p. 796).

In contrast, employer-centred curricula are often strongly influenced and informed by professional body requirements in addition to QAA subject benchmarks (QAA, 2022). This is true, for example, for degree apprenticeships where the Education and Skills Funding Agency (ESFA) (ESFA, 2022) of the Department for Education (DFE) are accountable for the quality, occupational standard, and end-point assessment, while the professional standard is developed and approved by the Institute for Apprenticeships and Technical Education (Institute for Apprenticeships and Technical Education, 2022). Degree apprenticeships are therefore an example that fits into the employer-centred perspective of workforce development.

As Nottingham (2016) suggested:

the provision was viewed as 'education', but the employer, [...] provided a focal point for curriculum development. Greater employer and sector interaction was expected to integrate the learning into existing businesses, with a pragmatic approach to developing learning and teaching aligned with in-company training... The design of curriculum was generally based on employer designated learning outcomes (ibid., p. 799)

The third perspective is learner-centred, where:

flexible negotiated learning was considered central to the methodology of WBL... [including] pedagogic elements such as the use of generic shell modules and portfolios. Assessment was seen as flexible, fit for purpose, and using HE standards that recognised coursework rather than exams; approved prior experiential learning was used as a route to individually negotiated programmes (ibid., p. 797)

This kind of learning often sits outside established university structures. At ARU, accreditation of prior learning (APL), prior experiential learning (APEL) and prior accredited learning (APCL) are available (as a proportion of a degree) and supported by faculties. More recent discussions at ARU and in the sector (QAA, 2021) may introduce negotiated awards through a collection of microcredentials (FutureLearn, 2022).

I found the definitions and terminology for work-based learning inconsistent and covering a wide range of different types of courses and perspectives. For instance work-related (e.g., Coldham and Armsby, 2016), work-based (e.g., Boud and Salomon, 2001; Brennan, 2005; Nottingham, 2016) and work-integrated learning (e.g., Atkinson, 2016) are all used as umbrella terms in different literature.

The two PGCerts in this study were primarily discipline-centred, but also employer informed, both because they were accredited by the Advance HE, and therefore align to the UK UKPSF (Advance HE, 2020), and met the expectations of academic staff as defined by ARU's strategies (ARU 2017; 2018; 2022b). Both PGCerts were delivered using student-centred activities, which, in this context, involved students negotiating their understanding between the generic content, models and concepts provided by the courses and their discipline-specific teaching context. In respect of the two PGCerts, I found that Nottingham's three perspectives are not necessarily distinct but overlap.

2.1.2 Elements of WBL

Like Nottingham (2016), Brennan (2005) differentiated WBL as courses with a highly prescriptive curriculum versus a negotiated one, and courses with WBL as a minor element. The curriculum can be defined by the HE institution (HEI), a professional body, the employer/workplace, or a combination of these.

The ODWBL courses I investigated were degrees where WBL is a major part. They were accredited university courses where the curricula were developed together with input from employers and defined by external standards or bodies, in the case of my courses the UKPSF of the Advance HE (former HEA) (Advance HE, 2020) leading to Advance HE Fellowship.

2.1.3 Modes of delivery

A further consideration is the mode of delivery or participation. Mumford and Roundhouse (2010) distinguished between the following modes:

- Conventional full-time courses
- Conventional part-time courses
- Distance Learning
- APEL and Shell courses
- Sabbaticals

These modes require different time commitments of participants: a conventional full-time course, for example, would usually involve taking time off work, while a part-time course may be undertaken while working. The modes may also reflect the commitment of the employer in providing time off to employees (i.e., sabbaticals) or supporting their employees in using their workplace and work experience as part of their learning as APEL, or Shell courses, where learning objectives and content are flexible and negotiated by the learners. Mumford and Roundhouse (2010) suggested that the curricula of conventional full- and part-time courses are 'controlled by the academic institution' (ibid., p. 3), while APEL and Shell courses tend to be more negotiated:

The 'shell' course... is essentially a content free programme. The university imports learning undertaken elsewhere into this framework... The university validates the courses and quality-assures student assessment but does not design the course or participate in provision (ibid., p. 6)

The courses I evaluated were part-time online, distance WBL and were more flexible concerning when and where they were studied, therefore enabling learners to study while working. However, my research also found that the support from employers varied, with most funding the courses but not providing ringfenced study time.

Mumford and Roundhouse's (2010) differentiation also indicated a spectrum (and potential tension) between highly structured and regulated courses, with little space for learner negotiation, and low structured courses such as 'shell' courses. I discuss this further in Section 2.3 *Distance and online curriculum models and frameworks*.

Lynn, Mason and Reynolds' (2002) e-learning typology provided a perspective on different forms of online distance WBL which differentiated between the type of learning taking place online (see Table 1).

Content-rich	Content / Communication	Community-based
Repository based	Mix repository and communication based	Communication rich, sharing of learning
Web-based training	Facilitated online learning	Learner-centred / informal learning
Instructor centred	Instructor and learner-centred	Community centred
Content focus	Process focus/led	Practice-led/focused
Individual	Small group	Organisational
Minimal interaction between participants	Mostly tutor-led interaction	Participation of the whole group
No collaboration	Interaction with other learners	Participants are both learners and tutors

Table 1: e-learning typology (adapted from Lynn, Mason & Reynolds, 2002, p. 11)

The courses I focused on have elements of both Content-rich and Content / Communication courses. The design of the courses was based on the assumption that active engagement in learning activities and the formation of an online learning community (Lave & Wenger, 1991; Wenger, 1998; Salmon, 2011; 2013) are essential for learning success, however, this was questioned by my IFS outcomes. Therefore, in my research, I considered how much of a student's learning is based on self-directed learning, an online learning community, and a work-based community of practice.

2.1.4 WBL pedagogic approaches and characteristics

Based on case studies, Nixon *et al.* (2006) identified several commonalities in WBL pedagogic approaches:

These approaches are distinctive in that they emphasise a **process-rather than content-driven curriculum** which is strongly **student-centred** and less derived from pre-set curricula...

The pedagogy is also **experiential in nature**, centred on the application of learning in the workplace, built around the student's current and/or potential work requirements and taking into consideration the capabilities that the student brings to his or her [*sic*] work practice...

Reflective practice is supported through **evidence-based assessment** of progress and achievement...

The adopted pedagogical approaches also emphasise the need to take on a **more flexible approach to delivery** that utilises a mixed mode or blended approach to learning, integrating e-learning and distance learning alongside more conventional and formal approaches to education (ibid., pp. 38-39 [Emphasis in the original])

Experiential and practice or work-oriented learning, as well as critical reflection are at the heart of WBL (Coldham & Armsby, 2016). However, courses like the PGCerts in this study are also informed, and to a certain degree, regulated by professional body requirements which limit the level of content negotiation. While content should be informed by workplace requirements, it is up to teachers to scaffold the transfer of knowledge from course content to the workplace through authentic activities and assessments. Therefore, the experiential nature of these PGCerts involved learners in making sense of course learning by applying it to their workplace and vice versa. The learning was evidenced through reflection (Helyer, 2015) in their assessments.

2.2 Learning in the workplace

This section considers how learning takes place between the university course and the workplace. The literature covered in this section informed the conceptual framework and research design (see Chapter 3 *Conceptual Framework and Research Questions*).

Kettle (2013) summarised the main characteristics of WBL as being ‘student-centred, authentic, situated, experiential, and reflective and may involve alternative assessments... [and] lend themselves to constructivist pedagogic approaches’ (ibid., p. 18). Experiential learning and critical reflection are associated with Kolb’s learning cycle, which consists of a cyclical process with the learner starting from a concrete and new experience, followed by reflective observation, abstract conceptualisation, and application through active experimentation (Fry, Ketteridge & Marshall, 2009; Pokorny & Warren, 2016).

The focus of WBL is often on competency-based learning (Kirschner, 2001; Illeris, 2008; Fry, Ketteridge & Marshall, 2009; Illeris cited in Malloch *et al.*, 2011; Pokorny & Warren, 2016). For Kirschner (2001) competency-based learning is ‘just-in-time learning’ of knowledge, skills and attitudes:

requiring learning settings in which the knowledge can be gained and the skills acquired in authentic, meaningful contexts, where the necessary interactions with others are fundamental elements of the setting and where the student can reflect upon what he or she has done and develop attitudes intrinsic to the profession (ibid., p. 2)

Kirschner's definition of competency-based learning was set in the constructivist paradigm of learning theories involving situated learning, reflexivity, and cognitive apprenticeship with collaboration and cooperation in an effective learning environment being the main ways students engage with and learn from each other.

However, the ODWBL courses I investigated were not solely competency-based. In postgraduate courses, a focus on theory also plays an important role, rather than being mainly experiential, situated, and applied (Lave & Wenger, 1991; Evans *et al.*, 2010; Kettle 2013; Pokorny & Warren, 2016).

According to Kreijns, Kirschner and Vermeulen (2013), 'scholars agree that the key element in collaborative learning is the social interaction among learning group members because social interaction is particularly important for reaching shared understanding and the construction of knowledge through social negotiation of views and meanings' (ibid., p. 229).

I found in my practice that while Web 2.0 social software may improve such social interaction (cf. Zachos, Paraskevopoulou-Kollia & Anagnostopoulos, 2018; Van Den Beemt, Thurlings & Willems, 2020), its use as part of formal learning is controversial and not (yet) mainstream. Greenhow and Lewin (2016) found that 'there is also considerable debate about the benefits and challenges of appropriating technologies (e.g., social media) in everyday use for learning and little exploration of the connections between formal, non-formal, and informal learning such technologies might facilitate' (ibid., p. 7). Their literature review found that 'students were less willing to appropriate social media as a formal learning tool, preferring it for course-related communication or using it largely for socializing and non-academic purposes' (ibid., p. 8). While teachers and lecturers can recommend their use, it usually relies on students to link up and collaborate, using social media informally. Kreijns, Kirschner and Vermeulen (2013) define 'sociability' as, 'the extent to which [computer-supported collaborative learning] facilitates social interaction in the socioemotional dimension and, as desired result, the emergence of a sound social

space, which is characterized by strong interpersonal relationships, trust, and a sense of cohesion' (ibid., p. 231).

According to Kreijns, Kirschner and Vermeulen (2013), social learning requires students to be present (social presence) and interact with each other (social interaction) to create a social space. However, if students, for various reasons such as time constraints, other priorities, and/or lack of self-confidence, do not interact, such a social space is either weak or underdeveloped. This form of learning, therefore, contrasts with independent learning where students learn by themselves and are not dependent on other learners to achieve a positive learning outcome (Kirschner, 2006).

Depending on what type of learning a particular online distance WBL course pursues, the learning activities, assessments, and learner engagement differ (see Figure 1). However, they can also be sequential, like the PGCerts, in which academic knowledge is acquired on the course, and then applied in the workplace, leading to reflection on the application, current, and past practice.

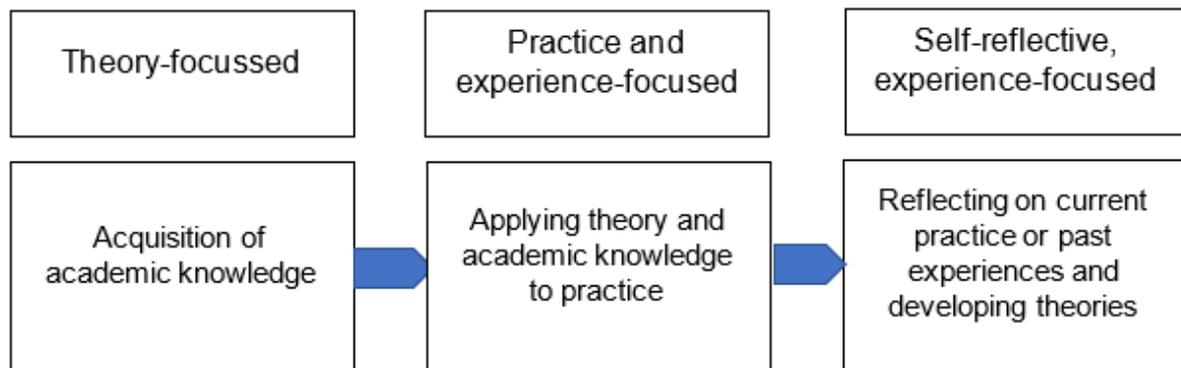


Figure 1: Types of Work-Based Learning course

Learning may take place in a formal or informal setting (Kirschner, 2001; Eraut, 2004; 2007; 2011; Laurillard, 2007). Eraut (2011) found that 'over a wide range of professions and workplaces, informal workplace activities provided between 70-90 percent of the learning' (ibid., p. 12).

This provides a strong case for examining both informal and formal learning activities and processes. This is supported by other sources such as Cross (2006; 2010), Eraut, (2011), Jennings and Wagnier (2011), Hart (2015; 2022), and supporters of the 70-20-10 framework of work-based learning (Forum Pty Ltd, no date), who advocate that only a small proportion of learning in a professional context is formal

(10%) while the majority is experiential (70%) and social (20%). There is growing recognition in the world of work (Cross, 2006; 2010; Jennings & Wargnier; 2011; Hart, 2015; 2022) that individual informal learning and social collaboration should be promoted and shared within a company or organisation to enable peer learning and sharing of experiential knowledge.

Laurillard (2007) characterised informal learning as:

the absence of a teacher. The absence of which means there is no defined curriculum, externally defined learning goals, formative and summative assessment, and or formal task structures. There is no longer a teacher constructed environment in which the learner is operating, but the more uncertain context of the real world (ibid., p. 168)

This means that learners must be self-motivated, setting their own tasks and goals in the real-world context they share with 'other learners and the world of experience acting as arbiters of the learner's actions and productions' (ibid., p. 169). Laurillard suggested that 'maintaining contact and sharing outputs with other learners would give a more optimal learning experience in an informal context' (ibid., p. 170), with peer support and feedback and learner-generated content being the main support vehicles of informal learning. However, considering that most learning in professional contexts is experiential (Forum Pty Ltd, no date), and that my IFS findings did not support the centrality of a course-based virtual learning community as the main factor for successful learning outcomes, I, therefore, suggest that informal learning also includes engaging with fellow employees in a work-based community of practice.

While my IFS study focused on the engagement of learners in an ODWBL PGCert, so far, I have not considered the aspect of workplace and practice engagement.

Eraut (2004) broke down the WBL learning process into five interrelated stages:

1. The extraction of potentially relevant knowledge from the context(s) of its acquisition and previous use
2. understanding the new situation - a process that often depends on informal social learning
3. recognizing what knowledge and skills are relevant
4. transforming them to fit the new situation
5. integrating them with other knowledge and skills in order to think/act/communicate in the new situation (ibid., p. 256)

Eraut continued that HE mainly focused on stages 1 and 3 while the workplace attention is on stages 2 and 3, 'Thus both cultures not only ignore the very considerable challenges of stages (4) and (5) but deny their very existence!' (ibid., p. 256).

Margaryan (2008) developed a reference model for work-based learning in organisations (ibid., pp. 33-42), which was applied and tested in a large Dutch company. Margaryan's premise was that formal course-based and informal work-placed learning need to connect to address the complexity of the modern workplace and its practices. According to Margaryan (2008)

Organisations require employees to possess skills, knowledge, and attitudes in strategic problem-solving; critical thinking; learning quickly in response to rapidly changing environment; working in distributed and culturally-diverse teams; building knowledge from different sources and different perspectives, and applying it in a flexible way. [...] The assumption that these highly complex skills can be learned in traditional formal learning settings focused on transferring content from expert teachers to novice learner is no longer tenable. It is equally untenable that the knowledge and skills required for effective performance in the workplace can be picked up from experienced peers and coaches in informal learning settings alone (ibid., p.8)

Margaryan emphasised that learning for work was situated in the workplace and in authentic work practices (ibid., p. 12) and proposed four types of knowledge at the core of organisational learning: know-what, know-why, know-how and know-where (ibid. p. 13) alongside key characteristics of work-based learning. These characteristics include real-world workplace problems situated in the learner's work context, project-based problem solving involving collaboration with peers, personalised learning with individual, group and teamwork, and finally action-oriented, reflective approaches focusing both on process and output (ibid., p.13). According to Margaryan (2008), the components of technology-enhanced work-based learning are:

1. Situated in the workplace
2. Collaboration and teamwork
3. Creating and Sharing Knowledge
4. Integration of formal and informal learning

What these sources have in common is that effective WBL is authentic, situated in work, experiential, and involving reflexivity. While there is agreement that engagement with peers and mentors is important, it is only one aspect of WBL and can be informal and formal.

Evans *et al.* (2010) provided a useful framework for *putting knowledge to work* by distinguishing between four kinds of knowledge recontextualisations involved in work-based learning and teaching:

1. *Content Recontextualisation* (putting knowledge to work in the programme design environment)
2. *Pedagogic Recontextualisation* (putting knowledge to work in the teaching and facilitating environment)
3. *Workplace Recontextualisation* (putting knowledge to work in the workplace environment)
4. *Learner Recontextualisation* (what learners make of these processes) (Evans *et al.*, 2010, p. 4 [Emphasis added])

All four kinds of knowledge recontextualisations applied to my study. However, my exploration focused more on *pedagogic recontextualisation* (course activities and assessments), *workplace recontextualisation* (application to the workplace) and *learner recontextualisation*, and less on *content recontextualisation*. Evans, Guile, and Harris (2009) published six exemplars of how the concept of recontextualisation was applied in practice ‘involving successfully moving knowledge from disciplines and workplaces into a curriculum; from a curriculum into successful pedagogic strategies and learner engagement in educational institutions and workplaces’ (*ibid.*, p. 12).

Content recontextualisation refers to how content was designed and made available to students in the PGCerts. Both PGCerts were designed with accessibility and useability in mind, following universal design principles (Burgstahler, 2020; CEUD, 2020), and the LTHE was improved over time based on student feedback. For instance, the weekly content used an accessible web template to achieve consistent design across both modules, therefore, avoiding students having to relearn the navigation. Students were introduced to module navigation, structure, and design at the beginning of modules, and user guidance was provided when new technologies were used during modules. Resources were presented in different media formats (e.g., text, audio, video, simulations), where possible, to cater for different media

preferences and accessibility. The design of the content and the activities followed a similar structure to the PGCert approach described by Hughes (2018) as ‘presenting good pedagogic practice for face-to-face as well as effective use of online tools’ (ibid., p. 2).

Pedagogic recontextualisation in the two PGCerts consisted of a range of activity types that encouraged and enabled different ways for participants to engage in their learning. This was in response to learners’ feedback about their contexts and preferences and supported by different engagement patterns. Some students, for instance, preferred non-active engagement, such as accessing resources, and reading and listening to other participants’ contributions, while others favoured more immediate interactions, responses, and feedback from peers and tutors. One of the principles of the pedagogic design of the LTHE was, therefore, to provide resources in different media formats, different asynchronous activities (e.g., discussion forums, wiki activities) and synchronous engagements (i.e., webinars) through presentation, text, audio and video chat as well as ‘breakout rooms’, which are separate digital rooms for group work during a webinar session. Another principle was to provide continuous peer and tutor feedback on activities and assessments. The approach was similar to van Merriënboer (2019) and Wasson and Kirschner’s (2020) Four Components Instructional Design (4C/ID) concept (see Figure 3) which consists of, ‘(a) learning tasks, (b) supportive information, (c) procedural information, and (d) part-task practice’ (ibid., p. 817).

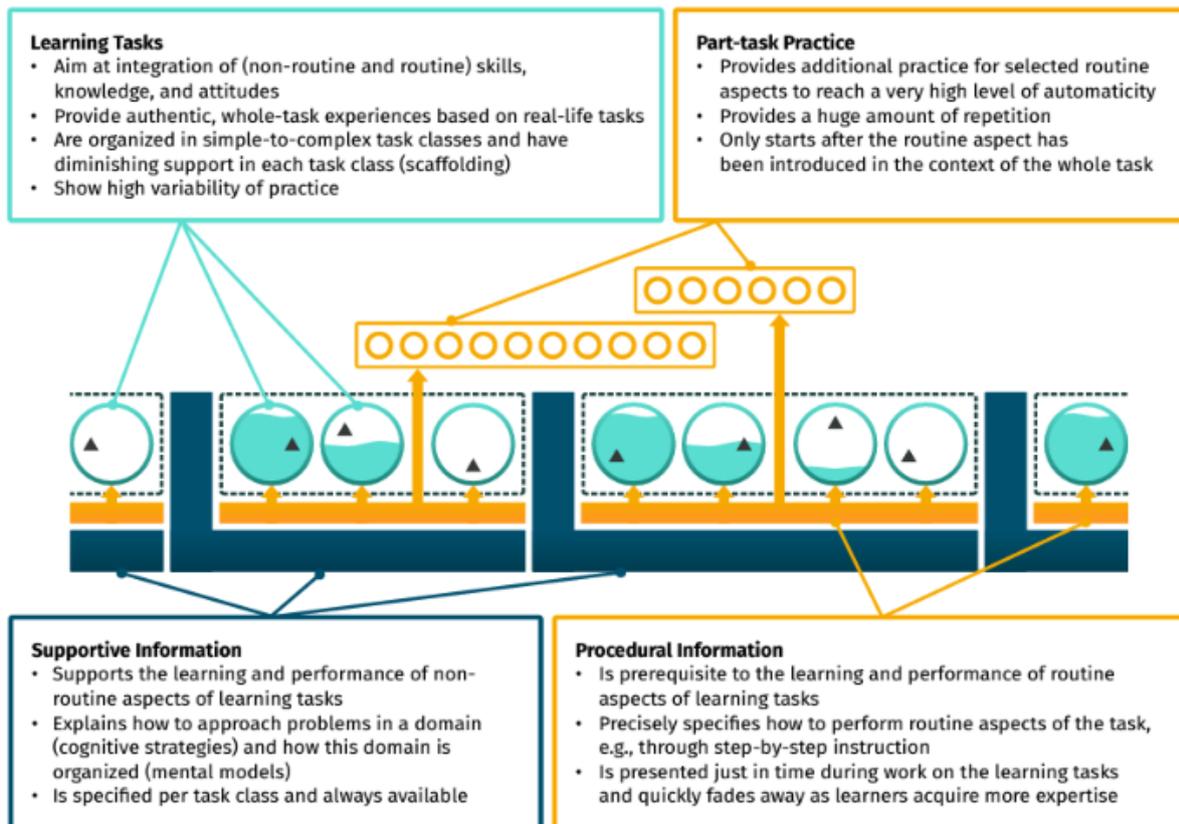


Figure 3: The four components of the 4C/ID model (van Merriënboer, J. J. G. 2019, p. 4)

In my research, I investigated student engagement in the courses to gain insight into how the *pedagogic recontextualisation* took place.

The link to *workplace recontextualisation* was achieved through real-world, authentic activities and assessments such as the Patchwork Text Assignments (in which each patch required participants to apply a learning, teaching and assessment aspect to their practice and reflect on the process) in the LTHE (Scoggins & Winter, 1999; Smith & Winter, 2003; Winter, 2003), and the peer-reviewed recorded teaching observations in the MHCE. As part of my research, I wanted to know how participants took their course learning into their workplace and applied it to their practices. In the interviews, I explored examples of these applications and their impact, but also whether and how participants shared their new knowledge with colleagues and their wider work community. These participants' reflections provided an insight into *learner and workplace recontextualisation* – participants' perception of how the learning process took place in the workplace.

Guile (2014; 2019) expanded on the concept of recontextualisation arguing that 'there is a mediated relation, rather than a gap, between, what is referred to, [as] the

contextual (i.e., world of experience) and decontextual (i.e., world of theory)', between practice and theory (Guile, 2019, p. 1) expanding on and debating the philosophical discussion of recontextualisation by Wertsch (1985), Vygotsky (1987), McDowell (1996), van Oers (1998), and Brandom (2000, cited in Guile, 2019) and 'identifying three principles that underpin the reformulated concept of recontextualization, namely purpose, context and process' (ibid., p. 2).

Guile (2019) looked at how knowledge develops from and differentiates between 'everyday experience' to theoretical, 'specialist forms of social practice such as inquiry and verification associated with disciplinary traditions' (ibid, p. 2). According to Vygotsky (1987), 'all forms of knowing are created through social practices and have a mediated relationship with one another' (quoted by Guile, 2019, p. 2). Thus, different kinds of knowledge evolve through, and are situated in, different social contexts, and produce different types of concepts.

One example that illustrates concept development is the process by which children learn to name and identify animals (Nickerson, 2021). When children begin to express themselves, the first animal they learn about is their name for all animals. For example, if the first animal they recognise is a dog, children will call all (four-legged) animals 'dog' before they can differentiate, both conceptually and linguistically, between dogs, cats, or horses, as well as two-legged animals (birds), all being animals. Everyday objects, therefore, become a theoretical concept (animal), which can be reapplied and refined by being exposed to a wider set of animals. All these objects are situated in contexts where specific settings are part of the meanings. Learning takes place in actions such as activities and according to van Oers (1998) (cited by Guile, 2019, p. 3):

as we understand a theoretical concept, which has most probably been introduced to us in relation to an educational purpose, we are also positioned to use that concept as a resource to help us enrich our educational or everyday activities (horizontal recontextualization) or as a source of inspiration to generate a new activity (vertical recontextualization) (ibid., p. 3)

Progressive recontextualisation is defined by Guile (2019) as a concept that:

allows us to appreciate that we inhabit a mediated environment where many of the decisions we take are characterised by the interpolation or a meshing together of Vygotsky's asymmetrical conception of the

relationship between theoretical and everyday concepts, to develop and enrich extant and to create new activity (ibid., p. 3)

This according to Guile (2019) dissolves the theory and practice gap as all activities are situated in contexts that can be (inter)related and connected.

Citing McDowell (1996), Guile (2019) argued that:

all thinking and acting, irrespective as to whether they are purely theoretical, practical or involve the mediation of theory and practice, occurs in the space of reasons. This space is a human creation, in other words, it has been built up over time through contestation and development and, as such, offers us the basis to interpret thinking and acting or assess competing claims (ibid., p. 4)

The 'space of reason' is socially rather than individually constructed through human interaction which makes reason conceptual and 'the basis of our intersubjectivity' (ibid., p. 4). Therefore, Guile (2019) argued that knowledge is normative, as knowledge is subject to sets of rules within a space of reason and 'unbound of the conceptual' (ibid., p. 4). Recontextualisation takes place in or across a space of reason with Guile (2019) making the argument that:

the world is already conceptualised [which] enables us to appreciate that everyday concepts are not totally divorced from the conceptual sphere, and therefore theoretical and everyday concept exist alongside one another in the space of reasons. The critical issue is that theoretical and everyday concepts are underpinned by different sub-sets of reasons or webs of reasons which exist within the wider space of reasons (ibid., p. 4)

Drawing on Brandom (2000), Guile (2019) introduced the concept of inference 'as the primary unit of analysis when participating in theoretical as much as everyday activity' (ibid., p. 5). He argued that when we engage in different activities and social practices, we form judgements by relating responses and encounters to the 'web of reasons' which underpin them by querying and asking for reasons (ibid., p. 5). Guile (2019) concluded that 'the genesis of the social practice of giving and asking for reasons rests therefore on our enculturation into existing traditions' (ibid., p. 5). Traditions according to Guile (2019, p. 5) have both a historic, or retrospective, dimension in the sense of 'understanding the origins of a development' and an 'immediate reading' where 'we ask others to explain how the tradition is currently being developed in its own terms, or in relation to another tradition, and as we infer what follows from either development'. Guile (2019) also pointed out 'that tradition could refer to a discipline, profession or workplace' (ibid., p. 6).

From this philosophical debate, Guile (2019) characterised recontextualisation as: 'the normativity of knowledge, the unboundedness of the conceptual and the social practice of inference' (ibid., p. 6). Guile defined three principles, purpose, normativity, and inference. The first principle, purpose, is the 'relationship between purpose and deployment of cultural tools' reflecting that 'the purpose (or object) of an activity influences the way in which participants use cultural tools, for example, ideas, technologies etc., to enrich or enhance an extant activity or to create a new activity' (ibid., p. 6).

In the context of this research, purpose is realised as part of the *content* and *pedagogic recontextualisation* where content is set up in a particular way in a technology-based learning environment while students engage in activities that are technology-enhanced or mediated. Content is guided by the course objectives which sit in the wider context of institutional strategies, Professional and Statutory Body Requirements (PSBRs) and governmental quality controls such as subject benchmark statements. It also involves dialogue between the course tutors, participants, and people in the work context such as colleagues, mentors, line managers and support. The teaching method(s), either more teacher- or learner-centred, is/are also part of the *pedagogic contextualisation*.

The second principle, normativity, is that a course occurs in a normative context meaning that the design of, and the rationale for, the activities students undertake as part of their learning on a course are informed by the 'space of reasons', which is they are informed by rules, norms and rationales which lead to modes of reasoning within a 'space of reasons' or subsets thereof. 'The principle of normativity allows us to appreciate that the ensuing curriculum constitutes the web of reasons in which recontextualised content is introduced to, and understood by, learners' (Guile, 2019, p. 7).

The third principle, inference, is that recontextualisation 'operates in a web of reasons and, by extension, problem space presupposes the role of inference and judgement associated with a particular social practice or intersection of social practices' (ibid., p. 6). Within the courses in this research, this relates to the different contexts including learning and working environment, education history, and institutional culture, students participate in which involve transferring and intermeshing different 'spaces of reasons' and 'traditions'. This takes place in both

the *learner* and the *workplace recontextualisation*. ‘The principle of inference contributes a different insight about *workplace recontextualisation*. It enables us to shed light on the way in which professional judgement and expertise is developed through participation in a learning curriculum in a work context’ (Guile, 2019, p. 8). In addition, inference can also be fostered by a more student-centred, dialogic teaching approach as part of the *pedagogic recontextualisation*.

Guile illustrated how the different recontextualisations relate to each other in Professional, Vocational, and Workplace Learning (PVWL) (see Figure 4).

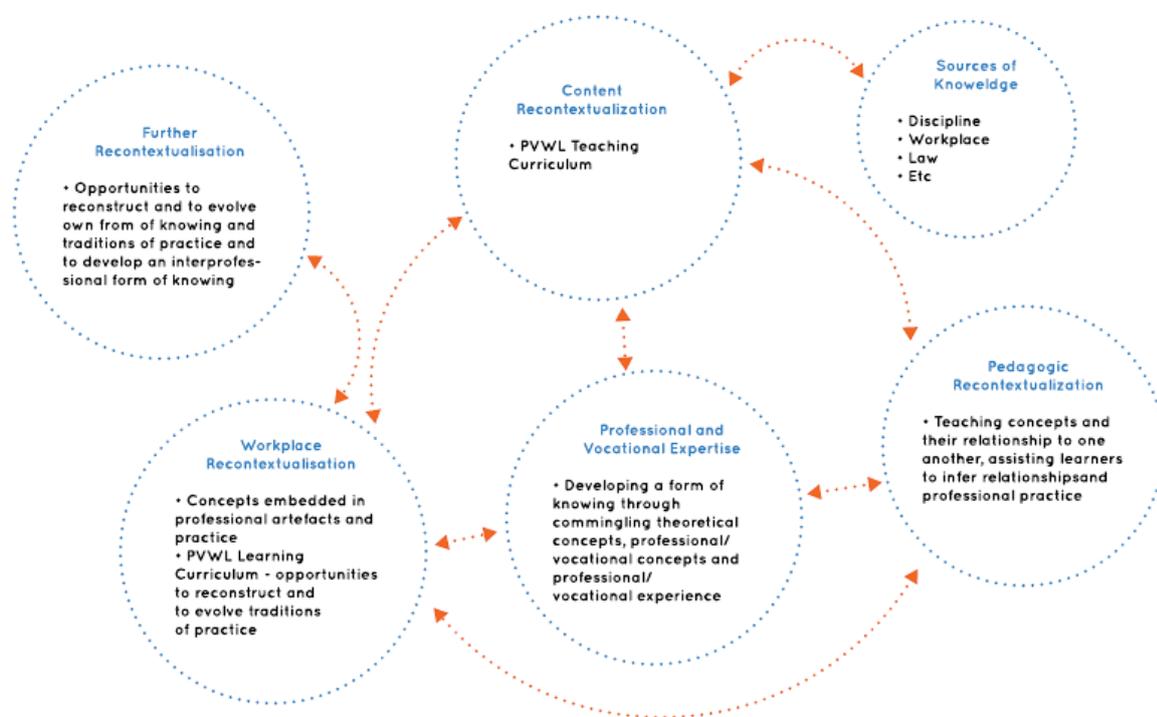


Figure 4: The continuous recontextualisation of knowledge and vocational practice (Guile, 2019, p. 9, reprinted with permission from Elsevier)

While Guile’s (2019) interpretation of processes and principles involved in recontextualisation provides a useful conceptual insight they are too abstract to be observable in the research I undertook.

Meanwhile, Kersh (2019) discussed the concept of recontextualisation in the context of workplace learning relating to experiences of further education tutors in the UK. Kersh defined recontextualisation as individuals crossing knowledge boundaries as they transfer knowledge from one context to another in their work environments (2019, p. 255). These contexts or spaces can take different forms, including physical

or virtual, formal, or informal, and purposes such as personal, learning, and working spaces. According to Kersh, this means that 'boundaries and spaces are multifaceted and multidimensional' (ibid., p. 255) and sometimes blurred. While Kersh's research focused on FE teachers and their *content and pedagogic contextualisation*, many aspects apply equally to the participants in my study, who were mostly HE teachers. For course designers, Kersh (2019) suggested that programmes:

provide opportunities for students to apply the concepts from their formal education to interpret the reality of workplace cultures and practices and, vice versa, relating everyday experiences to more formal bodies of knowledge... [Furthermore,] it involves workplaces allowing students to participate in 'communities of practice' and supporting them to negotiate their own learning in those 'communities' (ibid., p. 257)

However, learning is always in context and not just in spaces (i.e., home, college, work) but also increasingly the technologies that support and facilitate learning, as well as 'schools of thought, traditions and norms of practice, and the life experiences in which knowledge of different kinds is generated' (ibid., p. 258), and:

For knowledge generated and practised in one context to be put to work in another context involves the crossing of boundaries between such contexts, and further presupposes knowledge recontextualisation in various ways, which simultaneously engage with and change those practices, traditions and experiences (ibid., p. 258)

Kersh (2019) differentiated between types of knowledge, skills and experiences involved in the recontextualisation process for workplace learning teachers. The first one is the 'Subject-specific stored knowledge' (ibid., p. 259) which the teacher acquired over time. *Content and pedagogic recontextualisation* in the form of course design and delivery therefore 'involves crossing boundaries between the context where the knowledge has been acquired and the context where the knowledge needs to be delivered and passed on to someone else within the teaching and learning context' (ibid., p. 260).

The second type refers to 'personal experiences and skills' (ibid., p. 259), highlighting the importance of teachers' personality, biography, and experience in the learning process as they bring these into the teaching to personalise it and make it authentic.

The third type is 'workplace-related skills' (ibid., p. 259), which Kersh (2019, p. 263 quoting Evans *et al.* 2006) described as 'learning that can take place in, for and through the workplace'. However, Kersh (2019) cautioned that:

transferring skills and knowledge from one location (context) to another is neither straightforward, nor simple. It depends on many factors, such as tutors' attitudes and dispositions, regulatory frameworks and the structural organisation of their workplace environment as well as workplace constraints or opportunities (ibid., p. 264)

While the previous aspects related to *content* and *pedagogic recontextualisation*, the factors affecting the knowledge transfer to and in the workplace are part of the *workplace recontextualisation*. Kersh (2019) made the point that the effectiveness of *workplace recontextualisation* may depend on how open and supportive the environment is towards the learner. Kersh (2019) cited Fuller and Unwin's (2004) 'typology of expansive and restrictive workplace environments', which:

suggests that workplace environments experienced as expansive facilitate further development, deployment and embedding of skills, whereas environments experienced as restrictive are found in workplace settings that do little to encourage further professional training or development of new skills (ibid., p. 265)

Kersh (2019) also found that the affordances of technology can enable more collaboration, sharing and engagement, but cautioned that technologies need to be well supported and we, as tutors, should be careful about assumptions about learners' digital capabilities and availability of technologies.

Kersh (2019) identified several methods to motivate learners such as teamwork, group discussions, peer support and feedback, self-evaluation and a motivated teacher with experiences, skills and knowledge situated in the work context.

Kersh (2019) observations are more practical compared to Guile (2019) and were therefore more evident in my research.

2.3 Distance and online curriculum models and frameworks

Leading on from defining WBL, this section discusses three interrelated curriculum models or frameworks which have influenced the design of online distance learning courses.

Originally focusing on independent learning (Moore, 1972; 1973), Moore was involved in a theory of distance learning (1997; 2018) and later developed it into *the theory of transactional distance*. Moore (2018) identified three sets of macro-factors or critical elements of distance learning: 1) 'program structure' which refers to the content, 2) the 'dialogue' which is the interactions between learners and tutors, and 3) 'autonomy', which is based on learner behaviour and their 'decisions about what to learn, how to learn, and how much to learn' (ibid., p. 33). These three elements appear again in different forms in the Community of Inquiry (CoI) framework (Garrison, Anderson & Archer, 1999; 2010; Garrison & Arbaugh, 2007) and Salmon's Five-Stage Model of e-Moderation (Salmon, 2011; 2013). Moore (2018) noted

the 'transaction' in distance education is the interplay of the behaviors of teachers and learners in environments in which they are in separate places and have to communicate through a technology. It is this separation between learners and teachers that necessitates special 'patterns of behavior' in how content and teaching are organized in courses and programs - that is their structure - and special 'patterns of behavior' in how teachers interact with learners when using communications technologies in the tasks of creating knowledge - that is, through dialogue (ibid., p. 33)

Moore's (2018) and Kersh's (2019) research looked at the relationship between these different elements and how to build a bridge across what might be conceived as a psychological distance (ibid., p. 34) or in Kersh's terminology how to lower the boundaries between teacher's expertise (*content contextualisation*), course design and pedagogic knowledge (*pedagogic recontextualisation*) and the learner's experience and reality (*learner recontextualisation*) on the course and in the workplace (*workplace contextualisation*). As Moore (2018) summarised: 'transactional distance is the gap between the understanding of a teacher (or teaching team) and that of a learner, and distance education is the methodology of structuring courses and managing dialogue between teacher and learner to bridge that gap through communications technology' (ibid., p. 34).

A course structure is defined by how structured lessons and the curriculum have to be, reflecting Nottingham's (2016) three WBL perspectives (i.e., discipline-, learner- and employer-centred), and Lynn, Mason and Reynolds' (2002) e-learning typology (i.e., content-rich, content/communication, and community-based designs). A high degree of structure implies that learners are taken through their learning process in a

managed step-by-step approach to achieve fixed learning objectives. The scope for learners to negotiate or deviate from the learning objectives, and the set activities, to follow their needs or interests is limited (Moore, 2018). Conversely, a less structured approach may allow learners to negotiate 'courses that are designed with lesser structure might allow students to articulate their own learning objectives, find their own paths through the content, or find their own content relevant to the objectives of the lesson or allow them to negotiate other variations with the instructor(s)' (ibid., p. 35).

Moore (2018) summarised: 'since structure expresses the rigidity or flexibility of the course's educational objectives, teaching strategies, and evaluation methods, it describes the extent to which a course can accommodate or be responsive to each learner's individual needs and preferences' (ibid., p. 35). The least structured courses are the aforementioned shell courses (Mumford & Roundhouse, 2010; Nottingham, 2016).

Moore (2018) indicated that the structure of a course has implications on the kind of dialogue taking place between learners and tutors, and by extension between learners, which Moore did not fully discuss. 'The extent and nature of dialogue in a lesson is determined by numerous factors, including such mundane variables as the number of students in the charge of an instructor, but overarching all is the *structure* of the course' (ibid., p. 35).

Moore suggested that a highly structured course (e.g., traditional correspondence courses such as those originally offered by the (UK) Open University) may result in limited dialogue as learners concentrate on the content, specified activities and assessments (ibid., p. 35) while the less a course is structured, the higher the need for interaction or dialogue between tutor and learner to negotiate how, what, and when to learn (see Figure 5). Therefore, the more structure and the less dialogue a course provides the higher the transactional distance, or in other words the boundaries for recontextualisation increase.

One of Moore's elements is learner autonomy, which is the 'ability of students to manage their learning' (ibid., p. 36). The level of learner autonomy depends on the level of self-efficacy and independent learning skills each learner has, and the

structure a course provides in the form of instructions, guidance, scaffolding, and facilitation, some of which are learner-determined with others provided by the tutor.

Moore (2018) summarised the interrelation between structure, dialogue and autonomy as follows:

In a course with low structure and high dialogue, i.e., low transactional distance, learners receive information and guidance through frequent ongoing dialogue with their instructors and through instructional materials that allow modifications to suit their individual needs, learning style, and pace (ibid., pp. 38-39)

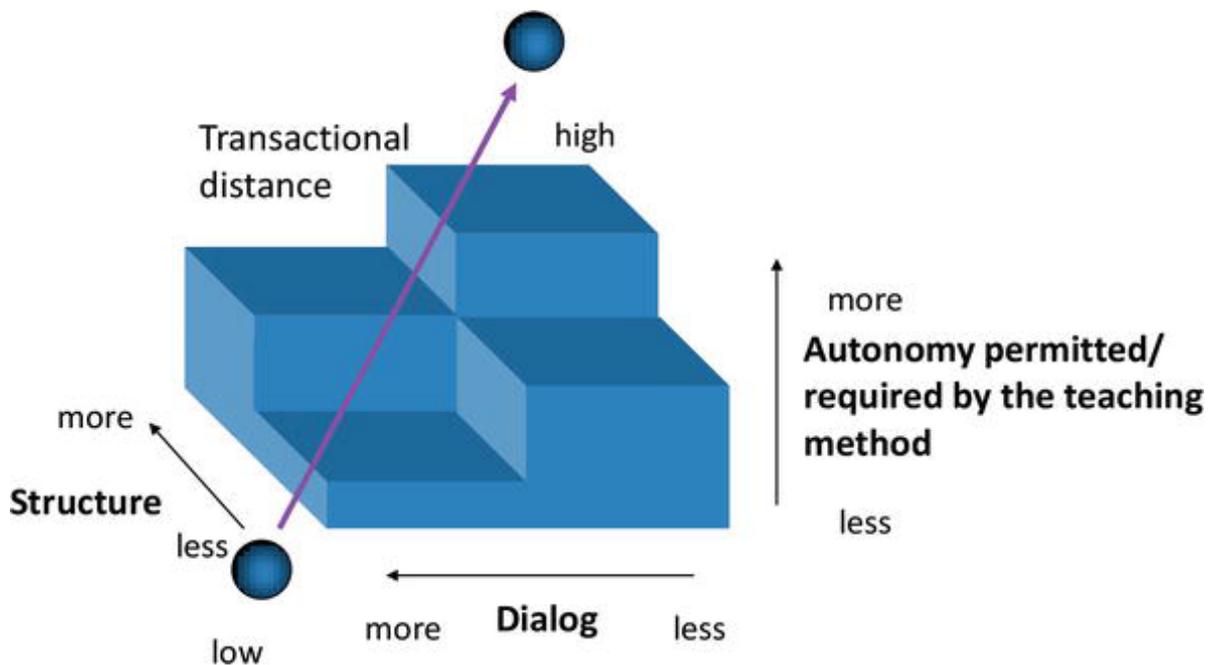


Figure 5: Relation between course structure, instructor-student dialogue, and autonomy (Delgaty, 2018, p. 4)

However, Moore also took account of the rapidly changing technologies which increasingly support 'rapid and frequent responses by teacher to student, and a greater degree of dialogue' (ibid., p. 36), especially with synchronous technologies providing opportunities for a 'highly dialogic process' (ibid., p. 36) for one-to-one interactions. Since the pandemic, this also includes synchronous collaborative group work in virtual breakout rooms and MS Teams channels, which were less developed when Moore (2018) was writing. Moore (2018) summarised that:

Besides the communications technology that link students and teachers, other determinants of the extent of dialogue that is appropriate in any course include the subject of the course, the abilities of students to manage their side of the dialogic process, the personality and

interpersonal communication skills of the teacher, and cultural and even language differences between instructors and students (ibid., p. 36)

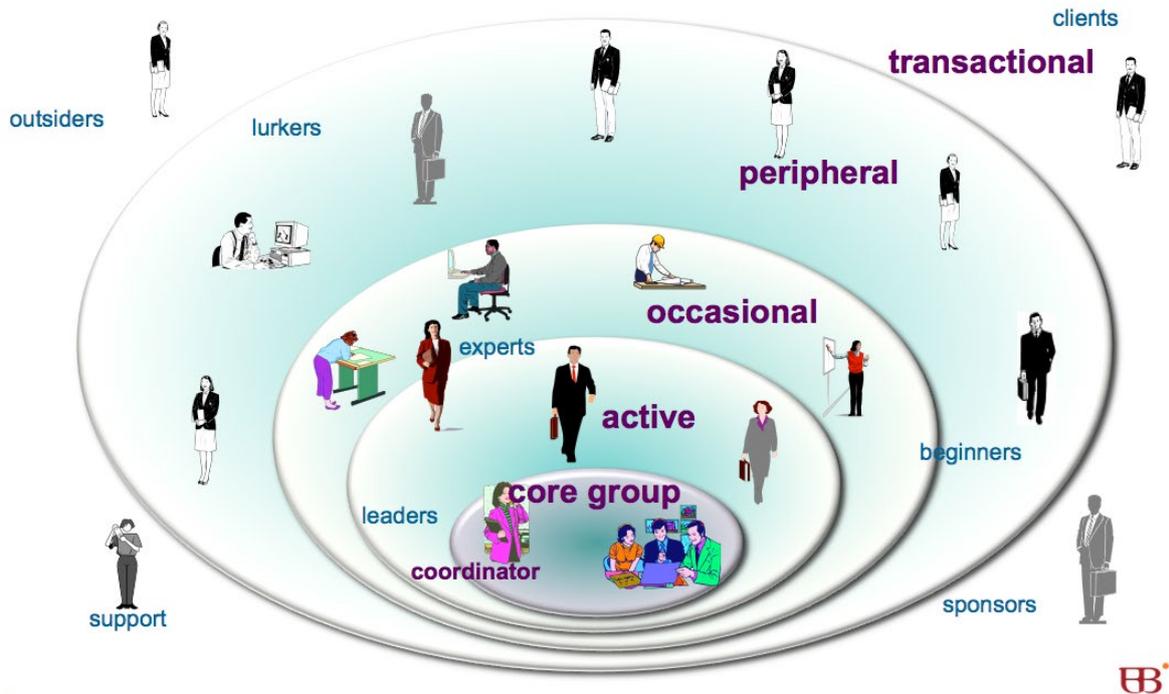
Therefore, the challenge for course designers and tutors is to provide the right balance of structure to meet learning outcomes and freedom for students to negotiate what and how they learn while providing the scaffolding for the variety of learners' abilities and capabilities to manage their learning.

In 1999 and 2000, two models or frameworks were developed which proposed curriculum approaches to online distance learning. Garrison, Anderson and Archer (1999) developed the Col framework at the University of Alberta in Canada. Salmon (2000) developed the Five-Stage Model of e-moderation while working at the Open University, originally based on online asynchronous discussions and later developed for other forms of online engagement (Salmon & Edirisingha, 2008, Salmon *et al.*, 2008, Salmon, 2013). Both approaches were influenced by Wenger's (1998) concept of a Community of Practice (CoP), and social constructivist approaches to learning. The Col framework, for example, 'is a collaborative-constructivist process model that describes the essential elements of a successful online HE learning experience rooted in Dewey's educational philosophy and social constructivism' (Garrison, cited in Catellanos-Reyes, 2020, p. 557).

Wenger-Trayner and Wenger-Trayner (2011; 2020) differentiated between different engagement patterns as part of their CoP model (Figure 6). The level of participation depends on circumstances, motivation, and confidence among other factors, as became clear from my IFS study and the engagement of the participants in this study.

Levels of participation

Multiple ways to engage in social learning



Version 2.0



Figure 6: Community of Practice: Levels of participation (Wenger-Trayner & Wenger-Trayner, 2011)

Modelled on Wenger's (1998) CoP, Salmon's (2000) Five Stage Model of e-Moderation (Figure 7) develops student engagement over time (Druce & Howden, 2017) with two initial stages focusing on accessing and navigating the virtual learning environment and starting the development of a learning community. Salmon's (2000) model suggested that increasingly deeper learning corresponds with the formation of deeper relationships between learners as part of a growing learning community.

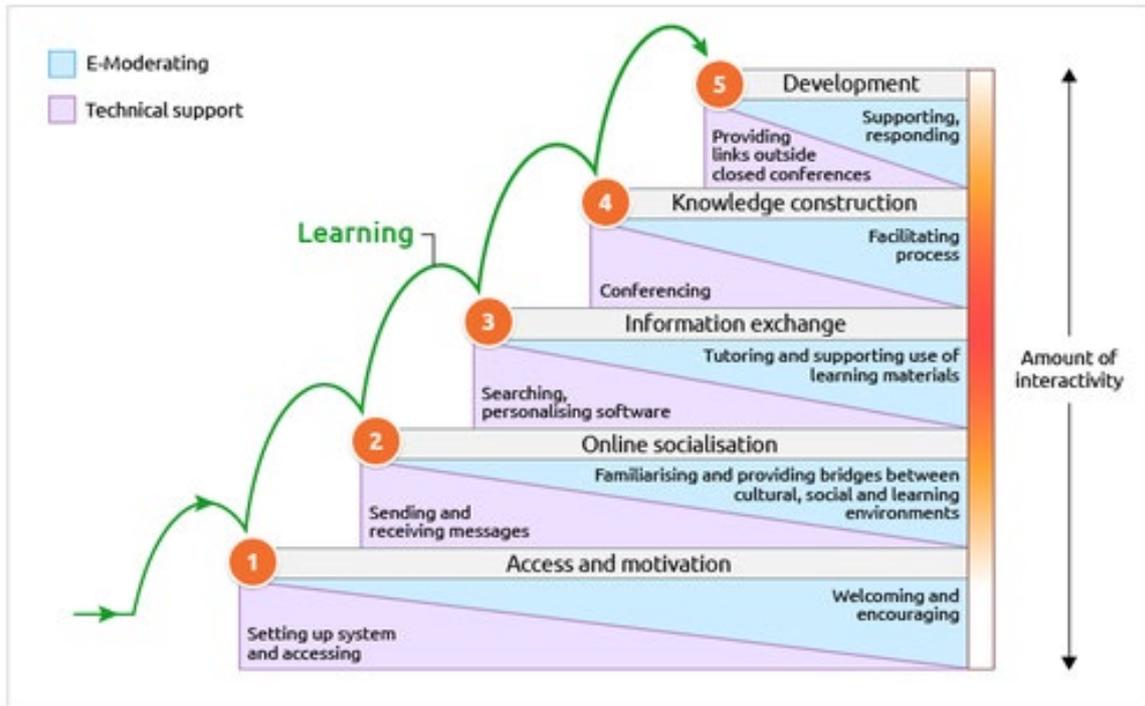


Figure 7: Five Stage Model of e-Moderation (image from Salmon, no date a))

However, Salmon (2011) acknowledged ‘that when working online there are three types [of interaction]: interacting with content (course materials or references), interaction between the tutor and the student, and third, the much wider interaction between groups of peers usually with the e-moderator as the mediator and supporter’ (ibid., p. 31). Salmon’s Five Stage Model focused on the third interaction ‘whilst seeking to integrate the other two’ (ibid., p. 31).

Salmon (2011) emphasised the importance of the socialisation stage in setting the foundation for a virtual learning community as ‘many of the benefits of online networking in education and training flow from building an online community of people who feel they are working together at common tasks’ (ibid., p.37). However, this necessitates that ‘an online team or small community must be built up for engagement between participants to occur, and relevant authentic and purposeful e-learning activities must also be simultaneously introduced to sustain the community’ (ibid., p. 37). Salmon (2011) described socialisation and active engagement as crucial for building a learning community, ‘since the kind of participation, I am describing here derives from social constructivist ideas, the key notion is participation (i.e., active and frequent engagement) is not only a positive contribution to the group but also essential for learning’ (ibid., p. 174).

While recognising that some participants engage passively by 'lurking' (or 'browsing'), Salmon (2011) recommended that if 'a majority of members of a conference are browsing, it is time to rethink and redesign the purpose and activities of the conference' (ibid., p. 176). While Salmon attributed the low level of active participants to the design of the activities, Pokorny, Oradini and Carballo (2014) and my IFS findings (Richter, 2014) indicated that there is a range of legitimate reasons for this behaviour such as time constraints, competing priorities, and strategic approaches to learning. Overall the high pass rate on the LTHE also indicated that to succeed on such a course does not necessarily require active peer-to-peer engagement. This was also echoed in early criticism of Salmon's e-moderation model by Moule (2007) claiming that 'it is limited because the variety of e-learning approaches available for use within computer-mediated communication is neglected and the range of learning theories available is ignored' (ibid., pp. 38-39).

Moule's (2007) e-learning ladder conceptual model proposed a more comprehensive and differentiated approach with different 'rungs' (from instructivist to constructivist and community of practice levels) that can be achieved depending on a range of factors including 'technical support, participants' digital literacy and access, the length of the engagement, the level and type of facilitation, and group composition and working' (ibid., p. 41).

Similar criticism came from Lisewski and Joyce (2003) who directed their concerns at their learning technologist colleagues warning that:

the five-stage e-moderating model has become too reified as a type of product in informing and guiding learning technology practice. There is a danger that such objectified models become off the shelf, one size fits all products that are seemingly transferable and usable across widely differing teaching and learning contexts' (ibid., p. 59).

Such objectified models are certainly a concern I have had both as a staff developer and designer of online courses including the LTHE.

The Col framework was developed by Garrison, Anderson and Archer (1999; 2010) and initially focused on asynchronous online engagement (online discussions) and shares many similarities with Salmon's Five Stage Model (Wright, 2015). The Col framework proposed that learning and engagement in an online course involve three overlapping presences: *Social Presence*, *Cognitive Presence*, and *Teaching*

Presence (see Figure 8). Garrison, Anderson and Archer (2010) differentiated that 'the Col framework is dependent upon the interaction of all presences to a greater or lesser degree depending on the subject matter, the learners and the communications technology'.

Community of Inquiry

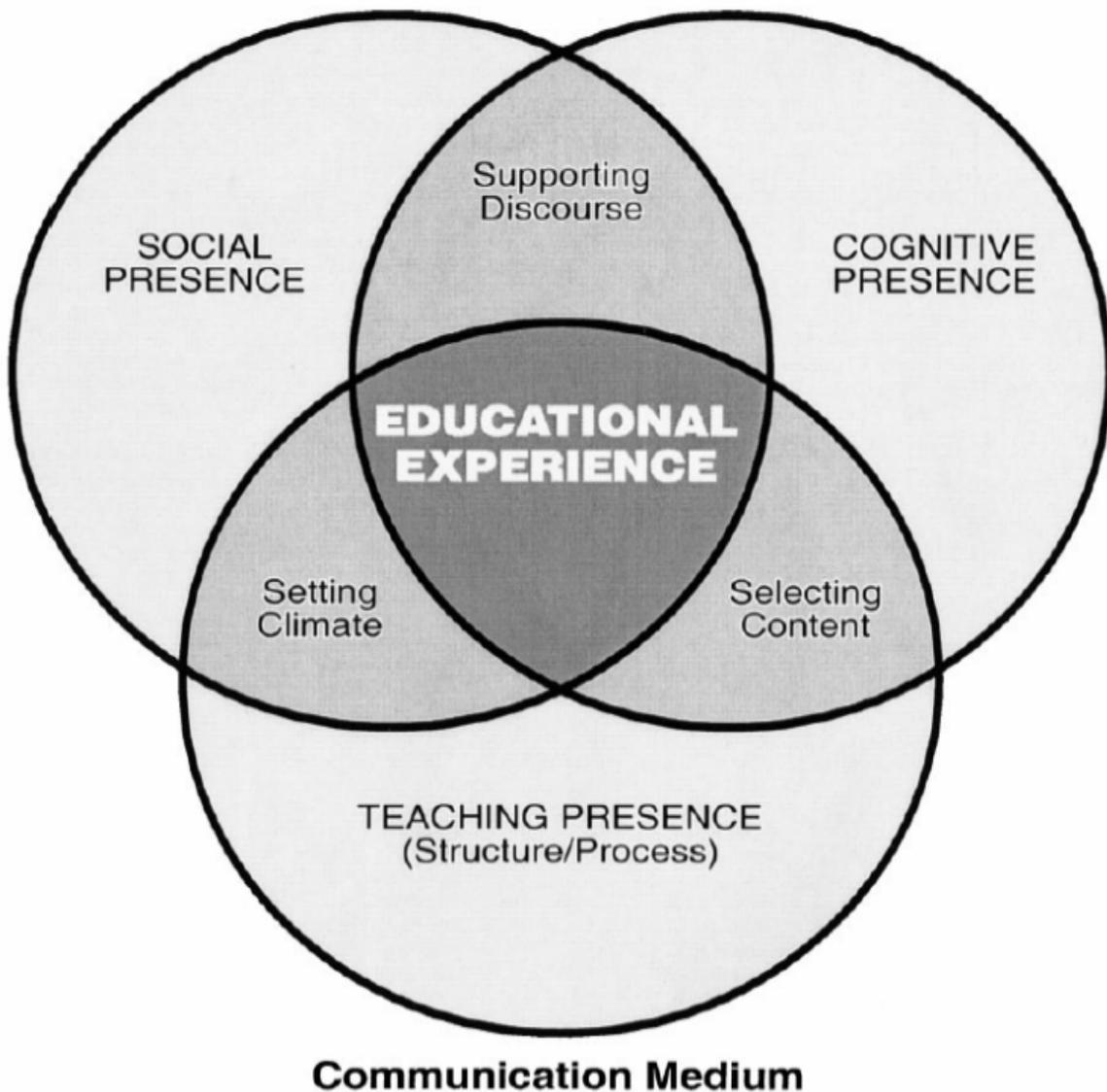


Figure 8: Elements of an Educational Experience (Garrison, Anderson & Archer, 2010, p. 88, reprinted with permission from Elsevier)

Garrison and Arbaugh (2007) defined *Social Presence* as 'the ability of learners to project themselves socially and emotionally, thereby being perceived as 'real people' in mediated communication' (ibid., p. 159). According to Garrison and Arbaugh (2007), there has been extensive research into social presence and most findings

supported the argument that a positive and strong social presence in an online course can improve learning outcomes, student learning experience and satisfaction, and increased sociability and social interaction. However, like Salmon's Five Stage Model, Garrison and Arbaugh (2007) argued that:

social presence evolves from open communication (interaction) to purposeful academic exchanges (discourse), and finally, to achieving a feeling of camaraderie. Students are challenged first to become acquainted with the instructor and students, next to understand the expectations, and then to feel some comfort communicating openly online (ibid., p. 160)

However, the research also suggested some caveats to achieving the learning community stage. While a community is 'based upon common purposes and inquiry' (ibid., p. 159), these need to be developed over time involving students negotiating and finding commonality in interest, motivation, and learning outcomes, strong group cohesion, and the opportunity to engage in collaborative, meaningful activities. The research suggested that 'progression in community-building is correlated with intensity of engagement' (ibid., p. 160). Garrison and Arbaugh (2007) indicated that this may depend on the course purpose and design, and that 'social presence is less important if the learning activities are information acquisition and there are no collaborative assignments where students can benefit from the perspectives of others' (ibid., p 159).

Garrison and Arbaugh (2007) defined *Cognitive Presence* 'as the extent to which learners can construct and confirm meaning through sustained reflection and discourse' (ibid., p. 162) following a 'reflective inquiry process' of four phases:

(1) a triggering event, where some issue or problem is identified for further inquiry; (2) exploration, where students explore the issue, both individually and corporately through critical reflection and discourse; (3) integration, where learners construct meaning from the ideas developed during exploration... and then (4) resolution, where learners apply the newly gained knowledge to educational contexts or workplace settings (ibid., p. 161)

These four phases can be mapped to Salmon's Five Stage Model (see Table 2), and to Kolb's (2014) experiential learning cycle.

The third presence, *Teaching Presence*, consists of three components:

(1) instructional design and organization; (2) facilitating discourse (originally called 'building understanding'); and (3) direct instruction (ibid., p. 163)

Garrison and Arbaugh (2007, p. 163) considered *Teaching Presence* as ‘a significant determinant of student satisfaction, perceived learning, and sense of community’. *Teaching Presence* maps well against Evans *et al.*’s (2010) *content and pedagogic recontextualisation*.

One aspect that was less researched by Garrison and Arbaugh (2007) is how the three *Presences* interrelated with each other; this formed one of the foci of my research. In 2008, a ‘34-item instrument was developed, to measure the dimensions of the Col framework’ (Stenbom, 2018; Castellanos-Reyes, 2020) and has since been used to survey online learners and start evidencing the three dimensions and how they relate to each other. Findings of the Stenbom review (2018) included how:

the structural relationship between the elements indicates that teaching presence predicts student perceptions of cognitive presence with social presence as a partial mediator. The studies also provide insights to several of the classical research questions in Elearning. This review shows that blended interaction to some degree does outperform online interaction, that synchronous or a combination of synchronous and asynchronous courses are superior to only asynchronous courses, and that applied disciplines are preferable to pure disciplines (ibid., p. 27)

Table 2 shows how the Elements and Categories of the Col (Garrison & Arbaugh, 2007) map onto Salmon’s Five Stage Model (Salmon, 2011) and Evans *et al.*’s (2010) recontextualisation framework.

Elements	Col Categories (indicator examples)	Salmon’s Five Stage Model (Salmon, 2011)	Recontextualisations (Evans <i>et al.</i> , 2010)
<i>Social Presence</i>	Open communication (Risk-free expression)	Stage 2: Socialisation Part of Stage 3: Information Exchange	<i>Learner recontextualisation</i> enabled by <i>pedagogic recontextualisation</i> (peer-to-peer and group collaborative activities and assessment)
	Group Cohesion (Encouraging collaboration)	An ongoing process through Stages 3-5 developed through e-tivities	<i>Learner recontextualisation</i> enabled by <i>pedagogic recontextualisation</i>
	Affective Expression (Emoticons)		<i>Learner recontextualisation</i>
<i>Cognitive Presence</i>	Triggering Event (Sense of puzzlement)	Spark in e-tivity – creating cognitive dissonance	<i>Pedagogic recontextualisation</i>

Elements	Col Categories (indicator examples)	Salmon's Five Stage Model (Salmon, 2011)	Recontextualisations (Evans <i>et al.</i> , 2010)
	Exploration (Information exchange)	Stage 3: Information Exchange (exploring resources)	
	Integration (Connecting ideas)	Stage 4: Knowledge Construction (synthesis, knowledge construction and application)	<i>Pedagogic recontextualisation and workplace recontextualisation</i>
	Resolution (Apply new ideas)	Stage 5: Development (knowledge application, problem-solving and solutions, decision making)	
Teaching Presence	Design & Organisation (Setting curriculum and methods)	Clear onboarding (Stage 1) and initial socialisation (Stage 2), clear structure of content through e-tivities focusing on online communication and collaboration	<i>Content and Pedagogic Recontextualisation</i>
	Facilitation Discourse (Sharing personal meaning)	e-moderation (all stages but decreasing from Stages 1-5)	<i>Pedagogic Recontextualisation</i>
	Direct Instruction (Focussing discussion)	Structured e-tivities with clear signposting, e-moderation (starting, weaving and summarising discussions)	

Table 2: Mapping Col elements against Five Stage Model and Recontextualisation framework

The following section considers the literature on the development of (new) teaching staff in HE with a particular focus on online PGCerts in LTHE or Academic Practice.

2.4 Teacher development in HE

As the two PGCert courses in my study belonged to HE teacher development, this section explores the relevant literature to inform my research. The literature covers reviews of HE teacher training and CPD and references considering different aspects relating to the PGCerts in this study. However, the literature is fragmented and does not provide a coherent or holistic view of ODWBL courses for HE teacher training.

Kushnir and Spowart (2021) considered PGCert courses as part of the professional recognition of university teachers and found a 'dearth of research in the area of the developmental potential of university teacher training courses' (ibid., p. 166). While they found some studies that indicate PGCerts can have a positive impact on the teaching quality of teaching staff who had undertaken these courses, they concluded that there is 'a need for cross-university studies to determine the extent to which PGCerts help new academics to develop their teaching expertise' (ibid., p. 166), especially in relation to the COVID-19 pandemic which changed deliveries to blended, hybrid, HyFlex, or online modes. Kushnir and Spowart (2021) identified three approaches in their literature review where PGCerts contribute to positive outcomes: reflection on teaching practice leading to improving the design of courses and becoming more self-confident in teaching practice, access to networks and networking, and 'developing positive relationships with mentors' (ibid., p. 165).

Kushnir and Spowart (2021) referred to a series of Advance HE studies on teacher training including their own (Spowart *et al.*, 2021). However, Parsons *et al.* (2012), Gunn *et al.* (2014), Hughes *et al.* (2016), and Spowart *et al.* (2020) focused on the wider impact of teacher training, CPD as well as the Advance HE fellowships, and not specifically on PGCerts for university teachers.

Hughes *et al.* (2016) conducted a literature review entitled, *Evaluating teaching development in HE: Towards impact assessment*, covering teacher development in HE in the wider sense of CPD including PGCerts. Their specific focus was on 'literature that critically engages with the impact discourse' (ibid., p. 3). The review updated the Parsons *et al.* (2012) report, *Impact of teaching development programmes in Higher Education*, which was commissioned by the HEA.

Both reports were structured around six themes:

1. impact on teachers' attitudes, knowledge and skills
2. impact on teachers' behaviour and practice
3. effects of disciplinary or generic programme focus
4. compulsory vs non-compulsory
5. impact on student learning
6. other emergent themes:
 - a) motivation
 - b) teacher experience

- c) online CPD
- d) social networks/communities of practice
- e) location
- f) time

(Hughes *et al.*, 2016, p. 4)

Previously, Hughes *et al.* (2016), Knight (2006) and Warnes (2008) also discussed the impact of courses similar to the ones I researched on the wider teaching and institutional context.

Hughes *et al.*'s (2016) report found some interesting correlations between the impact of teachers' behaviour and practice. For instance, there was evidence in the reviewed literature that teachers' teaching practices changed and improved. Several conditions for these changes were identified including the 'engagement with and learn[ing] from their peers' and a continuing dialogue beyond the CPD (Rienties and Kinchin, cited in Hughes *et al.*, 2016, p. 8) as well as measures such as 'seeing resulting change in the students; supportive management and leadership; opportunities to discuss and share with peers; and time to reflect' (Brown and Inglis, cited in Hughes *et al.*, 2016, p. 8). 'Modelling of good practice' in CPD was also mentioned as an approach to encourage teachers to apply these to their practice (Dyment & O'Connell, cited in Hughes *et al.*, 2016, p. 8).

Hughes *et al.* (2016) and Parsons *et al.* (2012) explored differences between generic and discipline-based CPD and found 'little comparison between disciplinary and 'generic' programmes in relation to impact' (Hughes *et al.*, 2016, p. 8). Instead, Hughes *et al.* (2016) found that the benefits of an 'interdisciplinary approach ... in which the deliberate combining and interaction of academics from different disciplines play a role in the manner in which they can challenge and learn from each other' leading to 'critical interdisciplinarity' (Skelton, 2013, cited in Hughes *et al.*, 2016, p. 9). Hughes *et al.* (2016) did not find much research on the comparison between compulsory and non-compulsory CPD.

Another study on the perceptions of 23 probationary academics at 11 UK institutions of the PGCert undertaken by Smith (2011) described the lack of a level playing field when considering high workload and the expectations on new academic staff to teach topics they are less familiar with versus other participants who did not have enough teaching to be able to put their learning into practice and reflect on their

practice. Participants' circumstances were often not adequately considered when requiring them to undertake a PGCert. Another issue Smith (2011) raised is the congruence of the teaching on the PGCert and the practice the practitioners find in their department. The study identified different potential misalignments such as the modelling of what is perceived as good practice in the PGCert, which is often defined by institutional priorities, policies and strategies (such as active, student-centred and inclusive learning), compared with its applicability in practitioners' teaching context, the sometimes more theorised and conceptual approach of PGCerts compared with its connection to participants' experiences in practical application and reflection, the tension between generic content and subject-specific requirements, and sometimes a mismatch of what a PGCert may aspire to and what they model in real terms, for example, 'PGCert teaching that purports to value reflective practice but fails to respond to feedback, or promotes innovative assessment practices but requires traditional essay based assignments, lacks congruence in the eyes of some PGCert participants' (ibid., p. 78).

A key question in terms of teacher development is what form socialisation into academic practice takes. For example, probationers are socialised by learning on the job from colleagues and supported by work-based mentors, or by training, such as the PGCert, and the interface between socialisation and support in the workplace and the training. 'This suggests that 'how things are actually done' remains a more powerful tool in probationary lecturers' socialisation than the goal of doing things well implicit in PGCerts' (Smith, 2011, p. 76).

Considering the impact of teacher CPD on student learning, Hughes *et al.* (2016) cited several studies in the literature review claiming that CPD had a positive impact on student learning. However, Hughes *et al.* (2016) provided the caveat that the evidence is often based on students' and teachers' self-reporting, and 'writers continue to highlight the difficulties of quantifying the impact of teacher CPD upon student learning, because causality of this nature is hard to isolate among the complex processes of student learning' (ibid., p. 9).

Many of the studies, Hughes *et al.* (2016) found, were small case studies and often discipline-based or considered a specific aspect such as learning with classroom response systems. Hughes *et al.* (2016) identified several other factors that indicated the potential impact of CPD including the motivation of participants and their attitude

towards the CPD they are undertaking, their prior teaching experience, and their access to a community of practice as part of the CPD programme, in their work context and networks developing over time post CPD.

While some PGCEs are accredited routes to Advance HE fellowship, Spowart *et al.*'s (2020) report, *Assessing the impact of accreditation on institutions*, which focused on 'research with UK and international institutions to assess the impact of their accreditation to award fellowships in the context of the UKPSF' (ibid., p. 4), only touched on PGCEs as part of a wider range of routes to Advance HE fellowships. They found that questions including, 'How has accreditation of CPD or teaching qualification programmes helped shape institutional culture?' and 'What is the impact of an institution's accreditation on its teaching quality?', remained unanswered (ibid., p. 106). Spowart *et al.* (2020) found that a motivating factor for attending CPD, and PGCEs in particular, was that:

institutional accreditation was seen as important in signalling that a minimum standard, an external benchmark for teaching and learning had been reached – this was a theme reported in respect to motivations but was also a significant factor in the benefits articulated by respondents, which helped to demonstrate a commitment to teaching and learning, internally and externally (ibid., p. 109)

At ARU, the LTHE was a compulsory element of the probation process for new academics, but for those where it was not a requirement, recognition and career progression were important motivators. Another of Spowart *et al.*'s (2020) findings is the alignment of PGCEs and CPD to institutional strategic priorities and the ethos and ambitions of an organisational learning culture where 'some 80% of institutional respondents reported that accreditation aligns with institutional priorities' (ibid., p. 109). Identifying whether a PGCE or other teacher training had an impact on student learning was difficult to prove. Spowart *et al.* (2020) found that 'researchers have struggled to articulate the impact of an institution's engagement with teacher development on student learning and student experience' (ibid., p. 110).

While Boyd, Murray and White's (2021) handbook, *Becoming a teacher educator: guidelines for academic induction*, focused on educating school teachers, their discussion of what makes an effective workplace learning environment applies to new university teachers in similar ways, as conceptionally PGCEs are often informed by 'situated learning theories... [and an] apprenticeship learning' model

(ibid., p. 12). Therefore, the conceptual framework presented by Boyd, Murray and White (2021) for an 'expansive' versus a 'restrictive' learning environment may apply to a HE context as well.

According to Boyd, Murray and White (2021) an expansive learning environment features:

- Close, collaborative working
- Colleagues mutually supportive in enhancing teacher learning
- An explicit focus on teacher learning, as a dimension of normal working practices
- Supported opportunities for personal development that go beyond institutional or government priorities
- Out-of-institution educational opportunities, including time to stand back, reflect and think differently
- Opportunities to integrate off-the-job learning into everyday practice
- Opportunities to participate in more than one working group (ibid., p 13)

Therefore, an expansive learning environment for becoming teachers involves the organisational learning culture providing a supportive learning community.

Boyd, Murray and White (2021) also alluded to the effects of the pandemic as 'an enforced shift to online learning [which] created rapid development and innovations in online learning, with many teacher educators showing their 'pedagogical agility' in implementing online pedagogies' (ibid., p. 39), when the closure of schools and universities forced teachers to online teaching and facilitation. This made teachers more familiar with the different technologies and the opportunities they provided but also the complexity of online learning, teaching and assessment. 'The importance of all teacher educators developing sophisticated understanding and application of technology to support their pedagogies is now crystal clear, as technology enhanced learning has become part of [...] teacher educators' pedagogical content knowledge' (ibid., p. 39).

Daly *et al.* (2007) also researched the e-learning experience of schoolteachers on the Master of Teaching (MTeach) taught in a blended format at the Institute of Education, University of London (today University College London). Rather than direct observation, Daly *et al.* (2007) used the learners' reflections and narratives of their experiences. The rationale for narrative methods was that they 'have the

flexibility that is necessary to capture and record the complexities of human experiential phenomena' (ibid., p. 446).

The main focus of Daly *et al.*'s (2007) study was the experience of the learners as e-learners but also 'how teachers experience e-learning *as a social practice*, in this case involving interaction with peers at a distance through asynchronous discussion' (ibid., p. 447), and learners' 'perceptions of a sense of community in their online environment' (ibid., p. 450). Daly *et al.* (2007) also found that learners experienced the e-learning environment as new and often unfamiliar resulting in disorientation. Over time, however, they moved from reorientation to familiarity with e-learning (ibid., p. 453). In Daly *et al.*'s study (2007) 'the majority of novices missed non-verbal clues in forging socio-communicative relations online' and were keen on 'establishing secure social relations' (ibid., p. 454).

However, the study's findings should be considered in line with their contemporaneous environment in 2007 when virtual learning environments (VLE) and learning technologies were still relatively new and not particularly user-friendly. Even in 2018, when ARU changed VLE, VLE adoption varied between UK universities. While some universities have been using the VLE as an opt-in, ARU has had a VLE presence for every module as a requirement. With the COVID-19 pandemic and the forced shift to online teaching, the penetration of learning technologies is widespread and the use of VLEs common place (UCISA, 2020; Pelletier *et al.*, 2021). The use of learning technologies and the required digital literacy skills required and expected of users have changed with barriers identified in Daly's *et al.*'s (2007) article being largely addressed but new skills being required as outlined by Boyd, Murray and White (2021) especially in light of the experiences during the pandemic. Technological barriers to distance learning are further discussed in Section 5.3 *Barriers*.

Rovai (2002) and Salmon (2011; 2013) are strong proponents of the need to develop an online community to foster deep learning in online distance courses which would apply to online teacher training courses as well. However, Daly *et al.* (2007) found that engagement with peers which is part of forming an online learning community involved 'establish[ing] a large investment in their peers as sources of validation, challenge and learning, rather than an expectation that these will come from the tutor or an external authority' (ibid., p. 457). Daly *et al.* (2007) also suggested that learning

on a teacher education course involves 'context-making processes' (ibid., p. 457) but the professional or work context as part of this process was not explored in any detail.

Similar to Daly *et al.* (2007) and Rienties and Hosein (2015), Hughes (2018) and Hughes and Price (2019) considered engagement with online tools using system data and tutor observation on an online PGCert at the University of London (UoL) targeting 'tutors working in the 100 + Teaching Centres worldwide, academic staff working in the University of London Member Institutions and colleagues teaching in HE more widely' (2018, p. 2). Hughes' (2018) and Hughes and Price's (2019) main investigations were into the comparison between a reflective journal and peer review activities, and topic discussions in the discussion forum, and mapping engagement against performance. The design team of the UoL PGCert were keen to embed ipsative self- and peer-assessment into the activities and assessment to foster reflection.

Hughes and Price (2019) found that:

engagement with the discussion forum on learning content is not a very good predictor of completion and success except that unsurprisingly no engagement at all predicts noncompletion (ibid., p. 18)

However, the strong and moderate engagement with peer review workshops are associated with success and weak or moderate engagement early on is associated with partial submission or plans to re-enrol. Thus, peer review is much more linked to success at any level than engagement in the discussion forum. As with the discussion postings, non-engagement in peer review predicts non-submission (ibid., p. 9)

Yet conversely, they found that:

some form of engagement throughout the module leads to successful learning and peer review activity is more significant than posting in the discussion forum. Nevertheless, it does not necessarily matter which particular activity or combination of activities the student spends time on when there are alternative ways of learning online available. [...] This is consistent with research that indicates that significant time spent on reading and writing tasks produces learning gain (ibid., p. 9)

Thus, a variety of asynchronous and synchronous activities and embedded self-, peer and tutor review and feedback seemed to cater best for the diverse needs of online learners, which supports the findings of my IFS as well as this research.

Building on earlier studies (cf. Rienties, Brouwer & Lygo-Baker, 2013; Rienties & Kinchin, 2014), Rienties and Hosein (2015) investigated how academics related to and communicated with each other on an academic development programme and with colleagues outside the programme as part of formal and informal networks. However, according to Rienties and Hosein (2015), the development of these networks and participants' engagement may vary depending on 'the design of the programme, participants' network outside the programme and the organisational culture in which participants are situated' (ibid., p. 164). They concluded that, 'the extent to which participants engage with and interact in an AD [academic development] programme is a complex function of individual motivation and drives, group dynamics, strength of social ties, departmental pressures, and external relations' (ibid., p. 166).

Rienties and Hosein (2015) evaluated these relations as part of a Social Network Analysis (SNA), which 'constitutes the measuring and understanding of social interactions between entities' (ibid., p. 165). They analysed the engagement of 114 academics from different faculties from one university during an 18-month face-to-face, taught, practice-based, academic development programme, and found that academics on that programme developed and used networks with 'contacts outside their AD programme to discuss learning and teaching issues' (ibid., p. 173) and 'to obtain and share emotional, academic, and professional support' (ibid., p. 174). Vital to these engagements was a relationship of trust, where 'contact with senior colleagues during performance reviews or module design discussions helped academics to connect their theoretical experiences from the AD programme with their practical experience in their discipline' (ibid., p. 174). They also found that both positive and negative experiences can inform the attitude of and cooperation with colleagues in the same department and affect the 'reputation and effectiveness of AD programmes within organisations' (ibid., p. 174). A related approach is White and Le Cornu's (2011) Visitors and Residents typology which explored the engagement with social media. I adapted the framework to investigate participants' engagement with content, peers and the tutor as well as their colleagues and communities.

Skelton (2013) discussed the University of Sheffield's Masters' of Higher Education Teaching (MHET). The focus of the article was on 'participant experiences and perspectives, looking, in particular, at 'impact' and what significance the course had

for participants in terms of their work and standing within the institution' (ibid., p. 910). The MHET was 'providing a compulsory certificate course for probationary staff' (ibid., p. 918).

Skelton interviewed ten participants from two cohorts, different disciplines, age range and contracts (from research to teaching only) on this face-to-face taught course. The research found that participants were able to translate the pedagogic theories and models from the course into their professional practice which increased their personal and professional awareness and identity. As in the courses in my research, participants on the MHET operated across disciplines which they found beneficial resulting in 'critical interdisciplinarity' (ibid., p. 914).

Fuller (2022) found that it is easier to create a space for participants to engage across disciplines in a classroom setting, compared to online as in the latter it is left up to participants whether and how much they engage with others online and form relationships within and across disciplines. However, in Skelton's (2013) research, participation for some students led to an enhanced identity and recognition in their department and beyond, for others their engagement was perceived negatively such as 'someone pursuing private interests and/or interests that were not conducive to the research focus of departments' (ibid., p. 916).

Butcher and Stoncel (2012) explored the impact of a PGCert in Teaching in Higher Education for new lecturers focusing on their becoming university teachers at the University of Northampton. They investigated changes in participants' understanding of HE teaching, their professional identity and beliefs, as well as engagement in their learning and teaching community (ibid., p. 150). The PGCert was a probationary requirement and taught face-to-face and the content was generic with disciplinary supplements (ibid., p. 150). Their research used a mixed-methods approach including learning activities, reflection in the assessed portfolios and an online survey during the delivery, a post-PGCert survey, and interviews and focus groups (ibid., p. 152). They found that the training 'resulted in more confident teaching approaches; a shift to learner-centred conceptualisations; practice reflectivity and cross-institutional dialogue as a catalyst for personal change' (ibid., p. 157).

They also highlighted the institutional context suggesting 'both a cultural dimension to impact and a tension between traditionally conceptualised academic roles and newer academic professionals' (ibid., p. 157).

Baughan, Lindsay and Parker (2015) undertook a review of professional teaching development programmes (TDP) for Higher Education teachers to identify common themes and missing pieces and relate their findings to their TDP at City University, University of London to identify the value of these programmes as well as potential improvements. At the time, the university had a modular postgraduate programme leading to a postgraduate certificate, diploma, or MA in Academic Practice. All new (academic) staff, and PhD students who wanted to teach, were 'recommended to attend at least the first module' (ibid., para. 5). The common themes in the literature the research found were that:

- most TDPs are modular and cover concepts including 'reflective practice, constructive alignment, student approaches to learning and scholarship of teaching' and 'assessment design, feedback, curriculum design, and development and evaluation of teaching' (ibid., para 10) all of which applied to the PGCerts in my research.
- 'most TDPs set out to develop and improve the teaching skills of their participants, often seeking to move them from a teacher-centric to a student-centric approach, increasing confidence and encouraging reflection within and about practice to put' (ibid., para . 9).
- they 'typically require participants to develop some sort of reflective teaching portfolio or teaching plan to evidence the learning achieved over the duration of the programme' (ibid., para. 10).
- they are usually generic rather than discipline-specific allowing for interdisciplinary sharing of practice, experience and knowledge, which was identified as an outcome by participants in my study as well. Furthermore, informal learning through learning communities and communities of practice was identified in the literature similar to Reimann *et al.* (2010).
- most TDP participants found the management of time and workload a challenge and support from their institutions varied, which was similar to my participants.

- the reception of their newly acquired knowledge varied including:
 - their home departments don't draw on or make use of their newly-acquired teaching skills and are less keen than they might be in their attempts to implement new teaching strategies. Some participants find themselves alone in championing teaching and learning developments, this being difficult in departments where teaching is not promoted (ibid., para. 12)
- the impact of such TDPs was 'mostly anecdotal' (ibid., para. 15) and often based on self-reporting including 'participants' reflective writing' (ibid., para. 15), similar to the discussion used in my research.

Reimann *et al.* (2010) reviewed the 'interplay of formal and informal learning in the academic workplace' (ibid., p. 1) around learning to assess in three projects, one of which included two assessment modules for academics similar to, or part of, a PGCert. They identified that learning is situated and thus a departmental and instructional culture can either contribute to, or hinder, the learning process. They distinguished between learning 'understood as either informal and separate from [a] set curriculum or formal and connected with structured curriculum' (ibid., p. 2), though the two are interconnected. One of the projects on *Assessment Cultures* was underpinned by the concept of 'learning as becoming' (ibid., p. 3), which Reimann *et al.* (2010) defined as 'the ongoing identity work that takes place in and through participation in workplace practices' (ibid., p. 3), while the second project on *Staff Learning* focused on conceptual change or 'learning as construction' (ibid., p. 4).

While this was small-scale research based on face-to-face engagement, it confirmed that 'formal and informal dialogue with other people about their assessment practices provided them with ideas for their own practice' (ibid., p. 7) and that these engagements can take place within and across disciplines depending on the context of these staff developments. For some participants, these dialogues with colleagues resulted in 'a feeling of belonging to a community of like-minded people who share similar values... [and] socialisation into the practices of their discipline and immediate context' (ibid., p. 8). However, the findings also reported that 'learning with and from others is not a neutral process' (ibid., p. 9) as it involves relationships with senior colleagues and line managers and engaging with local cultures and norms. Being critical and challenging norms can therefore be difficult requiring confidence (ibid., p. 11). Reimann *et al.* (2010, p. 14) concluded that:

when formal learning was experienced as an opportunity to make sense of what had been learnt informally, the interplay between formal and informal learning became particularly noticeable, with the resulting learning being neither exclusively formal nor informal, but comprising elements of both. The course also provided newer academics with the authority to challenge often taken for granted assessment practices in their respective disciplinary workplaces

Fuller (2022) reported on small-scale research into the PGCert in Academic Practice at Queen Mary University, London during the COVID-19 period. The course was compulsory or recommended for new academic staff from all disciplines. Fuller (2022) explored the role of 'communities of practice in distance learning courses for HE teacher development' (ibid., p. 1). Fuller's article is one of a few (cf. Daly *et al.*, 2007; Hughes, 2018) which discuss teachers' training taught at a distance and was written in the context of the COVID-19 pandemic, which forced most universities to teach online during lockdown periods. Fuller started with the premise that 'building and maintaining a sense of community can be a real challenge within a distance learning context' (ibid., p. 1) and that 'there remains a lack of detailed research into the practical features of successful examples of these communities and the ways in which they can be developed' (ibid., p. 2).

Fuller found support in the literature that CoP approaches can be beneficial for teachers' development in forming a professional identity in the workplace, becoming reflective practitioners, and being effective learners. Fuller found 'a clear link between active participation in the course and enhanced engagement and collaboration and sense of community' (ibid., p. 4), but also a range of barriers such as low priority of the course, lack of time, not wanting to disagree with other participants and fear of being criticised, as well as technical issues (ibid., p. 4). A condition for CoPs to develop is interactivity in the form of peer engagement and tutor moderation, and 'there need to be opportunities for students to interact with each other and also to take part in interactive learning activities within the online environment' (ibid., p. 4), with the tutor designing these interactivities and facilitating the engagement.

Fuller's course consisted of (flipped classroom) pre-session preparation, and regular webinar sessions followed by asynchronous 'post-webinar activities' in discussion forums (ibid., p. 6). The course was evaluated using a questionnaire and interviews focusing on participants' experiences of engagement and community through

synchronous and asynchronous activities. The results indicated that a community of practice is easier and more effective to develop in synchronous rather than asynchronous activities. Peer interaction and feedback were a core part of developing a community and enhanced learning:

Compared to those on solely asynchronous modules, participants of synchronous courses clearly found their experience to be much more discursive, interactive and collaborative and they therefore perceived a much greater sense of community. However, those on asynchronous modules felt that asynchronous interaction with peers through forums was a significant way by which their learning was enhanced (ibid., p. 9)

Fuller (2022) also explored differences between internal and external candidates and found that both felt there was a sense of community on the course, but that 'their membership of different institutional communities may have made building a community among the cohort more challenging' (ibid., p. 9). Important in the development of communities was reciprocity of engagement through discussion of ideas, peer feedback and sharing of each other's practice. Breakout room activities in synchronous webinar sessions especially fostered community and 'relationship building' (ibid., p. 11) through 'both seeing and hearing other participants' (ibid., p. 11). Fuller (2022) also added that using audio and video chat was superior to text chat in synchronous sessions for creating a sense of community (ibid., p. 14), adding to a debate in the sector on whether cameras and mics should be on or off (Bali & Caines, 2020; Caines, 2020; Cheetham & Thomson, 2020; Shering, 2020; Castelli & Sarvary, 2021; Whyley-Smith, 2021) in synchronous sessions and breakout rooms. Further suggestions for enhancing a sense of community included group activities and informal social spaces such as WhatsApp groups to make up for the social interactions in face-to-face contexts. Fuller (2022) argued that:

In order to encourage further development of personal relationships and a common identity, measures could include use of online social groups; building in more synchronous spaces for informal chat and discussion; and activities specifically designed to encourage members of the group to get to know one another more (ibid., p. 15)

The literature on teacher development in HE is disjointed and often focused on specific aspects such as impact on practice, teachers, students and community (*workplace recontextualisation*), the design of courses (*pedagogic recontextualisation*), or learner experience (*learner contextualisation*), but not all of

Evans *et al.*'s (2010) and Guile's (2014; 2019) recontextualisations. Literature reviews and reports on teacher development are often broad covering all aspects of CPD and focusing on impact such as the effect of the Advance HE fellowships, UKPSF, and course accreditation by the Advance HE. There were very few studies on ODWBL PGCerts (Daly *et al.*, 2007; Hughes, 2018; Fuller, 2022) comparable to the research I undertook, and these were focusing on specific aspects rather than the overall learning experience on the course and in the workplace.

2.5 Impact of COVID-19: Online learning and learning technologies

The COVID-19 pandemic brought significant changes to HE teaching with institutions having to switch to various forms of online teaching, especially during lockdowns (Ní Shé *et al.*, 2019; Bozkurt & Sharma, 2020; Hodges *et al.*, 2020; Maguire, Dale & Pauli, 2020; Sanger, 2020). While some institutions went fully online, others such as ARU used a HyFlex approach (Beatty, 2019, Ninnemann *et al.*, 2020) where students had the choice of accessing their learning either online or in socially distanced classrooms.

Digital and online means of learning, teaching, and assessment brought opportunities and challenges (Iosad, 2020; Hobbs & Bolan, 2021; Jones, Killen & Langer-Crame, 2021; Killen & Langer-Crame, 2021; Jisc, 2022b). The literature reflects my experience with teaching online CPD courses and undergraduate modules during the pandemic, in which opportunities to learn together collaboratively and co-creatively increased with technologies such as breakout rooms in Zoom or MS Teams, plus different means to co-edit, for instance in MS Teams channels, MS Class Notes, and other technologies, including digital whiteboards and collaboration environments, such as Padlet (Padlet, 2022), Miro (Miro, 2022) and Jamboard (Google, 2022), or three-dimensional virtual spaces such as Gather (Gather Presence, 2022), SpatialChat (SpatialChat, 2022) and Wonder (Wonder, 2022). However, the learning curve has been steep for both teachers and learners.

My recent experience with teaching an undergraduate module online (Trimester 1, 2021 and 2022) indicated that many students are far from familiar and comfortable with learning and working in groups online with students not using their webcams

and microphones, even in breakout rooms with small groups which was reflected in recent literature (Pelletier, 2021; Jisc, 2022b). Regarding the courses in this study, the time-management challenge of attending synchronous sessions is likely to remain. Therefore, many synchronous collaborative activities will struggle to get high engagement. Furthermore, one of the shortfalls of learning remotely during the pandemic was the lack of spaces for social interaction to support belonging (Mulrooney & Kelly, 2020a; 2020b; Abu *et al.*, 2021). Hopefully, improved synchronous technologies, internet connectivity, and availability and affordability of technology will support the future development of digital social spaces and online communities which will foster social belonging within a HE learning context (Barber, 2021).

As higher education transitions to a post-pandemic phase, new research publications and reports (Beckingham *et al.*, 2022; Fergusson *et al.*, 2022; MacNeil & Beetham, 2022; Jisc, 2023; Quigley *et al.*, 2023) are published on what the impact of the pandemic maybe on learning, teaching and assessment in the coming years. Common amongst these reports are that the pandemic changed the way we teach and assess, and students learn. Different modes of learning (Beckingham *et al.*, 2022) evolved which provide more flexibility. For instance, alternative assessments were used instead of assessments, which relied on physical spaces and in-person engagement, such as invigilated exams, and practice- and work-based assessments (QAA, 2018 & 2020; Lillis & Bravenboer, 2020; MacNeil & Beetham, 2022). These alternative assessments and provisions including for work-based learning such as online and open book exams (QAA, 2020, p. 3), 'remote working arrangements' including 'revised support mechanisms' (*ibid.*, p. 5), and 'replacement activities that closely replicate the placement experience' such as video studies, virtual patients, simulated or remote and virtual access to practice (*ibid.*, p. 6), provide more flexible approaches beyond the pandemic. Lester and Crawford-Lee (2022) predicted that

it is likely that for most [work-based] programmes the post-pandemic norm will not be fully digital but blended and potentially 'digital first'; online methods will be used where they have clear benefits, whether pedagogically or from a perspective of efficiency and logistics. 'Flipped' or 'inverted' approaches, a mix of synchronous and asynchronous methods, judicious use of simulations, online tripartite meetings and online learning communities are likely to feature, and increasingly accessible technologies such as augmented, mixed and virtual reality may play a larger role as their potential becomes recognised (*ibid.*, p. 11)

MacNeil and Beetham (2022, p. 18) found that higher education institutions returned to on-campus teaching but with increased blended, technology-enhanced modes making use of the digital approaches introduced during the pandemic. Their findings agree with Lester and Crawford-Lee (2022), that 'many of the developments in online assessment brought about by the pandemic are continuing and are seen as key areas for evolving practice' (ibid., p. 19).

MacNeil and Beetham (2022, pp. 22-23) also identified challenges in the post-pandemic transition including a need for institutional vision and strategy to support the changes, and a coherent programme-based approach to different delivery modes, but also clarity about and recognition of the workload, staff development, and awards involved and required in developing and delivering in different delivery modes (ibid., p. 22). Furthermore, their findings pointed to the 'challenges of providing flexible, engaging and consistent teaching and learning opportunities' and 'flexible, accessible and equitable learning opportunities, student wellbeing, supporting different modes of participation, and effective use of digital technologies' (ibid., p. 23).

The following chapter introduces the conceptual framework which framed my research by looking at the learning in the university course and the workplace and how a learner recontextualises knowledge from one domain (e.g., the course) to another (e.g., the workplace) (linking to Section 2.2 *Learning in the Workplace*). The chapter introduces the courses that I investigated as part of my research (linking to Section 2.4 *Teacher Development in HE*) and explains the research questions and gaps in knowledge. The chapter concludes by specifying the scope of this study.

3. Conceptual Framework and Research Questions

3.1 Conceptual Framework

Informed by Evans *et al.*'s (2010) and Guile's (2019) recontextualisation framework (see Section 2.2 *Learning in the Workplace*), I propose that learning in ODWBL courses takes place with the learner located in the interface between the university course and the work environment. As such, learning can be formal (university course) and informal (social and experiential, with colleagues in the workplace, for example). Figure 9 illustrates the different knowledge domains and the recontextualisations, actors and contexts with the learner at the centre.

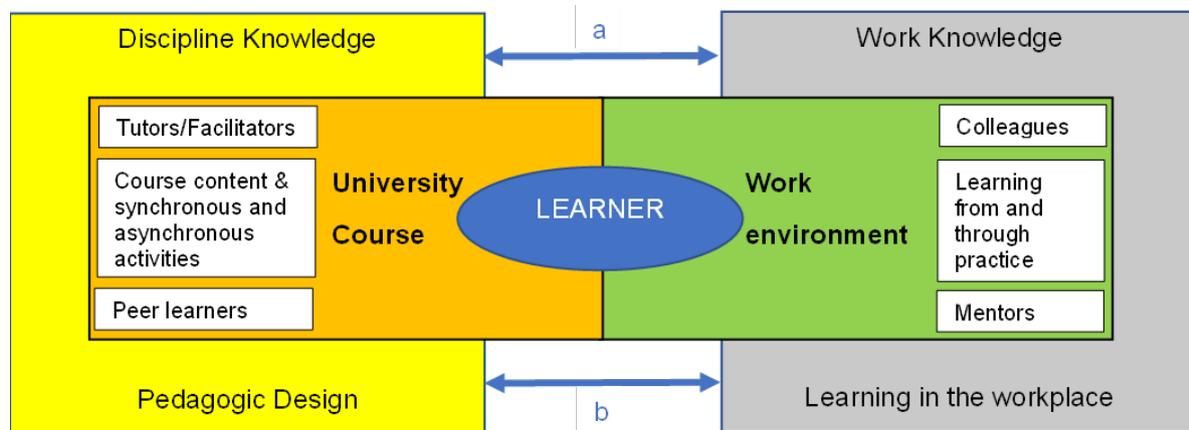


Figure 9: Conceptual Framework

A university course is informed by discipline knowledge (which may include employer and Professional, Statutory and Regulatory Body (PSRBs) requirements) [a] and the pedagogic approaches applied in the course delivery. The work environment provides different opportunities to apply the knowledge from the university course to practice formally (reports of pilots and projects, formal feedback from mentors, training) and informally (e.g., discussions with colleagues, exploration). Furthermore, I considered how pedagogic design can support engagement and learning in and through the workplace [b].

I considered:

- *Content and Pedagogic Recontextualisation* – the pedagogic design of the university course (through VLE-based modules and course materials, learning activities, assessments, engagement patterns, and module tutor observation)

- *Learner and Workplace Recontextualisation* – the learning experience in and engagement with the work environment (through learner interviews and reflections in assessments)
- *Learner Recontextualisation* – the reflection on learning (through interviews with learners and assessments).

3.2 The courses

My selection of the ODWBL courses was influenced by several factors. I wanted them to have commonalities to enable a degree of comparison as well as control of domain and learner characteristics. They were both work-based and at postgraduate level and more content- rather than competency-based aligning well with Lynn, Mason and Reynolds' (2002, p. 11) 'content and communication' courses.

The two courses, the LTHE and the MHCE, had similar learning objectives (teacher/educator training) but with different target audiences and contexts (university teachers and prospective educational leaders in the medical and healthcare sector respectively).

Limiting the selection to two courses was also influenced by the feasibility and scope of the EdD study and what access I had to the courses. While I was teaching on the LTHE, the MHCE included negotiations with and agreement from the course leader, who acted as the gatekeeper (Robson, 2011) to gain access to students, the module sites on the VLE and course materials. As Robson (2011) points out, gatekeepers 'often have the power to refuse access and even when this hurdle has been passed can adversely affect potential participants' willingness to be involved' (ibid., p. 211).

3.3 Research questions and gap in knowledge

Research questions guide the direction of a study, define the research, and identify the gap of knowledge to be addressed (Bell, 2010; Robson, 2011; Walliman, 2011). Similar to Eraut (2004; 2007; 2011), my research questions were based on the gap originally identified in my IFS, which looked at learning through engagement on an online course. The literature review revealed different aspects of distance learning and WBL, but there is a gap in knowledge on how knowledge crosses boundaries or

is recontextualised from an online, distance learning course to the workplace. The research questions are:

1. How is learning taking place on a university ODWBL course and the (related) workplace?
2. Which factors affect learning?
3. How do the findings apply to the curriculum design of ODWBL courses?

The aim was to identify different approaches to learning such as learning from the course itself (including reading, interacting and collaborating with other learners), learning in and through the workplace (incorporating engaging with colleagues, mentors, and other processes), and applying their learning to their practice (tackling challenges, sharing and disseminating).

My motivation and the driver behind this study were that there is a misalignment between the instructional design conventions on which the ODWBL courses were based, such as Salmon's Five-Stage Model (2011), and the engagement patterns found in the IFS. The assumptions were that active participant engagement and the formation of a virtual learning community were necessary for learners to successfully achieve the learning outcomes. However, my IFS found that learners also succeeded with passive engagement (or lurking).

In teaching the online LTHE, I observed a low level of active engagement in online activities but this didn't prevent learners from meeting the learning outcomes, as evidenced in their assignments. Hence, the question arose of how the learning took place despite a low or lack of active engagement in the online learning activities and community. Connected to the positive outcomes, I questioned what role the work environment played in the learning process. Finally, I wanted to know the personal component of learners' motivation, interest, reflexivity, and support received from their employers, mentors, and peers.

Most studies including Eraut's research (2004; 2007; 2011) considered WBL in a face-to-face learning context. However, the expanding engagement of HE with employers to deliver WBL increased the need to deliver at a distance in an efficient and accessible way to an often distributed workforce. Additionally, during the COVID-19 pandemic, most teaching, including staff development, had to move

online. Research into changes to learning in the workplace indicated that there has been a shift towards online and digital learning, which is likely to continue as:

there has been a major swing to digital learning, with spend increasing on almost all areas of digital, led by content. 82% report that demand for digital learning has increased from senior stakeholders, whilst 71% have experienced an increased demand for digital learning content from learners themselves (Forsay, 2020a, para. 4)

Forsay (2020b) noted:

- an explosion in the use of virtual classrooms for coaching and mentoring, with a 19x increase.
- A 400% increase in the use of virtual classrooms for external training delivery.
- 95% of learners are satisfied with their virtual learning experiences (Forsay, 2020b, para. 4)

I investigated how learning happened and what factors affected ODWBL from a learner perspective with the aim to lead to guidance on designing, delivering, and supporting effective ODWBL for my institution, and to enhance and support the learning experience of my institution's work-based distance learners.

3.4 Scope

Due to the limited time available for this study, wide coverage and/or a longitudinal study were not possible. Therefore, I chose to focus on two courses from my institution centred on the student learning experience. As students could start in September and January on both PGCerts, the time span for recruiting participants was restricted to three semesters to keep within a cohort.

Furthermore, as the participants studied at a distance, it was not feasible for me to observe their learning in the workplace as I did not have access. Therefore, students' learning experiences in the workplace came from their accounts and narratives in the interviews, and their reflections in assignments.

The small and restricted sample of participants from the two PGCerts limits the generalisation of the results of this research. Goertz and Mahoney (2012) raised the issue that undertaking research into 'one or few cases are much more vulnerable to the charge that their findings are not generalizable' (ibid., p. 307). To define the limits of the scope of my research, I had to 'make sure that measurement stability holds

across all units and variables of a theory' to achieve 'conceptual homogeneity' (ibid, p. 308). For 'causal homogeneity', I needed to ensure that 'posited causal relations are stable across all observations' (ibid., p. 308). By using the same research methods, questions and measurements across all 12 participants, I attempted to achieve conceptual homogeneity. However, causal homogeneity is only stable as long as the variables are well defined and don't change what is referred to as *ceteris paribus* (Little, 1993, pp. 200-201) – 'all other things being equal' (Liberto, 2023). The interview and survey questions for instance attempted to assert the causes for participants' engagement in the course and workplace and aimed to define these variables such as motivation, barriers, prior experiences, preferences, and work environment. Therefore, the findings of my studies are stable and transferable to other cases of the same nature as long as the variables are the same and stable. If other variables are added, the findings of this research are limited in their applicability. In the literature, restricting generalisation is referred to as 'casual scope [...] resulting from the need to maintain stability in the hypothesized causal linkage between independent and dependent variables' (Goertz & Mahoney, 2012, p. 313). Casual homogeneity 'refers to the assumption that independent variables work in analogous or identical ways across a given population of observations' (ibid., p. 313), which this research aimed to achieve. This implied 'the assumption that particular outcomes can be explained in light of independent variables that exert the same effects across all observations'. Therefore if the independent variables change or other variables are added when this research is replicated, the findings of this study may not or only partially apply.

However, while these limitations need to be kept in mind, ODWBL is not unique to ARU and is found in other HE institutions involved in WBL (Brennan, 2005; Nixon *et al.*, 2006; Helyer, 2015; Nottingham, 2016; Talbot, 2019) allowing my research to be replicated. Therefore, my findings make a valuable contribution to the knowledge of designing and delivering ODWBL at HE level.

Validity, reliability and generalisability and their equivalences in qualitative research are discussed further in Chapter 4 *Research Design*.

4 Research Design: Theoretical and methodological perspective and Ethics

4.1 Ontology, epistemology and methodology

This section considers the epistemological and ontological stances of my research. Epistemology 'refers to what we believe about how we come to know and understand the world' (Hamond & Wellington, 2013, p. 57), which is closely connected to ontology 'the claims about the nature of being and existence' (ibid., p. 114). Cohen and Manion (1994, p. 6) suggested that epistemological assumptions can lead to a dichotomy between positions claiming knowledge is acquired through facts and knowledge or socially constructed through personal experience with others. Cohen and Manion (1994) describe this contrast further as:

The view that knowledge is hard, objective and tangible will demand of researchers an observer role, together with an allegiance to the methods of natural science; to see knowledge as personal, subjective and unique, however, imposes on researchers an involvement with their subjects and a rejection of the ways of the natural scientist. To subscribe to the former is to be positivist; to the latter, anti-positivist (ibid., p. 6)

However, according to Hamond and Wellington (2013):

in practice, the distinction between the two [epistemologies] blurs around the edges. Much research within the positivist tradition is 'fuzzy' about interpreting cause and effect and much interpretive research follows positivism in treating some concepts as objective categories in order to focus on other categories that are more problematic (ibid., p. 58)

Nobel and Smith (2015) provided a useful comparison between quantitative (positivist) and qualitative (interpretivist) terminology (see Table 3).

Quantitative research terminology and application to qualitative research	Alternative terminology associated with the credibility of qualitative research
<p><i>Validity</i> The precision in which the findings accurately reflect the data</p>	<p><i>Truth value</i> Recognises that multiple realities exist; the researchers' outline personal experiences and viewpoints that may have resulted in methodological bias; clearly and accurately present participants' perspectives</p>
<p><i>Reliability</i> The consistency of the analytical procedures, including accounting for personal and research method biases that may have influenced the findings</p>	<p><i>Consistency</i> Relates to the 'trustworthiness' by which the methods have been undertaken and is dependent on the researcher maintaining a 'decision-trail'; that is, the researcher's decisions are clear and transparent. Ultimately an independent researcher should be able to arrive at similar or comparable findings.</p> <p><i>Neutrality (or confirmability)</i> Achieved when truth value, consistency and applicability have been addressed. Centres on acknowledging the complexity of prolonged engagement with participants and that the methods undertaken and findings are intrinsically linked to the researchers' philosophical position, experiences and perspectives. These should be accounted for and differentiated from participants' accounts</p>
<p><i>Generalisability</i> The transferability of the findings to other settings and applicability in other contexts</p>	<p><i>Applicability</i> Consideration is given to whether findings can be applied to other contexts, settings or groups</p>

Table 3: Terminology and criteria used to evaluate the credibility of research findings (Nobel & Smith, 2015, p. 34)

My research was based on two ODWBL courses as case studies (Travers, 2004; Yin, 2009; 2014; 2018; Simons, 2010; Thomas, 2016) and used a mixed methods approach mainly involving qualitative research in the form of a participant survey, interviews, and participants' reflections in assignments. An analysis of courses and course documentation was included for background information as well as access to the VLE for both courses. Qualitative data were derived from Likert scale questions in the participant survey (cf. distance learning experience, comfort with learning at a

distance and with technologies) which were used for triangulation with interview and assessment data. But the research was predominantly qualitative and therefore belongs to the post-positivist or interpretivist paradigm:

we can expect interpretivists to consider the subjective nature of the world, to treat meaning as socially constructed and to have special concern with the unique character of human activity and of the agency which creates social action (Hammond & Wellington, 2013, p. 90)

As mentioned in Section 1.3 *My role and the research*, I was an insider researcher, especially on the LTHE which I taught, as a colleague of many participants on the LTHE and the course leader of the MHCE. 'Researchers' views about the nature and production of knowledge, their epistemological bent in brief, underlie the inquiry project they conceptualize and operate' (Yazan, 2015, p. 136).

As an insider researcher, I was situated in the context of my research:

Situatedness arises from the interplay between agent (you, the researcher), situation (the particular set of circumstances and your position within it), and context (where, when and background). Organizational, professional and personal contexts will affect the way a piece of research and development is undertaken (Costley, Elliott & Gibbs, 2010, p. 1)

As a researcher adopting a case study methodology, my epistemological approach was determined by my view that 'knowledge is constructed rather than discovered' (Yazan, 2015, p. 137). Stake (1995) sees 'qualitative case study researchers as interpreters, and gatherers of interpretations which require them to report their rendition or construction of the constructed reality or knowledge that they gather through their investigation' (Yazan, 2015, p. 137).

Especially in my research, the reality was first interpreted by the interviewees in the narrative of their experience, and secondly by my interpretation of the interviewees' narrative. My interpretation was also influenced by my observations of interviewees as my students engaged in the online course I delivered. I was aware of potential biases regarding interviewees having their own reasons to volunteer as interview participants. These ranged from positive motivation to 'give back' because they had good experiences with their studies, to letting me know what could be improved, or why they did not feel distance learning was for them. Another reason was that most academics had gone through the doctoral journey and wanted to support me in mine.

While my IFS literature review and findings informed this research (Deductive Reasoning), in this study, I looked for patterns in learner engagement in the ODWBL courses and in the workplace based on which existing theories can either be revised, or new theories developed (Inductive Reasoning). Hammond and Wellington (2013) defined induction as ‘the process by which we draw a general conclusion from individual instances or observations. It is thus a bottom-up approach concerning identifying patterns within data’ (ibid., p. 87).

Simons’ (2010) definition of case study research summarised my methodological approach:

Case study is an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a ‘real life’ context. It is research-based, inclusive of different methods and is evidence-led. The primary purpose is to generate in-depth understanding of a specific topic (as in a thesis), programme, policy, institution or system to generate knowledge and/or inform policy development, professional practice and civil or community action (ibid., p. 21)

While case studies frequently use qualitative research methodology, ‘research methodologists do not have a consensus on the design and implementation of case study, which makes it a contested terrain and hampers its full evolution’ (Yazan, 2015, p. 134). Robson (2011) also warned that a misconception of multiple case studies is ‘that this is for the purpose of gathering a sample of cases so that generalization to some population can be made’ (ibid, p. 140. Robson (2011, p. 140) continued that case study research ‘is not concerned with statistical generalization but with what is sometimes referred to as analytic or theoretical generalization’ (ibid, p. 14).

Although my initial research proposal was wider and incorporated more postgraduate ODWBL degrees from different disciplines, limiting the scope to two courses in a similar discipline made the study feasible within the time and word limit of an EdD thesis (see Section 3.5 *Scope*). The LTHE attracted 11 participants however the MHCE only had one participant. This means that the LTHE formed a case study with the MHCE experiences being used for comparison rather than being a case study in its own right. It allowed analysis of the 12 participant cases to explore similarities and differences in experience, and therefore draw some general conclusions. However, for this research to be applicable to other contexts and trustworthy the application of

the research methods needed to be consistent and thus replicable. It is also important that the participant cases represented the diversity of participants on the LTHE to provide truth value (Nobel & Smith, 2015, p. 34).

I followed Creswell and Poth's (2018) six features of case study research:

1. **Identification:** According to Creswell and Poth (2018) 'case study research begins with the identification of a specific case that will be described and analyzed' (ibid., p. 98) This may involve a single case or multiple or collective cases. My research involved two PGCert courses at my university with 12 participants who were interviewed, constituting cases in their own right. 'Often the inquirer purposefully selects multiple cases to show different perspectives on the issue... Yin (2009) suggests that the multiple case study design uses the logic of replication, in which the inquirer replicates the procedures for each case' (ibid., p. 96).
2. **Bounded system:** The two PGCerts as case studies are bounded as postgraduate, online, distance, and WBL courses which were situated in the same discipline of teacher training though the audiences were different. However, as most of the participants ($n = 11$) interviewed came from the LTHE, the main focus is on one case study (LTHE) with the MHCE being a comparator.
3. **Intent and multiple data sources:** The intent of conducting this research was expressed in the research questions and is focused on 'understanding a specific issue, problem, or concern and a case or cases selected to best understand the problem' (ibid., p. 96) and is referred to as an instrumental case. Yin (2009; 2018), Gustafsson (2012), Yazan (2015), Harrison *et al.*, (2017), and Creswell and Poth (2018) emphasised the importance of multiple data sources to provide rigidity, validity as well as comparison of data. Data sources in this study included a participant survey and interviews, participants' reflections in their assessments, course documentation, and delivery sites in the virtual learning environment. Through my teaching a PGCert, I also observed students' engagement in the course but not in the workplace. 'Some researchers, like Lieberman (2000), argue for the use of a small group of comparison cases because of the potential to draw otherwise inaccessible conclusions' (ibid., p. 96).

4. **Data analysis approach.** 12 participants' stories as cases were involved. The participant cases allowed me to compare different experiences, and outcomes depending on participants' motivation, context, prior experience, and support in the workplace, cross-referenced against themes arising from the thematic analysis of the participant data.
5. **Description:** According to Creswell and Poth (2018), 'a key to generating the description of the case involves identifying case themes' (ibid., p. 96). A core part of the analysis of the data was the thematic analysis of the interview transcripts and the assessment data.
6. **Conclusion:** Case study research finish with conclusions, recommendations or lessons learned which was the initial intention of this research.

4.2 Research Methods

The research centred on the student learning experience in two PGCert courses. There were three research methods namely a participant survey, an interview, and the reflective element of their assessment. Course information (e.g., module handbook, assessment guidance, and proformas) and the module VLE site, which included the learning activities, provided contextual information.

While I had originally considered using online pre-and post-course questionnaires targeted at all PGCert participants in the 2018-2019 academic year (three semesters), I abandoned this approach in favour of a shorter survey taken by all participants before the interview. Similarly, I had originally considered reviewing the reflective elements of the patchwork text assessment for all participants but then focused only on the interviewees' assignments. This allowed me to triangulate the three data sets within and across the participant cases and avoid issues with low response rates of online surveys or questionnaires, and too much data from the assignments.

Originally, I had envisioned using learning analytics from the VLE to analyse engagement to triangulate with the interview data. However, ARU had adopted a new VLE at the time, and the learning analytics data were not reliable enough (for instance, it recorded access via mobile app differently than via web browser. The

data also poorly captured what may count as engagement, e.g., page view versus posts).

4.2.1 Sampling

While the potential population of my research would have been all participants on similar ODWBL courses in the UK, the limited scope of the EdD thesis required me to focus on two similar ODWBL courses at my institution, one of which included the course I taught and my students. My sampling approach has characteristics of convenience sampling, which ‘involves choosing the nearest and most convenient persons to act as respondents. The process is continued until the required sample size is reached’ (Robson, 2011, p. 275).

While my invitation to participate in my research went to the whole (course) population or ‘sampling frame’ (Robson, 2011, p. 271), participants were self-selected and therefore represented a non-probability sample. A probability sample ‘involves selection at random from the population list... of the required number of persons for the sample’ (ibid., p. 271) while non-probability samples are those where it is not ‘possible to specify the probability that any person will be included in the sample’ (ibid., p. 274).

I invited my students on the LTHE via email up to three times at the end of each module (over three semesters) to increase the number of participants aiming at a response rate of around 20% with the hope of getting as close to a representative sample as possible. However, I was realistic from previous research experiences, that response rates to research requests, especially those conducted online, are generally low, which led to my repeated invitations. Nevertheless, my efforts were successful as the participants that took part in my research represent the diversity of participants on the LTHE (see Table 4).

Institution	Age	Gender	Highest qualification
ARU	41-50	Male	Postgraduate Degree
ARU	31-40	Male	Doctorate
ARU	41-50	Female	Doctorate
ARU	31-40	Female	Postgraduate Degree
ARU	51-60	Female	Postgraduate Degree

ARU	41-50	Female	Postgraduate Degree
ARU Partner	51-60	Male	Postgraduate Degree
ARU Partner	31-40	Female	Doctorate
External	51-60	Male	Doctorate
External	41-50	Male	Postgraduate Degree
External	41-50	Female	Postgraduate Degree

Table 4: LTHE Participants' characteristics

On the MHCE, sending out timely and multiple invitations was limited as I relied on the course leader to forward my invitations to their students. Robson (2011) shared my concern, when they said, 'non-response can be a very serious problem and it is worth giving considerable time and effort to reducing it. The basic issue is that those who do not participate may well differ from those who do, but it is extremely difficult to allow for this' (ibid., p. 276).

Robson (2011) suggested some strategies to address the potential lack of representation of the population in the sample including one which I used: 'If you know some characteristics of the population, you can check to see whether the sample you obtained is reasonably typical of the population on these variables' (ibid., p. 277).

As participants chose to participate in my research, I had to consider participant biases as highlighted by Robson (2011, p. 86) including the reason(s) to engage in my study. Participants often expressed these reasons in the interviews as captured in my findings.

I increased consistency in the research design by using the same survey and interview questions for all interviewees. While participants could choose between a face-to-face and an online interview, the interview approach was identical in both environments. Additionally, different data sources (survey, interview, and reflection in assessments) were used to triangulate findings (data triangulation, see Robson, 2011, p. 158) and increase the truth value (or validity in positivist terms) of the results. Robson described 'similar patterns of findings from very different methods of gathering data' as one form of triangulation, which 'increase confidence in the validity of the findings' (ibid., p. 87).

Robson (2011) defined internal generalisation or applicability (Nobel & Smith, 2015, p. 34) as 'referring to the generalisability of conclusions within the settings studied' while 'external generalisability is generalisability beyond that setting' (ibid., p 160). While the findings from these data cannot be statistically generalised, the objectives of my research were that the findings are replicable and transferable to research of similar ODWBL courses (internal generalisability) and lead to a rethinking of existing pedagogic design approaches and recommendations for ODWBL courses beyond the case study context of my research (external generalisability).

4.2.2 Surveys

Interview participants engaged in a short survey before the interview to obtain information about their profile and their motivation to study the course, their experience and comfort with distance and online learning, and the role the workplace played in their learning. The surveys were administered online using Jisc Online Surveys (Jisc, 2022a) and were completed by all interviewees. This survey enabled a bivariate analysis of qualitative data with participant demographics, such as age band, motivation, type of institution, and support and motivation (see Appendix C: *Survey Questions*).

Responses to the three qualitative survey questions were explored further in the interviews to obtain more details on those aspects which I thought might reflect differences between participants. Details of the survey and its outcomes are discussed in Chapter 5 *Research Analysis and Findings*.

4.2.3 Interviews

An invitation was sent out to all participants on the LTHE and MHCE towards the end of each of the two modules. For the LTHE, I sent the invitation several times directly to my students but relied on the course leader for the MHCE to distribute invitations. Unfortunately, in the latter I had to send multiple reminders to get the invitations emailed to participants, often missing windows of opportunity. However, the course was new and had only recruited five students, and consequently only having one participant answering my request and being interviewed was not unexpected. However, the access to the MHCE modules on the VLE was limited, and I was only

able to obtain limited data for this participant (e.g., no assessments) from the course leader. It is possible that while the course leader was supportive, they were also new to the role and were still (re-)designing the course, resulting in some reluctance to provide greater access. Therefore, the MHCE cannot be considered a case study in its own right as one participant does not constitute a representative sample. While I put a lot of effort into increasing the response rate, this was ultimately not achievable.

Thus, the central data set consisted of interviews with 11 LTHE students and one MHCE student undertaken between May 2018 and March 2019.

While attracting 11 participants from around 60 LTHE students (over three semesters) was a satisfactory response rate (18.3%), it still took repeated requests and a structured effort to schedule interviews either online or in person. Interviewees had the choice between being interviewed online using Adobe Connect or face-to-face.

In the online interviews, I used a PowerPoint presentation (see Appendix E: *Interview PowerPoint slides*) or a hardcopy version in the face-to-face interviews, to structure the interviews. The interview was structured with questions and, where appropriate, explanations (see Appendix D: *EdD Interview Questions (Outline)*), and were scheduled for, and usually lasted one hour, and were (audio) recorded. Participants received an overview of the questions before the interview together with the Participant Consent Form and Participant Information Sheet (see Appendix F: *Participant Information Sheet and Participant Consent Form*). Their consent was also confirmed at the beginning of the interview. After uploading the recordings to ARU's secure MS Stream server, I transcribed the interviews using automatic captioning. I then downloaded the captions as a text file and edited them into accurate transcripts, which I then annotated. The annotations included the speakers (i.e., interviewer and anonymised participants) and division into sections by area and by my questions.

As shown in Figure 10, the interviews explored four areas of learning aligned to the conceptual framework (see Section 3.1) and Evans *et al's* (2010) and Guile's (2019) recontextualisations:

1. Engaging in (one or both modules of) the online course
2. Taking learning into the workplace

3. Engaging in the workplace
4. Reflecting back (to the online course)

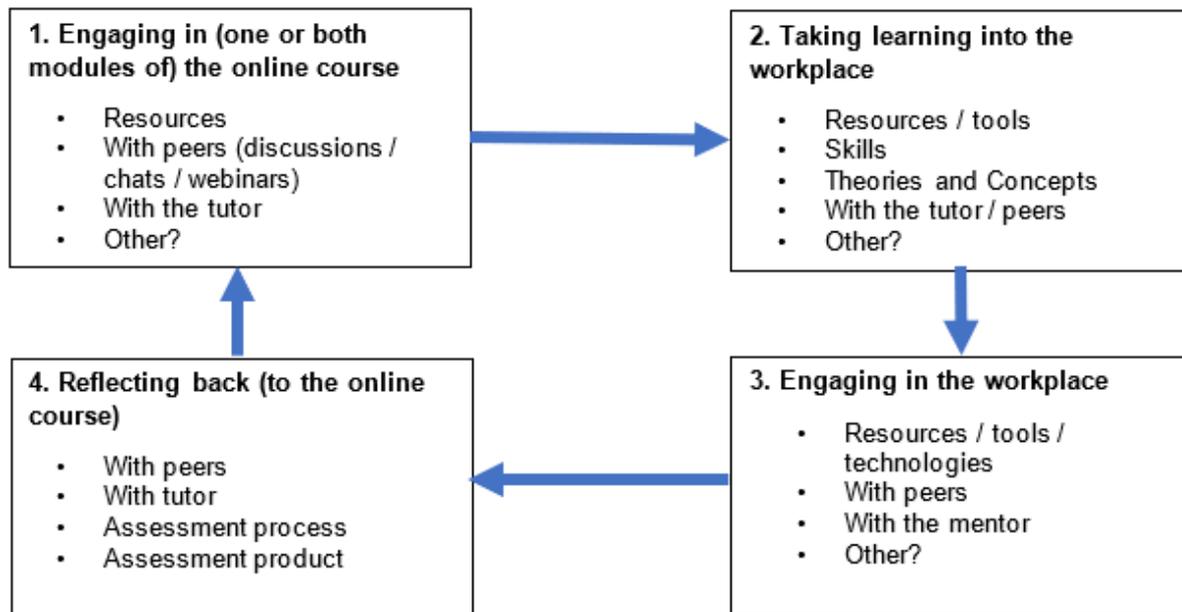


Figure 10: Four areas of learning covered in the interviews

For the first area, I focused on the engagement in each of the module activities and the motivation and rationale behind the level of engagement in individual activities. I adapted White and Le Cornu’s (2011) Visitors and Residents typology for online engagement, originally used to visualise ‘engagement with online technology’ (ibid., para. 16), to map each activity to a grid, with Visitors to Residents on the horizontal axis, and Personal and Work/Study on the vertical axis.

White (2015) defined Visitors and Residents as follows:

Visitors and Residents is a simple way of describing a wide range, or continuum of, modes of online engagement. When in Visitor mode, individuals decide on the task they wish to undertake. For example, discovering a particular piece of information online, completing the task and then going offline or moving on to another task. In Visitor mode, individuals do not leave any social trace online. When in Resident mode the individual is going online to connect to, or to be with, other people. This mode is about social presence. Resident behaviour has a certain degree of social visibility. This type of online behaviour leaves a persistent social trace (ibid., paragraphs 4-8)

My adaption of White and Le Cornu’s (2011; 2017) typology relates to Wenger-Trayner and Wenger-Trayner’s (2011; 2020) levels of participation in their

community of practice model by allowing me to identify the degree of passive (e.g. lurkers) versus active (e.g., leaders or coordinators) engagement of my participants in different course activities (see Section 2.3 *Distance and online curriculum models and frameworks*).

The adapted 'Visitors and Residents' approach I used maps participants' engagement in different course activities against two poles on a Cartesian graph, with the continuum of Visitor to Resident on the (horizontal) X-axis and the Personal to Study/Work continuum on the (vertical) Y-axis (see Figure 11).

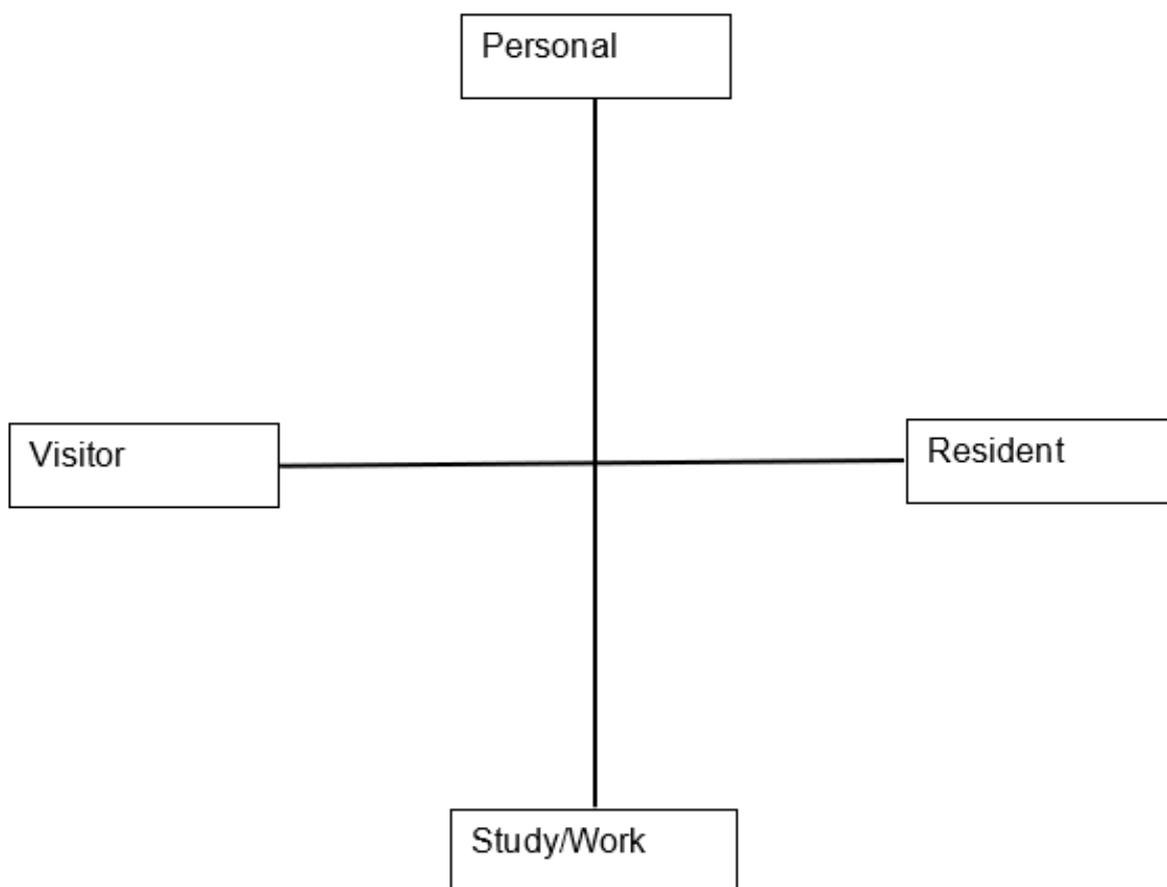


Figure 11: Visitors and Residents Typology (adapted from White & Le Cornu, 2011; 2017)

While this part of the interview generated detailed engagement patterns for each activity and participant, the main focus for this element of the research was the rationale, motivation, and, in some cases circumstances, for the level of engagement.

This then led to follow-up questions about motivation and barriers relating to engagement in the course and the workplace, which I later triangulated with the free text entries on motivation from the participant survey.

Another focus regarding engagement in the online course was how participants experienced learning with others in the form of a virtual learning community, and how important such a community was academically as well as socially.

Areas 2 and 3 of the interviews focused on learning in the workplace from two, often overlapping, perspectives:

- How participants took their learning into the workplace, for example, how they applied the theories and concepts from the course into their practice, use or development of new learning and assessment activities informed by examples they came across on the course, and whether they developed new skills.
- How they engaged in the workplace, for example, dissemination or reflection on their learning with colleagues, their mentors, line managers, and the institutional community, and whether they changed anything beyond their own practice.

The final area elicited how they reflected on, or brought back, their learning to the course, therefore closing the circle. The assessments and teaching observations were the main means of reflection on learning but required a high level of reflexivity and metacognition from participants.

The interview finished with three closing questions, where interviewees were asked to take the position of a designer and deliverer of an ODWBL course as well as a prospective student. I also asked what kind of support they ideally would have liked to have had from or in the workplace.

Coding Engagement

To be able to compare individual participants' engagement in activities and engagement across all participants I overlaid the quadrants formed by the axes with coordinates to relate to where participants had allocated their activities in the interviews (see Figure 12). For instance, a '5' on the Visitor -Resident axis indicated a high active engagement, while a '1' was a low or passive engagement. For

example, if a student only accessed a webinar recording rather than the live version it would be allocated on the visitor side of the axis coded as '1' or '2' depending on the frequency, the middle of the axis indicated a mix of recorded and live webinar access while regular live engagement in the webinar would be coded as '4' or '5' on the resident side of the axis.

The numbers across all activities were added up and divided by the number of activities providing an engagement average per participant. Non-engagement in an activity was coded as '0' to provide comparability between engagement profiles. Similarly, this calculation applies to the Personal and Study/Work data by activities across all participants.

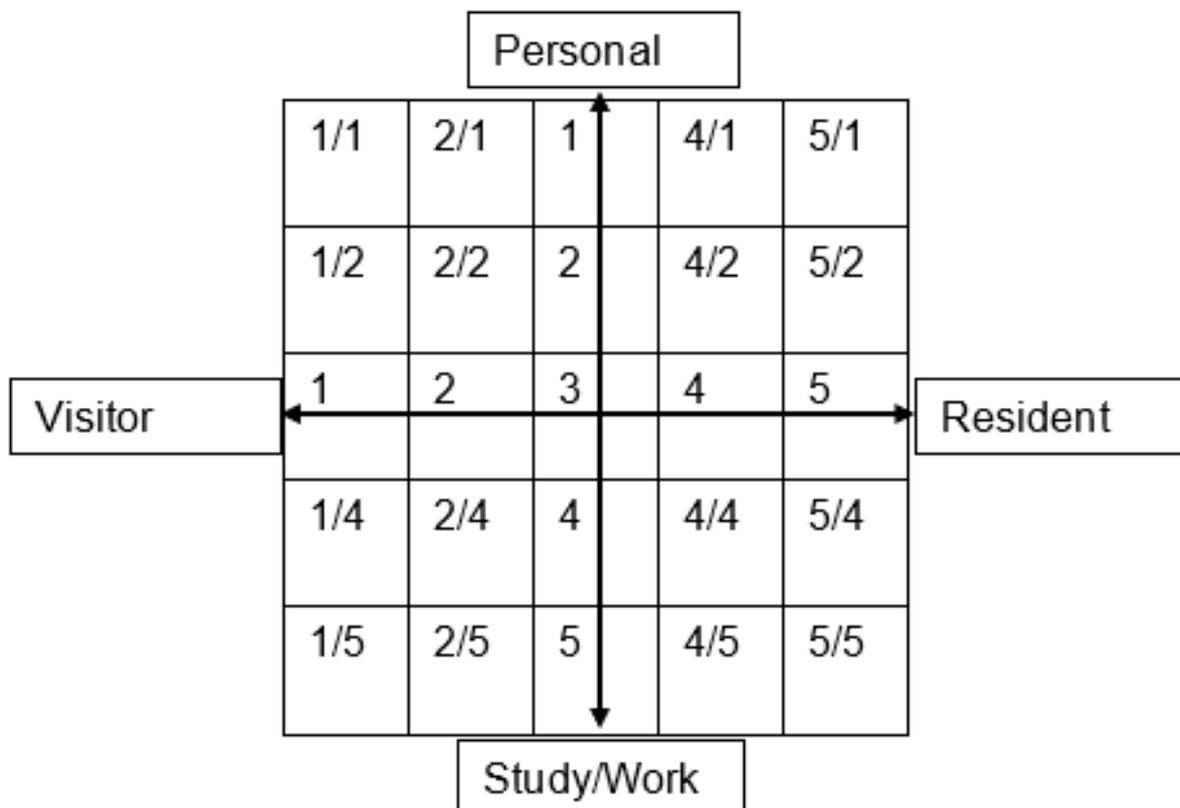


Figure 12: Engagement Grid: 5 indicates high engagement on the Resident and Study/Work axis

I made some small adjustments when there was a discrepancy between participants' narration in the interview and what I drew freehand on the paper or digital whiteboard grid during the interview with the interview transcript being the final locator. As I added the coordinates to the grid allowing clearer allocation, when I processed the data these discrepancies appeared which led to adjustments of plus/minus half to one coordinate on the X or Y axis.

The interpretation of the participants' narrative about their engagement in their courses as well as their engagement map is discussed in Section 5.4 *Engagement in the Course*.

4.2.4 Academic assessments / reflective assignments

I had access to the assignment scripts of the LTHE, from which I extracted the final reflective section. The assignment was a patchwork text, and the final patch, or 'stitching piece', included students' reflections across all patches, including their teaching observation.

The Patchwork Text assignments consisted of four or five patches (depending on the module) including the teaching observation and the final reflection. All patches used an authentic assessment approach (Wiggins, 1990; Darling-Hammond & Snyder 2000; Herrington & Oliver, 2000; Gulikers, Bastiaens & Kirschner, 2004; Sambell, McDowell & Montgomery, 2012; Koh, 2017), which meant that each patch required students to apply an approach, technique or concept from the course to their practice and reflect on the implementation. The expectation was that the assessment would be an important vehicle for transferring the learning on the course into the workplace and then reflecting on the implementation back to the course.

The instruction for the final patch used on the Assessment for Learning module of the LTHE stated:

This patch will be based on a 1,750-word reflective commentary on your experience of producing patches 1-5 (including your planning, observation and reflection...), and what this means for your continuing professional development as a teacher in Higher Education.

In order to support reflective practice that is informed by a sound theoretical base, you will be expected to draw upon, and reference, the extensive body of assessment for learning literature and pedagogy in Higher Education.

In this patch, you will be able to consider the impact you have had on students and their learning during this module, as well as your developing teaching practice. You will also be able to conclude with your plans to continue to develop your assessment for learning practices further and justify those plans (Kitchin & Richter, 2018, p. 3)

While final patches were a mixture of reflection and description, they provided an insight into how participants had applied their learning to their practice and changed

their approaches to teaching and assessment. Therefore, many of the reflections confirmed and sometimes extended the interview responses to Areas 3 and 4.

As a researcher, I had to consider that students would write their assignments strategically against assessment criteria to pass, which may involve participant bias (Robson, 2011) in so far as participants might have portrayed their learning and experiences on the course in a more positive light considering that the course tutor is the first marker.

4.2.5 Data analysis

I used NVivo 12 Pro (QSR International, 2022) which was running from and storing data on ARU's secure, protected server. I created a folder for each of the 12 participants, and uploaded the interview transcripts, survey responses, and assessment scripts to these folders (Figure 13).

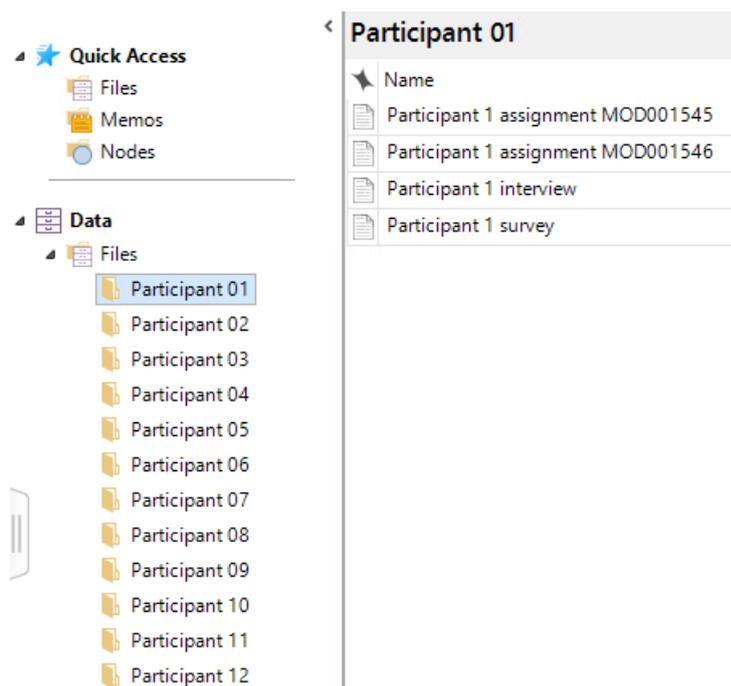


Figure 13: NVivo - Data Folders for each participant with uploaded files (example for Participant 1)

I also created File Classifications relating to each of the uploaded data files (i.e., Assignment, Interview, and Survey). Within each File Classification, I added classifications for each Participant. For example, under Assignment (File Classification), I added Participant 1 assignment MOD001545 and Participant 1 assignment MOD001546 (where MOD001545 and MOD001546 are module codes) as Classification, and added Attributes and related Values (e.g., Attribute:

Module Code, Value: MOD001545 or MOD001546) from the Survey to each Classification (identifiers used for queries and cross-referencing including Module Code, Age, Gender, Qualification, Role, Institution, Distance Learning (DL) Experience, DL Comfort, DL technical comfort, Workplace essentiality) (see Figure 14).

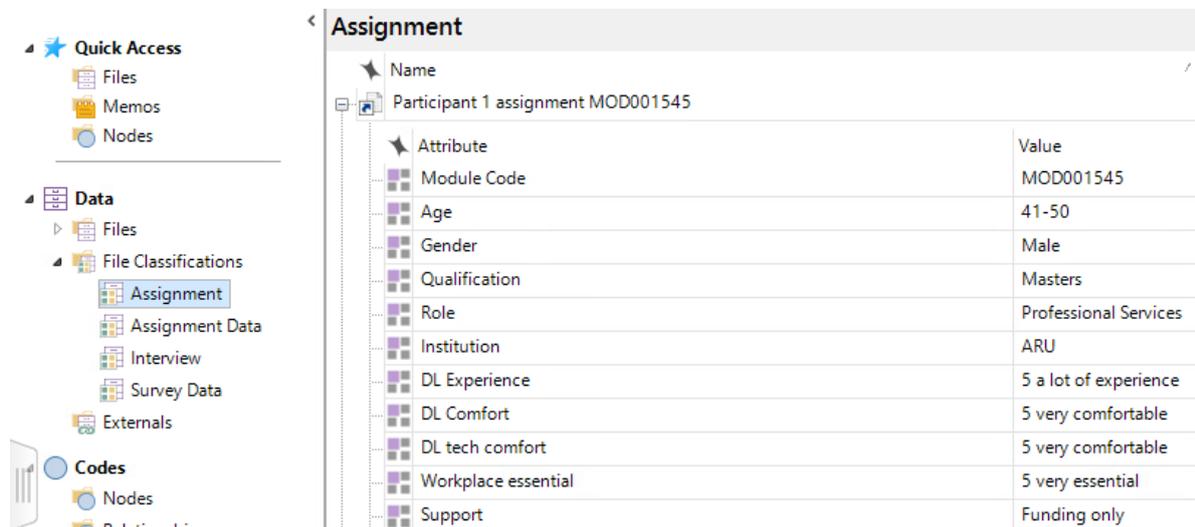


Figure 14: NVivo: Example of File Classification for participant file with survey attributes

Having created Participant Files and File Classifications for each participant, I ran queries filtered by File Classifications and Attributes, Participant folder or files, and Nodes (i.e. containers for thematically-related text extracts). For instance, I could explore Motivation (Node) in a particular age group (Attribute in File Classifications).

After creating the Participant folders under Files, uploading the files to NVivo, and creating the File Classifications, Attributes and Values, I started the thematic analysis of the interview transcripts. I first worked through the first interview script (Participant 1) manually and identified themes (Nodes), creating a Nodes structure in Word. I then created the Nodes and sub-Nodes in NVivo under Nodes (see Appendix G: *NVivo Cookbook (Nodes)*) and then went through the first interview transcript, highlighting the text and associating the highlighted section with the Nodes I had created. I also added new Nodes and sub-Nodes that I missed in the manual round. This step was followed by thematically analysing the second interview script, annotating the script with the existing Nodes, and checking that all required Nodes were created. For any new Nodes derived from the second script, I went back to the first script to check if I needed to add them. Having gone

through this process, I analysed the remaining scripts and annotated them amending Nodes where required.

I went through a similar process for the assignment and survey files. While the Nodes for the survey files were straightforward and did not need amendments in NVivo, the Nodes for the assignment ones were changing more over the thematic analysis process in NVivo. This was because the assignments did not follow a particular structure, and the individual participants' reflections varied considerably between the two assignments (where available) and between participants. However, they became consistent after a few scripts and mainly involved the renaming of nodes rather than generating new ones.

Once all the scripts were coded, I ran queries to extract all coded passages by nodes for further analysis and interpretation. Unfortunately, as I did not find a way to export the text from queries as a Word file, I copied and pasted them into Word to print out the queries to interpret them, before writing up the findings. This made it easier for me to find patterns within the coded passages and identify quotes to use as references in the findings.

I also added a further step of detailed analysis by copying passages from thematic queries into Excel to identify further subthemes and group them further. While this could have been done in NVivo, the advantage of Excel for me was that I could count the number of passages falling under a theme more easily, therefore being able to quantify some clusters of responses (e.g., '10 of the 12 participants said...'). It was also easier to sort findings by role, institution, and so on (see Figure 15).

Motivation										
Theme	Participant	Quote	Count	Role	Institution	DL Experience	DL Comfort	Tech com	Workplace	
Assessment and syllabus		1 the syllabus, syllabus, so the areas, I needed to cover because I was told I needed to cover them too achieve success in the course it was connected to the assessment, the areas that I had to write my patches on, so I needed to gain more information connected to those specific areas, that I needed to reference. from an academic point of [view] you need to achieve this academic certificate to move on and I'm very motivated to move on and I want to do my master. So my prime motivation is to learn, but also to push myself so that I can further my career.	1	Professional Services (LT)	ARU	5	5	5	5	5
Assessment and syllabus		8 I'm going to learn, there's no way I can submit a good assessment and there's no way I can get a pass and there's no way I could go for the claim and all that.	1	Academic	External	2	4	4	4	5
Assessment and syllabus		9 And another motivation of course, was, as also we said in lots of the meetings we've done, the assignment. So it was, of course, the idea of getting the work done. This sort of the ethical thing of having said at the beginning, yes, OK, I'll commit to do this.	1	Prof Serv (Study Coach)	ARU	3	1	5	5	3

Figure 15: Excel: Example of detailed analysis of participants' comments under the Motivation node

4.3 Ethics

The research involved students and staff at ARU and was, therefore, subject to ethical approval to 'conform to a code of conduct and set of principles' (Robson, 2011, p. 197). The code of practice for this context is based on the *Ethical Guidelines for Educational Research* produced by the British Educational Research Association (BERA, 2011). I received ethics approval from the Institute of Education (UCL) before starting my research.

The participants involved in this research included:

- Course and module leaders
- Course participants

Other stakeholders considered in the wider context were universities and colleges as employers of my students and, to some extent, students' work colleagues and work-based mentors (where applicable) and other people, students interacted with within their work context as part of their studies.

As part of the research process and to ensure an ethical approach I applied the following measures:

- Informed consent and participant's right to withdraw. Participants were asked for consent to participate in my research and had the right to withdraw up to

the point when the data was processed. As my contact details were at ARU, I used ARU-headed paper/Word templates for the Participant Information Sheet and Participant Consent Form (see Appendix F: *Participant Information Sheet and Participant Consent Form*).

- All data were anonymised and made confidential to avoid participant identification, as far as possible. For instance, if participants had worked or had undertaken their education outside the UK, the country names were replaced with 'abroad'. However, I identified ARU as home institution of the LTHE and MHCE to demonstrate the links with institutional strategies and educational culture.
- I was aware that participants may raise grievances and distress in relation to their studies which were dealt with confidentially and that the interviews could cause discomfort or distress. While there were very few such situations in the interview, where sensitive issues were raised, I was conscious to be careful not to probe deeper into aspects which may cause distress (e.g., personal or professional challenges of participants such as illness, bereavement, workload, conflicts with colleagues and line managers, etc.) and to be ready to mediate critical instances for example by referring to professional support such as counsellors.
- All data was stored securely on my work MS One Drive and the institutional NVivo secure server to exclude unauthorised access and sharing of participants' personal and sensitive data.

5 Research Analysis and Findings

In the following chapter, the sources of participants' quotes were attributed as 'P1-S' for survey, 'P1-I' for interview, and 'P1-A' for assessment.

5.1 Sampling – the participants' profiles from the participant survey

Twelve students participated in the participant survey and the interview, of which 11 were from the LTHE and one from the MHCE. The surveys and the interviews were undertaken between May 2018 and March 2019. The survey provided data on the following categories: participant demographics, motivation, support, distance learning experience and their comfort of studying online which are discussed in detail in Appendix H: *Sampling – the participants' profiles from the participant survey*.

Looking across the bivariate analysis (Appendix H), there was no significant variation across categories but the variations within categories reflected the diversity of the participants. My research found that preferences in learning on their own and with peers, and how participants experienced their learning and work environment, made a difference, which is explored further in the following sections.

The following sections analysed aspects including motivation, barriers, engagement, and learning in the workplace across all participants, derived from interviews and assessment data filtered by role and institution. This allowed me to conclude whether a specific role or institution made a difference in the outcomes.

5.2 Motivation

The main motivation for ten of the 12 participants was because the PGCert and/or the associated Advance HE Fellowship was a qualification requirement, either as part of probation ($n = 5$) and/or as an expectation of career progress ($n = 5$). Two participants did not identify a requirement for a PGCert. Two out of the three Professional Services colleagues felt that the PGCert was a requirement to “move on” (P1-I) and apply for new jobs or as a “requirement for my job” (P3-S). A further Professional Services staff member focused mainly on gaining insights into learning, teaching and assessment to support students and staff (P9). P12-I, who attended the

MHCE, wanted a “qualification that was a bit more encompassing [than most PGCEs in Medical Education]. A lot of it is about personal sentiment to meet my own goals and to be as effective as I can be later on”.

At ARU, the PGCE was a probation requirement for two (P2, P6) out of the three ARU academics, while for the two academics (P5, P7) from ARU partners, it was an institutional expectation to have a PGCE. For the three academics from external HE institutions, it was an expectation either from the validating university (P11) and/or for career progression (P4, P8, P11). Two of the external institution staff mentioned that they chose the PGCE HE over a further education teaching qualification for career purposes.

All participants were motivated to refresh their learning, teaching, and assessment knowledge and update on developments. Some participants wanted to improve their teaching by focusing on students’ needs, such as “reflect[ing] the diversity of the student body” (P4-S), “developing my understanding of teaching students from international communities” (P5-S) or being required “to teach professionals from a range of environments/ specialities” (P12-S). For Professional Services staff, it was primarily about understanding more about university teaching in their roles to support students and/or academic staff. “Also, because it’s very important, while I’m doing the coaching also to see what other lecturers are doing, what are they thinking about the students” (P9-I).

Both external academic participants and ARU academics from other countries felt it was also important to become familiar with the UK HE system and jargon (P6, P9, P10).

Participants had different reasons for choosing to study online rather than face-to-face. While colleagues at ARU had a choice between the online and face-to-face courses, participants from ARU partners chose the online PGCE because they could not attend the face-to-face version, met the university’s expectations, and had a fee reduction. External participants often chose the online ARU PGCE because it enabled them to undertake a PGCE HE which they preferred over a Further Education teaching qualification (such as a Post Compulsory Education and Training (PCET) or Diploma in Education and Training (DET)); see Education and Training

Foundation, 2022) (e.g., P7). For P12, the MHCE provided a more diverse and well-rounded offer than comparable courses in Medical Education.

Time constraints were a major reason for studying online. ARU participants often faced a clash between timetabled teaching or other work commitments and the face-to-face PGCert classes. Two ARU participants who felt uncomfortable with studying online, changed to the face-to-face version for the second module when they were able to attend in person.

Flexible time management was mentioned specifically as an advantage of studying online:

Time is a very, very crucial commodity for me and going to work to do a full day's work and then having to go into a classroom setting, it's quite painstaking for me to say the least. Alright, but what I can do is manage my time. So, I can go and do a full day's work and then go home, manage my downtime and then give myself an hour or hour and a half to do some reading or whatever research (P5-I)

I found it very helpful because I had time. I am able to manage my time based on my workload (P10-I)

For P10, whose first language was not English, studying online had the additional advantage of improving their English because of features specific to online learning.

Another motivational factor was how the course supported engagement. Four participants (P2, P6, P7 and P9) highlighted learning from peers, and felt that:

I could rely on some of my peers on the course to give me some really useful constructive feedback. And so, I was able to use that more effectively (P2-I)

I felt that if a lot of people were engaging in something, then it kind of spurred you on to kind of get engaged as well, to kind of bother to put something up and do things rather than just do it on your own as a kind of thought experiment or something (P12-I)

While there was a positive side to peer learning, and the course had synchronous and asynchronous activities specifically designed to engage students in peer learning and feedback, the engagement and expectations were managed using a learning agreement. However, a couple of participants raised concerns about how the expectation to engage caused feelings of guilt.

The patchwork text assessment (Winter, 2003) divided the assessment into staged patches, thereby structuring the learning process. The patches were also designed

as authentic assessments (Darling-Hammond & Snyder, 2000; Herrington & Oliver, 2000; Sambell, McDowell & Montgomery, 2012; Koh, 2017) and required participants to apply the theory and modelled practice in the course to their work context:

The syllabus was connected to the assessment, the areas that I had to write my patches on, so I needed to gain more information connected to those specific areas, that I needed to reference (P1-I)

And another motivation of course was the assignment. So it was, of course, the idea of getting the work done, the ethical thing of having said at the beginning, yes, OK, I'll commit to do this (P9-I)

Two participants also mentioned that their learning became more efficient in the second module because they were more familiar with the way of engaging in this course:

Because it was more familiar, because I've done the first module, I thought: 'Oh, I can use this a little bit more. Maybe I was a bit more practised' (P2-I)

When you do that the first time, it makes the second time easier (P7-I)

Finally, P2-I mentioned the consistent, easy-to-navigate structure of the course in the virtual learning environment was helpful:

I think the way that everything was set out on Canvas was extremely helpful. I really appreciated the fact that the readings and the links to the readings were embedded so that made the whole process really simple to access those things

However, comments by other participants who experienced the virtual learning environment more as a barrier are covered in Section 5.3 *Barriers*.

5.2.1 Summary of findings

Where qualifications such as the LTHE are compulsory, as part of probation for example, there is always a risk that some participants only undertake the qualification because they have to. Therefore, there needed to be other incentives to intrinsically motivate participants to engage and see the value of the degree.

All participants were motivated by seeing the course as part of further developing and updating their practice and knowledge. This was an important motivator in convincing participants of the value of such a course combined with a well-structured, easy-to-use online provision, learning from peers, and authentic activities

and assessments. Enabling participants to relate the online course to their practice was an essential intrinsic motivator. Amongst the 12 participants, there was only one whose “focus was just to get it done... I’d already had the background knowledge in it” (P1-I).

Delivering a course online brought challenges which are explored in Section 5.3 *Barriers*. However, the benefits of providing flexibility for busy professionals in full-time work were mentioned by several participants. The course design accommodated this with a mixture of synchronous (e.g., webinars) and asynchronous activities (e.g., discussions, self-directed learning). However, these synchronous and asynchronous activities needed to be well-balanced to provide different options for participants to engage and overcome barriers, such as clashes of webinars with other activities.

Engaging with other peers and receiving peer and tutor feedback was important for several participants (e.g., P2, P6, P7 and P9). The immediacy of synchronous engagement was also valued but potentially clashed with other time commitments while asynchronous engagement was sometimes seen as frustrating because of the time delay between initial posts and replies: “I find that a little bit more frustrating. When you posted something and then you’ve got to check back in for a reply and then got to reply again” (P7-I). I explore the engagement of peers as part of forming a learning community further in Section 5.4 *Virtual Learning Community*.

When I considered motivation as part of the conceptual framework, some aspects were achieved through content development, support, and delivery (*content contextualisation*). Providing participants with resources in different formats helped motivation as well as guidance for onboarding (i.e., introduction to module, virtual learning environment, the learning agreement to manage expectations, and icebreakers) and support throughout the module including activities to develop and support a learning community through peer engagement. However, from a design perspective, the balance of asynchronous and synchronous activities, as well as alternatives such as recorded webinars for those who could not attend the live ones, is an important part of the *pedagogic recontextualisation* (Daly *et al.*, 2007; Baughan, Lindsay & Parker, 2015).

How the set-up of the course and the activities engaged students are discussed in Section 5.4 *Engagement in the course*. However, what motivated participants was ultimately related to how they engaged in the course and the workplace (*learner contextualisation*) (Rienties & Hosein, 2015; Hughes, 2018; Hughes & Price, 2019).

5.2.2 Recommendations

From the analysis, I can make the following recommendations. To improve the motivation of participants on an ODWBL course, participants should

- be provided with pre-course access, user information (onboarding) and ongoing support during the course
- find the course easy to navigate, highly accessible, and user-friendly
- find content provided in different media formats
- have their expectations on engagement informed by a learning agreement
- be provided with flexible opportunities to engage in different ways including with peers
- have a supportive learning community and peer support
- be provided with a balance between asynchronous and synchronous activities
- be given activities and assessment tasks structured to help with time management
- be enabled to engage in authentic learning activities and assessments connecting the online course to participants' work practices

5.3 Barriers

The main barrier to engaging optimally in the online course was time constraints, often in combination with competing priorities. Eight participants mentioned time constraints including timetable clashes between their teaching and the synchronous webinars of the course. For P4-I, for example, “a lot of the sessions in the first semester were [when] I had teaching at the same time”.

High workload commitments limited the time available for participants to engage. Reasons for the workload included general working conditions such as “the context of the world we work in in the sector is just manic at the moment and it's been like that for the past couple of years” (P3-I), understaffed teams (e.g., “our team is really small, and we've been understaffed for quite a while” (P7-I)), and being new to a job and becoming tasked with responsibilities to develop and deliver new modules with little support (e.g., “Because [I was] new in September, in January I was given two modules to lead [which] were completely new, so there was no material on Canvas. So, I've got that to prepare and teach and do this. So, this [PGCert] just kind of fell on [by the] way[side]” (P6-I)).

Participants also faced personal commitments such as family and partners, as well as unexpected circumstances such as accidents. P4-I, for instance, noted, “there've been various things happening in my personal life, private life, family life, work-life, etc., that have kind of got in the way of engaging with things as much as I would have liked”.

A few participants who acknowledged these time constraints also explained the time management strategies they used. These included getting buy-in from their partners and family members to support them and tightly managed schedules balancing work, personal life, and studies:

So anything that I needed to do in terms of managing my time, going to work, reading, setting aside my personal time, and spending that personal time working on my studies, I was able to overcome because I put in place a study plan (P5-I)

I would set aside time on those days where I wasn't physically at work. So that I could work through those modules. Part of my ability to do the course is being as organized as possible (P12-I)

Time management was, therefore, an essential skill to ringfence the time for studying, but because time was so pressured, any additional and unexpected challenges such as a crisis, increased workload or looking after young children during school holidays could lead to low engagement or disengagement. Ultimately, time constraints affected all participants irrespective of their roles, except for timetable clashes, which mainly involved academics.

In addition to time constraints, six participants explained that engagement in asynchronous discussions was also affected by the time delay in interaction and the lack of immediate responses or feedback:

It's not simultaneous, you not having that to-and-fro with the lecturer. So, you might ask a question and forget about it and get a response maybe two or three days later (P3-I)

But in total honesty, even if I had more time, I would have probably posted only one comment more. It's more, the getting used to it, the fact that I much prefer the immediate feedback chat (P9-I)

P1-I also did not “engage so much in the discussions, because I found them too long, too many contributions, so I just ended up emailing you or [the other tutor]... I found it easier than using the discussion”. P1-I also related the number of contributions to the group size, where the group size in the PGCert tended to be around twenty: “You get more engagement with three together than you would with five, six, seven... and it's the same online, I think. You have to keep those engagements small”.

While the engagement in discussions of two-thirds of academics was more constrained by time, two of the three Professional Services staff found the asynchronous nature of discussions a barrier and disconnect, and the length of the sessions was a challenge for the third. A further form of disconnect was mentioned by two of the Professional Services staff: the target audience of the course was mainly teaching staff, which meant that some aspects of the course such as the readings, as well as the experiences shared by other participants, were not felt to be as relevant.

While rare, some participants did mention a few technical challenges. P3-I, for example, felt that the virtual learning environment was “not really intuitive” and clunky. However, this may have been because they were unfamiliar with the platform which had just been introduced at ARU and were generally anxious about studying online: “I think once you've been doing it for a month or so, you then become quite good at it, but it did take time for me to really work out how this is going to work. There is still a feeling of anxiety attached to all those processes” (P3-I).

P12 mentioned that the MHCE had an interface that was sometimes difficult to access because the tutors used timed release of units. This created problems with P12's highly managed schedule as it inhibited the ability to work ahead in the

timeslots available: “You couldn’t start Session 2 in advance, even if you had completed the session activities”.

A challenge, mentioned by two external participants (P4 and P12) was the complicated online access to the University Library from outside the institution because of authentication (which improved since then with the introduction of an authentication App).

5.3.1 Summary of findings

The biggest barrier by far was time constraints. Many ARU academics took the online course due to timetabling clashes with the face-to-face course. However, they often experienced clashes with synchronous online sessions (webinars). Therefore, good time management was essential, and the provision of ringfenced time during working hours to study on the course would be desirable.

Most participants mentioned in the survey that the only support they received was the fee payments. It would have been an advantage for them to negotiate ringfenced time during working hours to undertake the course, or if this came as part of the probation requirements, that participants are given time equivalent to the time for scheduled sessions in the face-to-face course. The lack of ringfenced time during working hours was sometimes additionally impacted by the high workload experienced by understaffed teams, new course developments, module and course leadership, and poor organisational management, which added to other competing priorities.

Some participants described their strategy to balance work, study and social time. While ARU provides some guidance to distance learning students (see ARU, 2020), it would be useful to embed such advice and strategies more explicitly as part of the onboarding process at the beginning of a distance learning course. Providing learners with clear deadlines for activities to make them more manageable and chunking the assignment into patches with a clear submission schedule helped learners’ time management, but this needs to be flexible enough for learners to cope with unexpected events.

Because of time and other constraints, students tended to be strategic with their engagement. One aspect participants raised was the number of discussion

contributions in relation to group size. While the learning agreement at the beginning of each module managed student expectations regarding their level of engagement and tutor facilitation, group size can affect engagement levels. In my experience, smaller highly tutor-facilitated groups, while leading to more engagement, are often high in tutor workload while lower tutor facilitation requires larger groups of 15-20 to get enough student engagement to be viable. Ideally, online facilitation should be fully accounted for in online tutors' workload. However, online tutors often get the same or a lower allocation as face-to-face tutors.

Technical issues did not occur often and were limited to unfamiliarity with using the VLE and accessing the online library. Both issues can be addressed as part of the onboarding process by guidance on how to access and navigate the VLE, other technologies, and the online library.

There is a tension between highly structured courses which have a relatively prescribed curriculum and high engagement in facilitated online synchronous and asynchronous activities, as some participants could pass the course successfully with passive engagement while others needed more personal and immediate engagement to reduce the social or 'transactional distance' (Moore, 1997; 2018).

A final aspect is the lack of immediacy, especially if webinars could not be accessed live. The COVID-19 pandemic has highlighted the poverty of social engagement (Brown & Baume, 2022), which was also an issue for some participants in this course. Some of the participants who subsequently changed to the face-to-face course highlighted the lack of immediacy and social interaction. Providing more synchronous sessions including informal get-togethers could alleviate some of these deficits. New collaborative spaces such as MS Class Teams and online virtual reality spaces such as Wonder (Wonder, 2022), Gather (Gather Presence, 2022), and SpatialChat (SpatialChat, 2022) may provide the social space for students to meet and engage virtually.

5.3.2 Recommendations

Recommendations for addressing the barriers participants encountered may involve:

- providing a (technical) induction to learning with a VLE as part of onboarding (Salmon's Stage One, Salmon, 2011)

- recommending participants adopt a time management strategy as part of the onboarding process and learning agreement (Salmon, 2011) together with well-structured activities and assessment tasks
- employers providing participants with ringfenced time to engage in the course
- balancing asynchronous and synchronous activities to increase the immediacy of responses
- ensuring asynchronous activities are meaningful but not overburdening. This can be achieved with focused, well-managed e-tivities (Salmon, 2013) and optimised group sizes
- developing synchronous social spaces of learning

5.4 Engagement in the course

I adapted a version of the ‘Visitors and Residents’ approach developed by White and Le Cornu (2011; 2017) to map participants’ engagement in different course activities against the continuum of Visitor to Resident on the (horizontal) X-axis and the Personal to Study/Work continuum on the (vertical) Y-axis (see Figure 11, Section 4.3.2 *Interviews*). Participants’ engagement was coded by coordinates in the engagement map (see Figure 12 and *Coding Engagement* in Section 4.3.2 *Interviews*)

White (2015) described the Visitors and Residents typology as ‘a simple way of describing a wide range, or continuum of, modes of online engagement’ (ibid., para. 1). White’s (2015) definitions of Visitors and Residents were used for this research and shared with the participants as part of the interview. Since 2011, several projects have used the mapping approach which White and Le Cornu (2017) summarised in *Using ‘Visitors and Residents’ to visualise digital practices*.

The adaption of the ‘Visitors and Residents’ approach in my research defined the engagement with the course activities on the LTHE and MHCE. While these activities used different technologies and digital environments, for this analysis, the technologies were in the background. Instead, the mode of communication (synchronous and asynchronous), engagement (self-directed, with peers, tutors, and

colleagues) and intensity (low engagement (Visitor) to high engagement (Resident)) were the focus.

As part of the interviews, I went through the course activities with the participants and asked them to identify where on the continuum of Visitor to Resident and Personal and Study/Work they located their engagement for each of the activities using the grid (Figure 11, Section 4.3.2 *Interviews*). At the same time, I asked participants to verbalise the reasons behind their engagement, which followed White and Le Cornu's (2017) recommendation, 'that the maps need to be enriched with annotations or interviews for a detailed understanding of modes, behaviours, motivations and practices to emerge' (ibid., para. 12).

The activities were categorised as follows (see Table 5):

Activities	LTHE	MHCE	Synchron ous	Asynchron ous	Self- Directed	Comment
Reading, videos and self-directed tasks	√	√		X	X	
Webinars (live)	√	√	X			
Webinars (recorded)	√	√		X	X	
Face-to-face meetings with tutors	√	√	X			
Face-to-face meetings with peers	√		X			
Face-to-face meetings with colleagues	√	√	X			
Teaching observation	√	Wiki activity (lesson plans) and video recorded	X			

Activities	LTHE	MHCE	Synchron ous	Asynchron ous	Self- Directed	Comment
		lessons with peer feedback				
Ask the Tutor discussion	√	WhatsApp group		X		For discus- sions engage- ment can differ by active- ness from only reading posts to reading, posting and replying
Thematic discus- sions	√	Introduc- tory Discus- sion (Icebrea- ker)		X		
Patch discus- sions	√			X		
Email	√	√		X		
(Inbox – Canvas email)	(√)			X		

Table 5: Activity Mapping by PGCerts

The activities on the LTHE were designed to be accessed both sequentially and non-sequentially. The webinars were delivered using Adobe Connect and, in addition to the individual patches, introduced a topic or unit, and were recorded for asynchronous access. The webinars were prepared and followed by readings, self-directed activities, and asynchronous discussions. There were two types of discussions: one linked to the topic of the unit (thematic discussions); and one provided opportunities for participants to share and discuss their draft patches receiving feedback from peers and tutors. Additionally, an Ask the Tutor discussion was created as a support function for students to ask questions relevant to other students, which peers and tutors could answer. Email was normally used by participants to contact tutors with more personal or confidential questions. In some instances, participants also met with the module tutor(s) face-to-face where this was possible. A further form of engagement was face-to-face meetings with colleagues and mentors/line managers which were mostly situated in the work context.

The MHCE was structured differently, and the different elements were mapped against the LTHE activities (see Table 5) to allow comparison. Instead of the LTHE Ask the Tutor discussion, MHCE participants and the tutor used a WhatsApp group initiated by the module tutor. This was used well for questions and exchanges including by the participant in this research. It was occasionally used for tutor-participant communication similar to email. There were fortnightly readings similar to the LTHE. Discussions were only used as an icebreaker where participants introduced themselves. An introductory webinar was followed by regular webinars focused on discussions around the submitted video-recorded lessons, rather than the thematic discussions in LTHE. However, in terms of synchronous engagement, the webinars in LTHE and MHCE are comparable. At the core of the module was team-based collaboration around videoed lessons in which students were asked to peer review fulfilling a similar function as the teaching observations in the LTHE. Learners could arrange meetings with the module tutor/course leader via WhatsApp and face-to-face.

In the first interview, it became clear that only using the criteria of 'leaving strong evidence, visible traces, of personal presence' (White & Le Cornu, 2017, para. 1) to define a Resident in relation to engagement in a course, was insufficient for discussion activities as reading posts does not leave a publicly visible 'social trace' in the discussions but constituted engagement. I, therefore, distinguished between passive and active engagement in discussions with active engagement being posting and replying to discussion posts. Passive engagement would be located around the middle of the Visitor-to-Resident continuum while active engagement at the Resident end. A similar distinction can be drawn for webinars in which participants could engage synchronously in live webinars (Resident) and asynchronously in webinar recordings (Visitor).

The vertical axis was defined as the Personal to Work/Study continuum. However, in contrast to White and Le Cornu's original approach, personal was not defined as what participants did in their personal life, but what engagement was driven by a more personal motivation or interest. The engagement still contributed to the learning on the course. For instance, the course reading was coded to the work/study part of the axis while participants' Google Scholar and discipline-specific searches were coded to the personal area because participants explored resources

beyond the course content which was driven by their personal or disciplinary interests.

Similar to White and Le Cornu, the aim of this research was not to identify different fixed engagement types or personalities but to acknowledge that the position of engaging in different activities on the Visitor to Resident continuum is based on the notion that 'individuals may behave differently according to the context in which they find themselves' (White & Le Cornu, 2017, para. 2).

It was, therefore, important to identify the motivation, barriers, and contexts, while also considering whether personal preferences and attitudes may have an impact on engagement, therefore continuing the previously discussed themes of motivation and barriers in relation to course engagement.

In the following, I provided my interpretation of the participants' narrative about their engagement in their courses as well as their engagement map.

Participant 1 Engagement Profile

P1 was a highly strategic and, in a sense, a minimal effort learner whose main objective was to get a certificate. P1 felt that they already had the knowledge and experience before the course and did not engage actively unless it was necessary. P1-I commented, "it was to go through those procedures to get what needed to be done [and] yes, assessments made me engage with it online".

Library and Google searches were "connected to the assessment, the areas that I had to write my patches on" (P1-I) and no other searches and databases were used.

P1 also chose direct communication with tutors over peer discussions and engagement to minimise engagement effort. Because P1 was a learning technologist, they felt that some of the discussions and thus engagement with academic colleagues were less relevant to them or only relevant in so far as it gave them a better understanding of teaching which fed into and supported the training they provided for academics. P1 found the teaching observation very engaging and informative.

P1 was very comfortable and experienced with studying at a distance and very comfortable with the use of technologies which made P1's strategic approach very efficient (see Figure 16) (see Appendix J: *Participant 1 - Activity Engagement Map*).

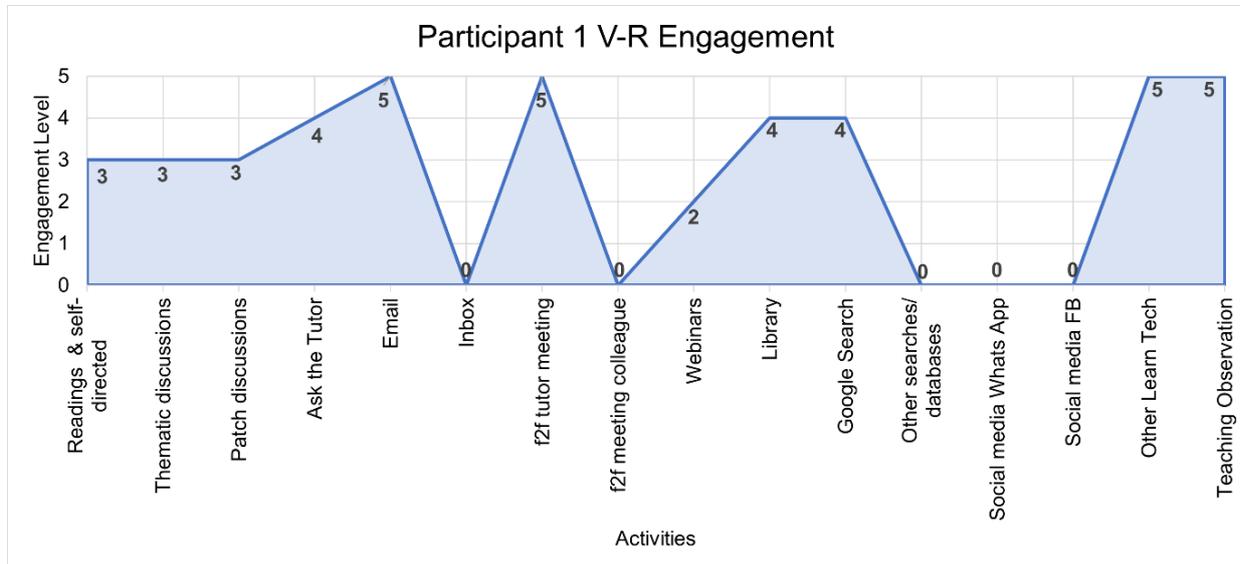


Figure 16: Participant 1 Visitor-to-Resident Engagement

The graph illustrates that while there was high engagement (Resident) relating to connecting with the tutors via email and face-to-face, the Ask the Tutor discussion, and library use and searches, P1's engagement with peers (discussions and webinars) was average. There was no face-to-face or social media (WhatsApp and Facebook) engagement with colleagues. This represents a strategic approach to succeed in the course with limited input into the course itself. The high scores in the use of other learning technologies in P1's work context, and the teaching observation related to their role as a learning technologist and their performance in training events.

Participant 2 Engagement Profile

P2 was highly engaged with the course including course readings, discussions and webinars. P2 followed up on the course readings to contextualise them to P2's discipline and shared their discoveries with others in the discussions but did not use other searches and databases.

P2 found the shared patches in the patch discussions useful to learn from others and provided feedback to others. P2 felt an obligation to engage in the discussions because they expected other participants to engage. P2-I said: "My take on the

patch discussions is that if I was expecting feedback from other people on the course, then I had a responsibility to make sure I gave them feedback”.

P2 engaged in the Ask the Tutor discussion which made P2-I feel “like I was part of a group that was working together to help each other” and also emailed the tutors directly because P2-I felt, if “it was a sensitive issue, email seemed to be the most appropriate form of communication”. P2 was more engaged in the second module, especially in webinars which in the first module P2 could only access offline. P2 found the teaching observation very engaging.

Beyond the course, P2-I engaged with work colleagues by “bring[ing] recommendations into our team meetings”. The engagement with peers, tutors as well as work colleagues was central to P2’s learning experience. There was no social media (WhatsApp and Facebook) engagement with other participants.

P2 was very comfortable with studying at a distance and the use of technologies but only had some experience with distance learning when P2 started with the course. The latter may account for P2’s being more engaged in the second module because they were more familiar and experienced with online learning (see Figure 17) (see Appendix J: *Participant 2 Activity Engagement Map*).

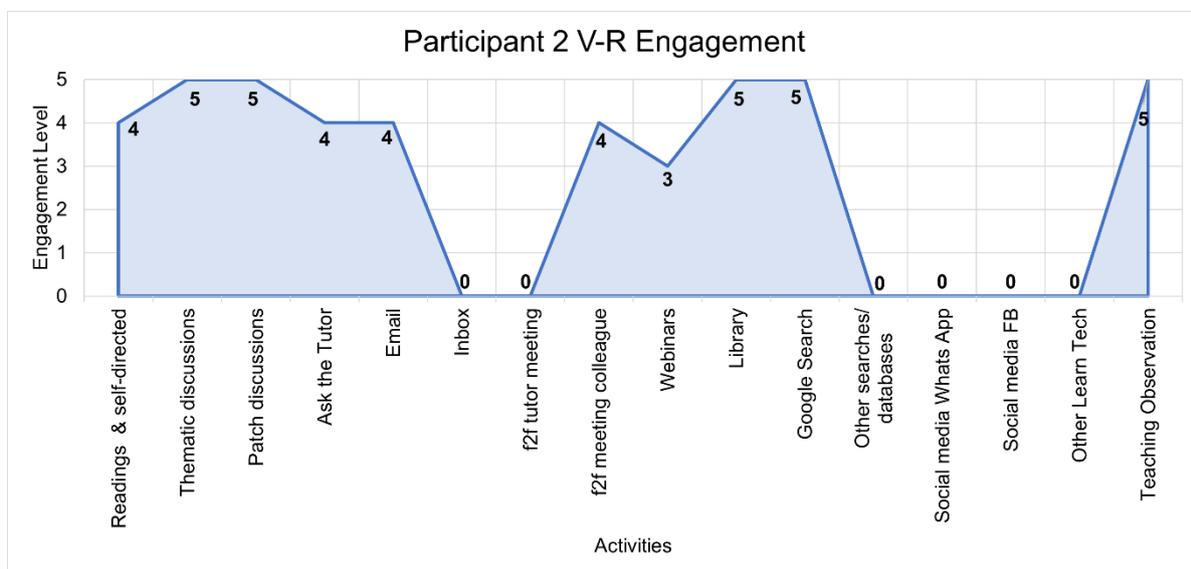


Figure 17: *Participant 2 V-R Engagement*

P2’s graph illustrates high, fairly consistent engagement across all course activities with webinars being between the Visitor and Resident continuum due to P2’s timetable clashes with live webinar sessions which P2 could only access

asynchronously. The participant also engaged with the tutors and colleagues (Ask the Tutor discussion, email, f2f meeting with colleagues).

Participant 3 Engagement Profile

P3 was overall very anxious about and uncomfortable with learning online. This meant that P3 frequently consulted with the module tutor and participants on the face-to-face course, as well as with colleagues they knew in the Education Department. P3-I mentioned that:

I had a few colleagues who were studying face-to-face because sometimes it's better to get clarity from your friends rather than just keep bothering the tutor. I engaged with colleagues as well on Facebook just as well as face-to-face and by WhatsApp. With the course, there wasn't much engagement externally. It was kind of very silo-based. I engaged with a few people in the Education Department, almost sense check that I was doing the right thing

P3 used the Ask the Tutor discussion to clarify questions as well as email the tutors. Much of the engagement was driven by their insecurity of not knowing if they were on the right track which, from their perspective, was heightened by learning online. P3-I commented, "I like, that I could post and get some feedback on your work, and that's probably the one thing which I did find the biggest difficulty because I think I sometimes feel that I didn't know what was really required".

P3's contributions to the discussion were driven by expectations they perceived their peers and the tutor had of them and their feeling of guilt, rather than their motivation to gain something from the engagement:

I felt when there was an expectation, there was an element of guilt there, when I hadn't done it because as much as I didn't know everybody, I saw that people were contributing almost on a weekly occurrence, and it was just like, oh I felt guilty that I wasn't contributing as much (P3-I)

P3's engagement with the webinars was asynchronous and irregular, indicating, that they "only caught up with them on an ad hoc basis and that was only occasionally" (P3-I). P3 engaged in the course readings as well as followed up with personal Google searches to relate the learning on the module to their training area but did not use the university library or other searches and databases. P3's approach was:

I tried to do is every two weeks I would go online and then go through what was set. I would go over [it] again and then kind of include the key literature and make sure I understood it. And then obviously to inform my

own personal reading, then that would be me going sort of off piece a little bit (P3-I)

Participant 3 was uncomfortable with studying at a distance despite rating themselves as being comfortable with learning online and the use of technologies. However, P3 also had limited distance learning experiences before attending the course. Personal contact and engagement with tutors and peers were preferred ways of engaging, while P3’s online engagement was mainly driven by perceived course and peer expectations. Overall, P3 felt a more blended approach would have been preferable (see Figure 18) (see Appendix J: *Participant 3 Activity Engagement Map*).

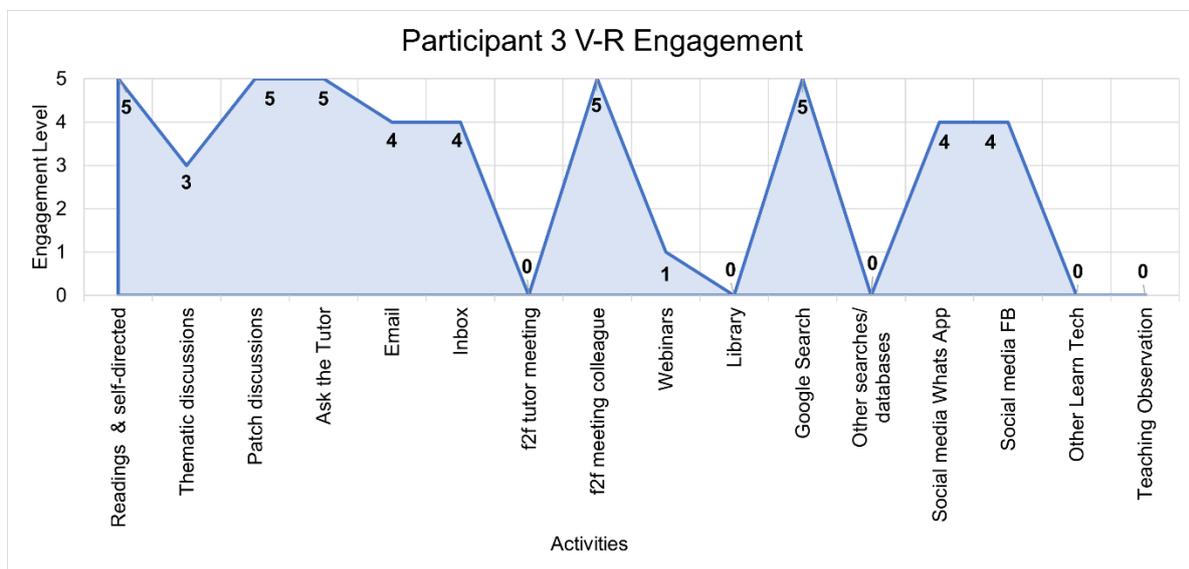


Figure 18: Participant 3 V-R Engagement

Participant 3’s graph showed high engagement for support with the tutors via email, Inbox, Ask the Tutor discussion and meetings with colleagues face-to-face as well as using social media (i.e., WhatsApp, Facebook). P3 also engaged highly with the reading, undertook searches (Google search), and strategically with the patch discussions related to assessment. P3’s engagement in the thematic discussions and the webinars was relatively low. While time constraints were mentioned as reasons for their low engagement with peers online there was also a degree of anxiety and discomfort.

Participant 4 Engagement Profile

P4 was actively engaged within the high time constraints P4 experienced. The discussions were not their preferred way of engaging. P4 read patch discussion posts and posted drafts but did not comment because “initially a sort of avoidance, anxiety response and then later on in this semester, partly because there just hasn’t been time”.

P4 attended the live webinars when possible but often had to catch up asynchronously because of timetable clashes. P4 found the live sessions more engaging and easier to keep the focus on, but also found the flexibility of the recordings useful. P4 commented:

I definitely think, when your attention to the information is definitely greater when you're watching it live and this chat [is] going on, even if you're not participating in the chat, you sort of turning your eyes to it, watching what people are saying. And even if you're not adding in it, it's more engaging (P4-I)

P4 was generally highly self-directed and did not use tutor support, noting “I didn’t really engage in that [Ask the Tutor discussion]. I didn’t use that resource partly through time, partly because I was doing it in a kind of catch up later way” (P4-I). As P4 was a student from an external institution, they did not have face-to-face meetings with tutors.

P4 read through the course reading and did a lot of personal research e.g., using PubMed and Google Scholar applying effective search and research strategies but did not use the university library:

I've read things just because they're interesting, and I found them sort of engaging, intellectually stimulating. I think I watched all of those videos or most of them as far as I'm aware (P4-I)

I prefer to use PubMed, just 'cause I'm very familiar with it and I teach about it. I mainly use Google Scholar for citation. I've done a fair bit of searching of the literature external to what was on reading lists and found quite a lot of really useful stuff (P4-I)

P4 discussed the PGCert with colleagues who pointed P4 to resources but did not engage with other participants via social media (WhatsApp, Facebook). The teaching observation, which was conducted by an experienced practitioner at P 4’s institution, was not mentioned as part of the discussion.

While P4 coped well with studying online and at a distance, they had no experience with distance learning before the course and rated their comfort level with studying at

a distance and the use of technologies as low, which likely accounts for their reluctance and initial anxiety with actively engaging in the asynchronous discussions and webinar chats (see Figure 19) (see Appendix J: *Participant 4 Activity Engagement Map*).

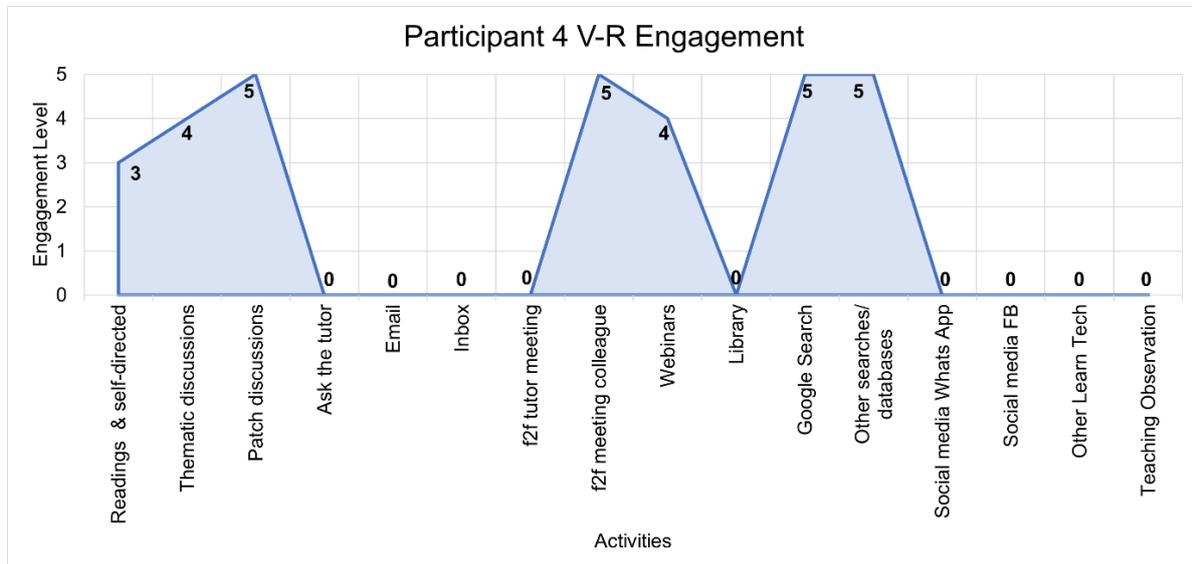


Figure 19: Participant 4 V-R Engagement

P4’s engagement was consistently high despite their lack of comfort with online learning. However, P4 did not seek support from tutors or peers from the course but engaged well in discussions and live webinars. While the engagement in the course readings was rated as average, P4 engaged highly with literature that was more relevant to their discipline (found on Google and other database searches e.g., PubMed) and complemented the course readings.

Participant 5 Engagement Profile

P5 was very engaged and enthusiastic about their studies. P5 participated actively and consciously with others in discussions. P5 felt engagement with and feedback from others was an essential part of their learning experience:

I actually felt as though I had an individual responsibility to the whole course that I made sure that I gave my input. I was actually mindful as to whether I would post my input first or wait to see what other students were posting or to give them an opportunity to post first. So, I was quite conscious that I was very, very proactive on the discussion board (P5-I)

I actually felt as though that was where a lot of the learning was taking place, because, by way of sharing your learning, I was then able when I

got onto the reflective side of my work to then start drawing on all the feedback that I had received from yourself, from Course Leader and from the other students (P5-I)

P5 read the course readings and extended their reading through their personal library and various Google searches, but did not use database searches, commenting:

I found the reading quite interesting. I also felt that the reading in itself forced me to think outside of the box. I read all of the material that was online, but also I looked within my own library just to drill down further just to draw a comparison (P5-I)

P5 engaged with the module leader through the Ask the Tutor discussion and via email, colleagues at work as well as the College Principal. As P5-I said, “what encouraged [me] was a four-way meeting where I’m actually working with the Director of Student Services and the Learning and Development Director to develop my self-assessment tool”. P5 did not use social media (WhatsApp, Facebook) to engage with other participants.

P5 accessed most webinars asynchronously because of timetable clashes.

P5 also engaged actively in their teaching observation which led to testing a new assessment approach. As a consequence, P5 was able to develop this tool institution-wide. P5 also introduced a polling tool into their teaching as part of the course.

Participant 5 rated themselves as very experienced with Distance Learning having taken Open University courses as well as very comfortable with studying at a distance and the use of technologies (see Figure 20) (see Appendix J: *Participant 5 Activity Engagement Map*).

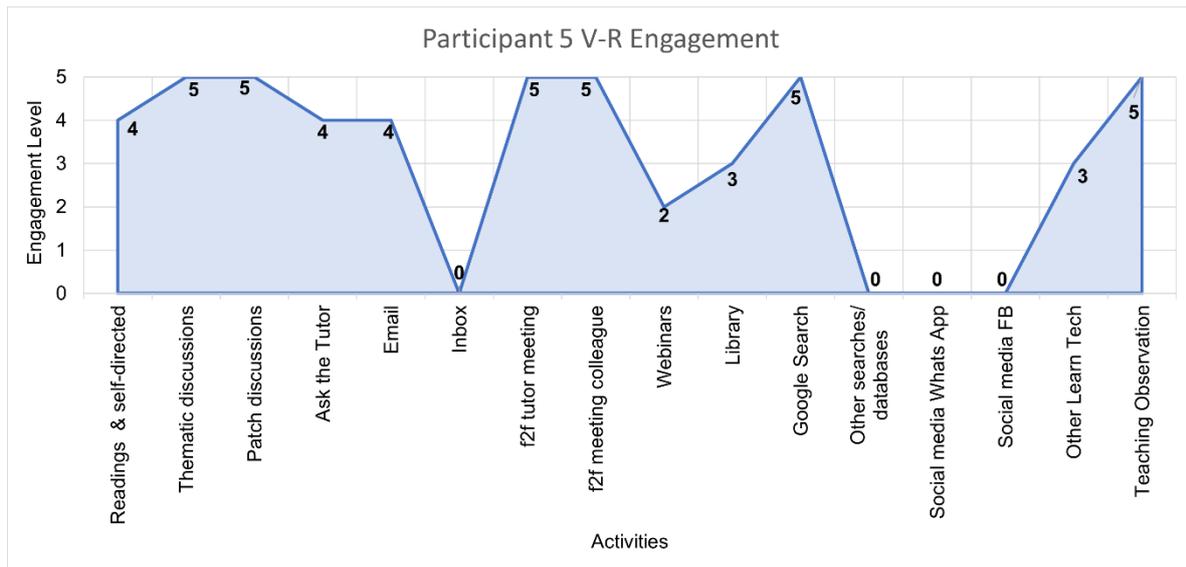


Figure 20: Participant 5 V-R Engagement

P5's engagement was consistently high except for the webinars which they had to access asynchronously most of the time. As an external participant, P5's access to the ARU library was limited but they used Google searches instead. P5 also introduced a polling tool in their class that accounts for the 'Other Learning Technologies' category.

Participant 6 Engagement Profile

P6 was actively engaged in reading including using Google Scholar, the Advance HE and other external sources, but did not use the university library. P6's inquisitiveness and curiosity often took P6 to resources outside the course reading, including following up on course readings or discussions. They said:

I did go to Google Scholar a lot, because you read that paper and then you think, oh I wonder what, if someone puts a reference, you think, I wonder what that's about (P6-I)

I looked at Higher Education Academy. I looked at others, you know, British Dyslexia Association and looked at some of their blogs (P6-I)

P6 read the Ask the Module Tutor, thematic and patch discussions posts but did not post, noting: "Patch discussions, I read a lot of the discussions and actually looking at the discussion I was able to look at as sort of references, I should read" (P6-I).

P6-I had to use the webinar recordings because of a timetabling clash with the live ones, as “there was no opportunity to actually engage at all. I looked at the webinars and looked at the videos attached and all the stuff that belonged to it”.

P6 met with the module leader in person and used email to the tutor occasionally but did not engage with colleagues or peers face-to-face or via social media (WhatsApp, Facebook). P6 commented, “I never met up with any of my colleagues of the course. I didn’t really engage with my colleagues” (P6-I).

P6 preferred personal contact and the f2f format and changed to face-to-face delivery for the second module. Most of P6’s online engagement was non-interactive (some due to high workload).

P6 had no experience with Distance Learning before taking this course and rated themselves low in comfort with studying at a distance but comfortable with the use of technologies. It was clear from the interview that distance learning was not their preferred mode of learning and may have contributed to their lower level of active engagement (see Figure 21) (see Appendix J: *Participant 6 Activity Engagement Map*).

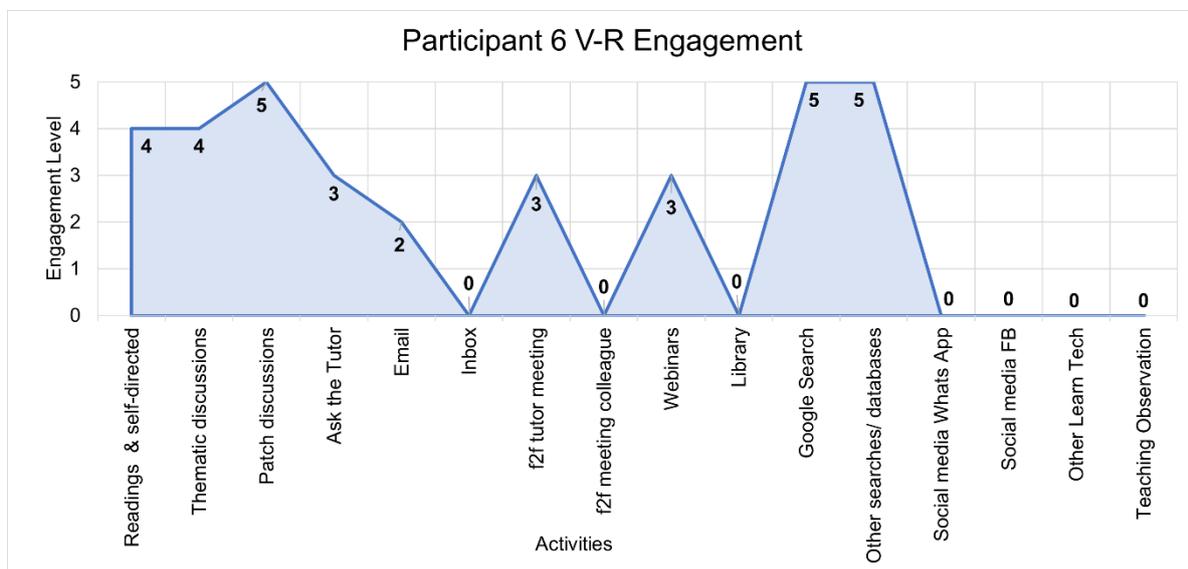


Figure 21: Participant 6 V-R Engagement

P6’s engagement was relatively high for readings, Google and other searches, but average for engaging with the tutors and the webinars. The live webinar clashed with their scheduled classes and P6 had to access the recordings instead. P6 engaged

passively with the patch as well as with the thematic discussions mainly reading peer contributions to inform their patches.

Participant 7 Engagement Profile

P7 was actively engaged in the synchronous webinars when available, which took centre stage in their learning process. P7 often ringfenced the time around the webinars to also engage in the asynchronous discussions as P7 found that other participants were active at this time as well and P7 got more immediate feedback and responses. This was less effective when P7 could not attend the live webinars in the second module. P7 mentioned:

I found it a lot easier to engage with other students because the day that the webinars were delivered, I had set aside to attend the live webinars and then sit and do a lot of work (P7-I)

I did download them [in the second module] and watch them, but you don't have that interaction immediately when you watch it, and I found that particularly helpful in the first semester when I could talk to you directly and discuss with the other students there and then. I found that much more satisfying, and I felt like I had much more part of the course then (P7-I)

The engagement in the discussions was closely linked for P7 with the live webinars as more students were online in the discussions as well. Therefore, P7-I engaged more actively in the first than the second module in the discussions because of the immediacy of the feedback (i.e., "When you upload something, or if there's a discussion on something, you get that feedback there and then"). For P7, the immediacy of the engagement was important through live webinars, related discussions and engagement with the module tutors.

P7 engaged with the tutors via email but most of the questions were answered in the live webinars. P7 also found the feedback on their teaching observation very helpful which was undertaken by their college's department head. P7 did not meet colleagues face-to-face and did not engage with other participants via social media (WhatsApp, Facebook).

P7-I read the course readings but also extended to searching the Advance HE and other databases, and using Google Scholar, noting "the weekly reading I found probably the most helpful and I did spend a lot of time going through the literature" (P7). P7 as an external student did not engage with ARU's library.

P7 had no experience with Distance Learning before taking this course but was very comfortable with studying at a distance and the use of technologies. P7's engagement with the course demonstrated their effective and strategic use of the technologies and resources (see Figure 22) (see Appendix J: *Participant 7 Activity Engagement Map*).

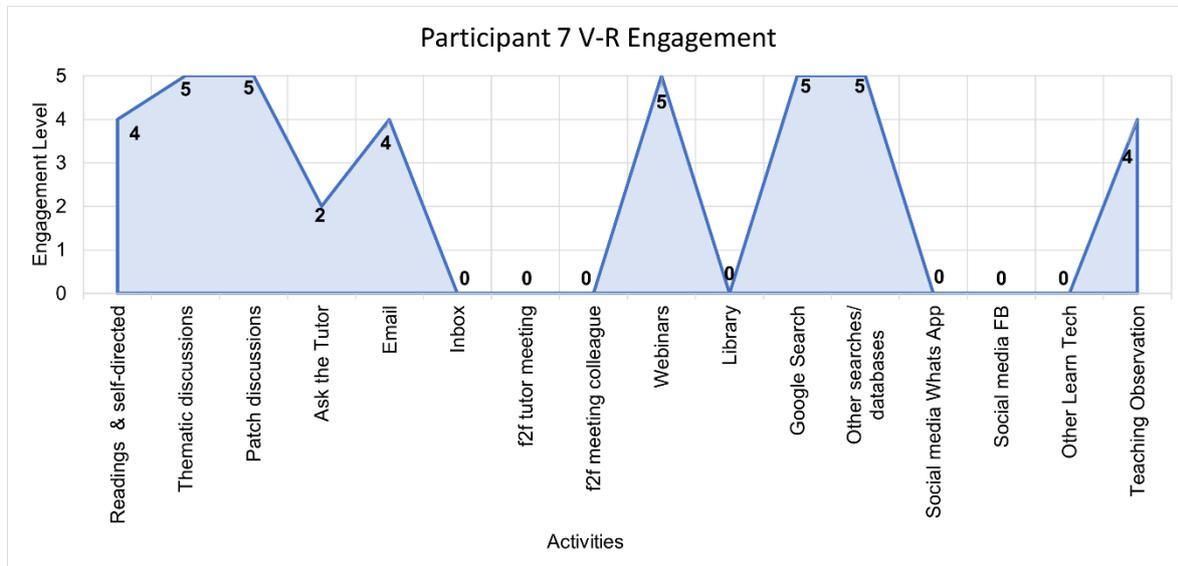


Figure 22: Participant 7 V-R Engagement

P7 engaged consistently and actively in all course activities except for the Ask the Tutor discussion as P7's questions were answered either in the live webinars or via email to the tutors. Engaging with peers was important hence P7's high level of engagement in the patch and thematic discussions as well as the webinars despite not being able to attend all of them live.

Participant 8 Engagement Profile

P8 engaged actively in the course readings and self-directed activities and followed up the reading with library, Google and other database searches. "What I do is after the sessions, I go back and look at the materials. I did searches, mostly databases. I used Google search. I also used the Anglia Ruskin library, the online library" (P8-I).

P8 read discussion contributions, as well as the Ask the Tutor discussion but did not post. P8-I commented:

I think [I have] only gone in there to read, never posted anything. But I always read the comments. It was more looking at what people have done

and also getting the feedback from what colleagues put there. I never had the time to put my own patches again

For timetabling reasons, P8 accessed the webinars asynchronously but worked through the recordings and the related readings and activities:

I go through the webinars from the beginning to the end and [if] it makes a pointer to an activity and also to further activities, I tend to go into those activities, so I get the full information and knowledge about what the activity is all about (P8-I)

P8 felt the observation was an effective means of self-assessment and identifying gaps and strategies for improvements, pointing out:

the teaching observation provides the opportunity for me to engage in self-assessment. I am able to identify where I am now in my teaching practice, identify gaps such as the areas of improvement as noted by my observer and develop strategies to improve on my practice (P8-A)

P8 used email frequently to get feedback and clarification from tutors but as an external student did not meet tutors face-to-face.

P8's engagement was mainly passive. P8 read the course readings and explored them, read discussion posts but did not post and could not engage in the live webinars. As such P8 was a self-directed learner who relied mainly on the course content with some email support from the tutors. P8 did not meet colleagues face-to-face or engage with other participants via social media (WhatsApp, Facebook).

While P8 had little experience with distance learning before taking this course but was comfortable with studying at a distance and the use of technologies (see Figure 23) (see Appendix J: *Participant 8 Activity Engagement Map*).

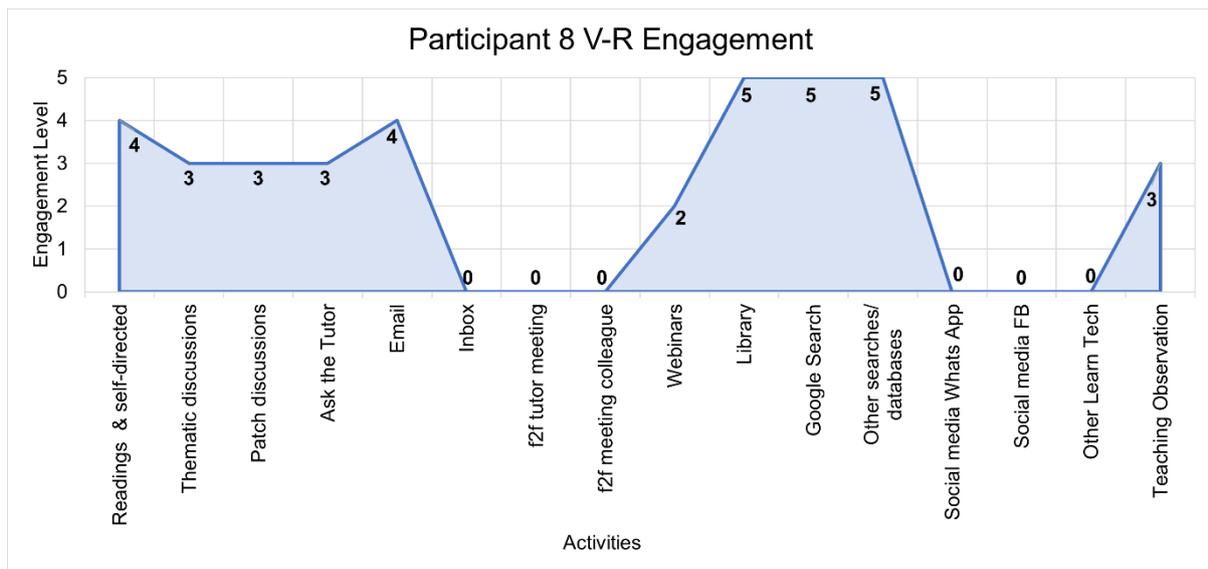


Figure 23: Participant 8 V-R Engagement

P8's engagement was average for most course activities except for readings, library, Google and other searches where engagement was high. Engaging with other participants was not in the foreground for this participant.

Participant 9 Engagement Profile

P9 was mainly passively engaged in the module, reading discussions and accessing webinars asynchronously for timetabling reasons. P9's reason for not posting and engaging with participants was mainly about not having the confidence and also because as a study coach P9 only partially shared the experiences of the academics on the course. Therefore, P9 felt they could not contribute actively. P9 found especially the patch discussions useful for self-evaluation:

I was very passive on this. I found it is a very big challenge. For me learning online is a struggle because I'm very introverted and so if I don't know the people and I just see what they wrote, I am not going to open my mouth ever (P9-I)

P9-I undertook the reading and followed up with some library and online searches relating to their area, stating how "I did all the reading, so it was quite active. In a way, I felt less isolated through the reading because I had all of this idea of how things should be done, and how the processes are".

P9 actively engaged with the course leader online and face-to-face, and "was mainly communicating with the Course Leader. So, I did various mishmash of email and

face-to-face with the Course Leader” (P9-I). P9 did not meet colleagues face-to-face or engage with participants via social media (WhatsApp, Facebook).

P9 engaged in the webinar recordings because P9 did not have time to access the live versions, commenting:

always asynchronous and also not even looking at other people’s comments. But generally, I will be concentrating on looking at the slides, listening to you or the Course Leader and taking my own notes and thinking straight away, how would I apply them (P9-I)

P9 (I) expressed their experience with distance learning on the course as follows: “For me, one problem is also the non-immediate feedback. It’s just like being in the liminal space and you don’t have the immediate feedback from the tutors”.

While P9 had experience with distance learning before taking this course, P9 was very uncomfortable with studying at a distance which also became evident in the interview. P9 needed more immediate engagement, feedback and social interaction which is easier to achieve in a face-to-face learning context than in a distance learning one. For the second module, P9 changed to the face-to-face version of the PGCert. P9 was very comfortable with the use of technologies (see Figure 24) (see Appendix J: *Participant 9 Activity Engagement Map*).

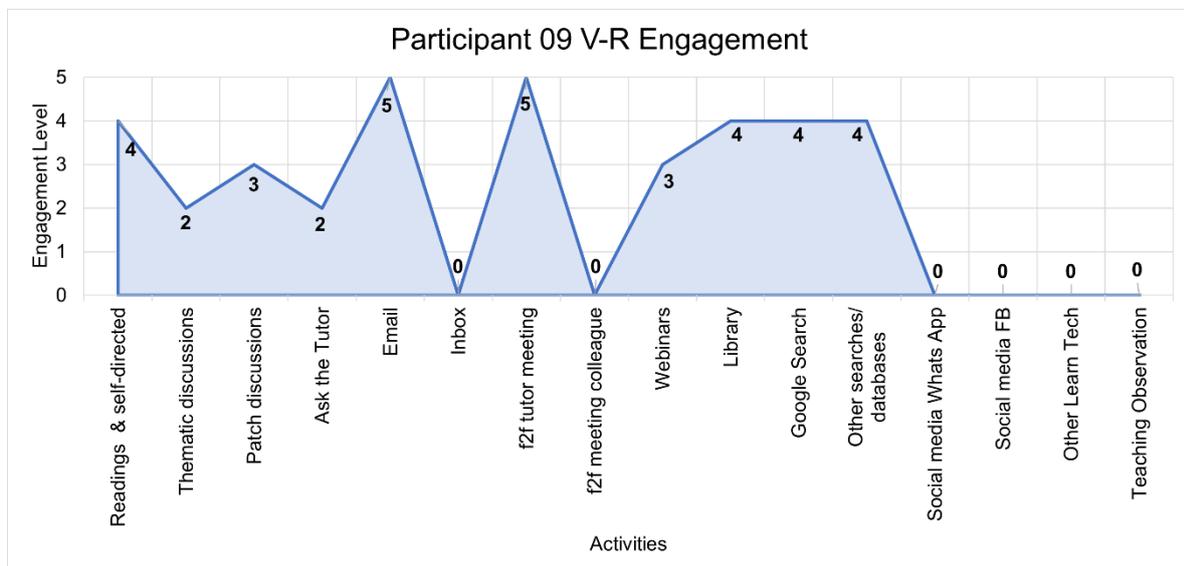


Figure 24: Participant 9 V-R Engagement

P 9’s engagement centred around the reading with follow-up searches using Google and other searches. P9’s engagement with the tutors was also high while engagement with peers in discussions was low. P9’s engagement in webinars was

mainly using the recordings because of timetable clashes, thus P9's engagement was average.

Participant 10 Engagement Profile

P10 was mainly a passive, self-directed participant. P10 read the course reading and followed up with Google and Advance HE searches and confirmed that "I did read. Even when I went through the studies that you provided, I always go and search Google because if there is something that I couldn't understand or need more explanation" (P10 I). P10 did not use the university library.

P10 read the thematic and more intensely the patch discussions and found the latter useful for their assignments, but P10 did not post. P10 was aware of the Ask the module tutor discussion but did not engage, pointing out, "I did read, but I didn't participate in the activity to leave a comment. I didn't participate in the discussion because I was engaged with the teaching" (P10-I). P10 did not meet colleagues face-to-face and did not engage with other participants via social media (WhatsApp, Facebook).

P10 accessed the recordings of the webinars because the live sessions clashed with the timetable. Therefore P10's main engagement was through reading and listening to the webinar recordings, confirming: "the recording, unfortunately, because at the time of the webinar [I] engaged with teaching in the classroom or preparation for that" (P10-I).

P10 had no face-to-face contact with the module leader/tutor or colleagues. P10-A found the feedback of their teaching observation "invaluable in promoting my practice".

P10 was experienced with distance learning before taking this course and was very comfortable with studying at a distance and with the use of technologies. P10 was confident in their engagement with the course but their active engagement was limited because of their high workload and clashes with scheduled teaching (see Figure 25) (see Appendix J: *Participant 10 Activity Engagement Map*).

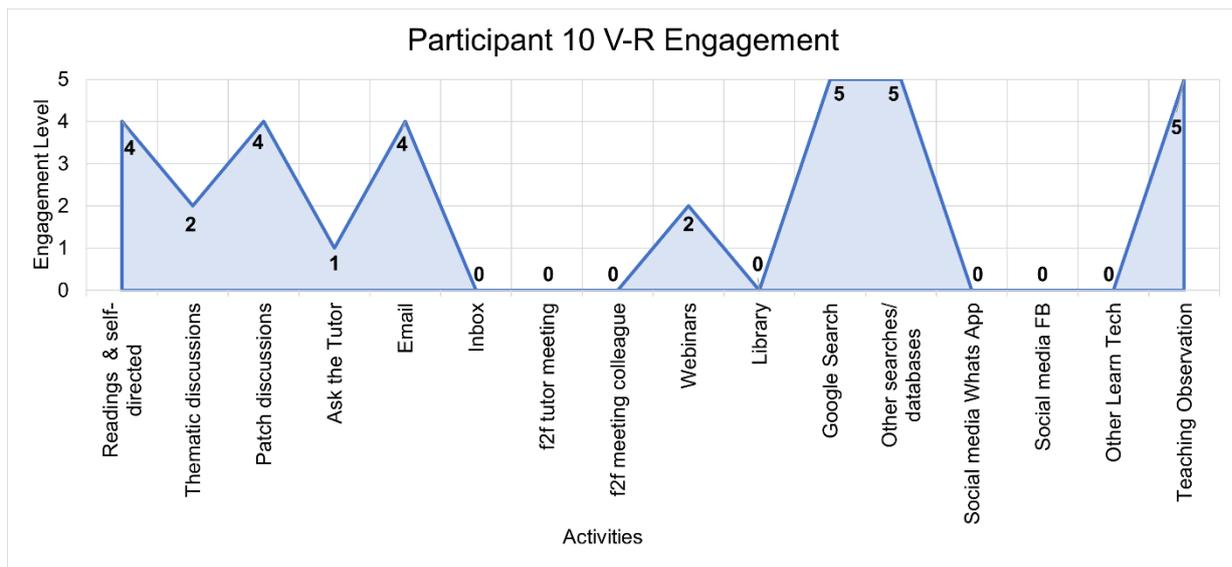


Figure 25: Participant 10 V-R Engagement

P10's engagement varied and was strategic. For instance, P10 engaged highly in patch discussions because they were assessment relevant while P10's engagement in other discussions was low. P10's high engagement was in the course readings and follow-up Google and other searches. P10 also engaged with tutors via email. Time constraints limited how P10 engaged in the course.

Participant 11 Engagement Profile

P11 was very engaged in the course. Owing to time constraints, P11 was also strategic in how they spent their time.

P11-I actively contributed to the thematic and the patch discussions, as well as the Ask the Tutor discussion, and "really engaged. I started to engage with the patches and the webinar when it kind of infiltrated. And I kind of then became more engaged with the discussions and the weekly reading".

P11 engaged in the course readings and followed up with Google and Advance HE searches. P11 found access to ARU's online library difficult and used their institution's library instead. P11-I reported, "the reading lists that you put down were fantastic, really fantastic. The reading list that you provided for us was key in supporting my engagement with the course".

P11-I attended most webinars live and felt they were more engaging than the recordings (i.e., "Most of the time live. But I did also engage with it [asynchronously]

when, only on two occasions, [I could not attend]. I found it more engaging when I actually attended when everyone was [there] when it was live”).

P11 engaged very much via email with the module tutor and to some extent the line manager at their college. Email was “really important“ for P11-I. The social contact with the tutor and through the webinar emphasised their need for more immediate feedback and contact. As an external participant, P11 did not meet tutors face-to-face.

P11 did not engage as much with work colleagues because they were not in the right frame of mind for changing their practice. But P11 had support from their line manager. Also, “I kind of engaged really more than anything with yourself and the reading and the patches and slowly, slowly with my realization of what was best practices, I then brought it into the workplace and my manager supported me with that” (P11-I). P11 did not engage with participants via social media (WhatsApp, Facebook).

Although P11 had no experience with distance learning before taking this course P11 was very comfortable with studying at a distance and the use of technologies which was evident in their active engagement. P11’s main barriers were time constraints. P11 addressed some of their queries and challenges through frequent contact with the tutor (see Figure 26) (see Appendix J: *Participant 10 Activity Engagement Map*).

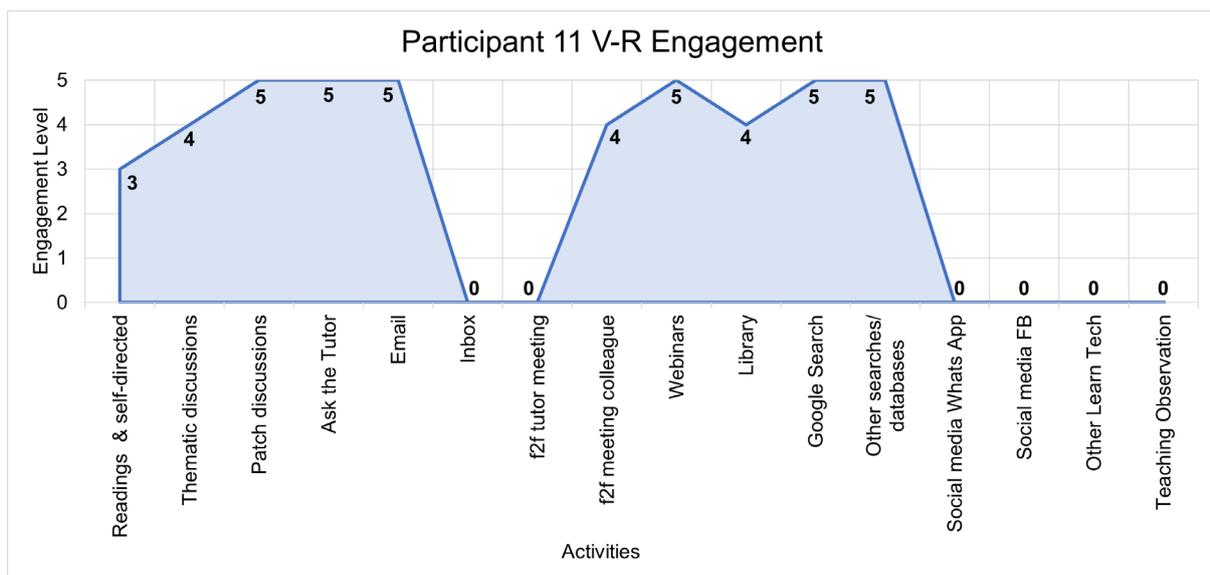


Figure 26: Participant 11 V-R Engagement

P11 had one of the highest and most consistent engagement across all course activities within the group of participants. This was mainly due to P11's commitment and dedication. Engaging with peers, colleagues and tutors was in the foreground, as well as the immediacy of interaction that P11 achieved through participating in the live webinars.

Participant 12 Engagement Profile

P12 took part in the MHCE which was structured differently. Instead of the Ask the Tutor discussion they used a WhatsApp group. This was used well for questions and exchanges including by the participant, and "often what happens is, we'll ask a question, a couple of us might put forward solutions to it, and then the module leader will also engage in the conversation. The other questions we've either discussed through the webinar or WhatsApp" (P12-I).

There were fortnightly readings, but P12 searched for resources mainly in PubMed and other specialist databases and was interested in Google Scholar searches. P12's use of the ARU online library was more limited because of access issues. P12 commented on their reading, that:

most of them are kind of fortnightly. I looked at things that interested me. But I kind of decided to use that as a foundation, because that's what I was needing. Because I found that it would be easier to go and search for that type of information amongst articles, rather than just try and read kind of basically core theory about things (P12-I)

A discussion was only used as an icebreaker where participants introduced themselves. as P12-I said, "This is when we introduced ourselves to our kind of peers. That required some thought, and it was a very personal way of looking at things". As the assessment for the MHCE did not involve patches there were no Patch discussions.

There was an introductory webinar followed by regular webinars which focused on the discussion around the submitted videoed lessons rather than the content. P12 found this engaging. P12-I described the process as:

the module leader put[ing] out to the group, some of the possibilities, we wanted to go through. And some of it has been very useful in terms of kind of structured reflection. So actually, probably more practically based rather

than theoretically related to the core content of the module. And then there was the overall introduction that we had a better idea of what to expect

Email and phone calls were used between the participant and tutor to clarify individual questions beyond the WhatsApp group. P12-I said, they:

had to email, but these are mainly about logistical things rather than kind of actual content or contact about content. The module leader and I have rung. The module leader rang me when I had a question that was quite complex to answer on WhatsApp

At the core of the module was team-based collaboration around videoed lessons which students were asked to peer review, which P12 found useful but not as engaging as they could have been e.g., team members could only comment but not follow up exploring aspects further. P12-I explained, how:

the module leader basically divided us into groups. I was in Group 2, and there were four of our videos there. So, I actually fed back on three. We did have a brief webinar that did touch on feedback. We used Google Docs, and within Google Docs there was the feedback form. You did look at other people's [videos] and you did kind of pick up things, but again there wasn't that much in terms of the ability to maybe probe other people

P12 was very engaged and motivated but did not meet colleagues face-to-face and found the opportunities to actively engage and collaborate with participants limited by the course design. Generally, P12-I found the set-up of the course rather didactic, with "not much collaboration actually in this module".

P12 had no experience with distance learning before taking this course but was very comfortable with studying at a distance and the use of technologies (see Figure 27) (see Appendix J: *Participant 11 Activity Engagement Map*).

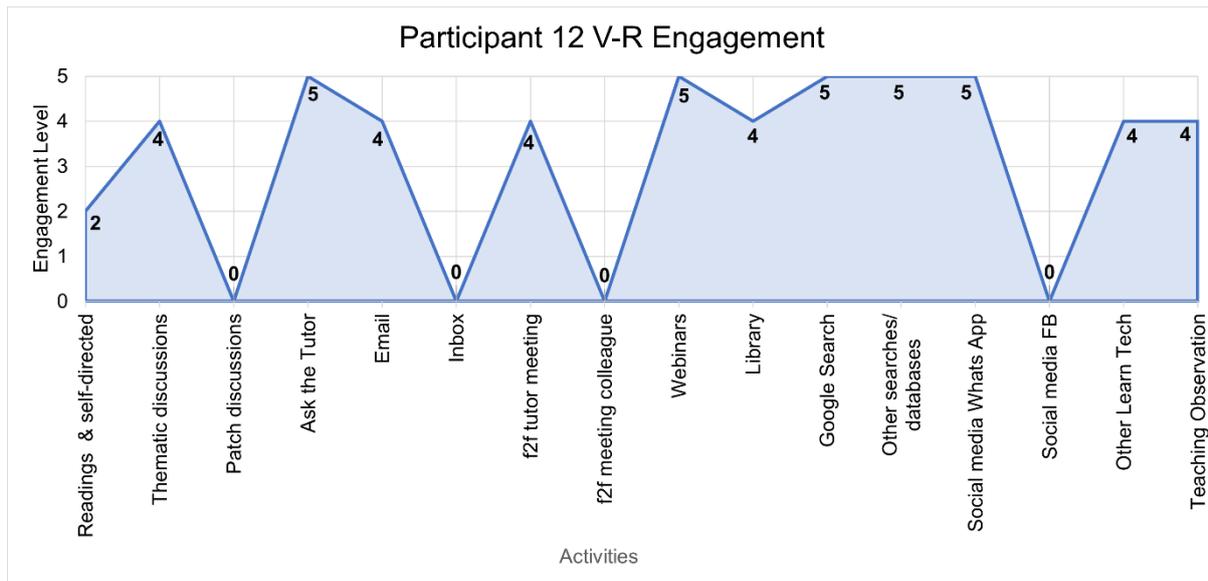


Figure 27: Participant 12 V-R Engagement

P12 engaged actively and consistently across the course activities and was mainly held back by other participants not engaging as much where their feedback on videoed teaching observation was required as well as some technical issues in the design of the course which did not provide the flexibility in progressing through the course at the participant's pace. The course readings were generic and therefore not all relevant to P12. Most of the reading was achieved through P12's own searches to relate to P12's discipline and profession.

5.4.1 Summary of findings

The engagement maps of participants, together with their commentaries, show the variations of engagement influenced by the type of activities, motivation and barriers, and personal engagement characteristics. Some tools were rarely used such as the VLE email function (Inbox), which was discouraged, and social media (WhatsApp, Facebook) unless it was set up and facilitated by the course tutor (MHCE). The teaching observation was an assessment of its own, conducted by trained ARU observers for ARU participants and by experienced practitioners for partner college and external participants following an observation proforma format. Participants reflected on the teaching observation as part of their Patchwork Text assignment but not everyone discussed it as part of the interview.

The engagement map in Figure 28 provides an overview of the engagement by colour-coded activities across all participants. While some activities are consistent such as the use of the library, Google and other online searches, others that mainly involve peer and/or tutor engagement, have a wider distribution such as Ask the Tutor, thematic and patch discussions. Webinars are widely distributed mainly as study/work and along the Visitor-to-Resident axis reflecting the different engagement from accessing the webinar recordings (Visitor) to a consistent, active engagement in the live webinars (Resident). The intensity of tutor support (emailing tutor, face-to-face meetings with tutors) depended on the participants' needs and face-to-face meetings on their access to tutors. The map illustrates the different engagement patterns of participants, especially regarding asynchronous and synchronous peer learning activities.

Table 6 provides a list of the participants by engagement means derived from the sum of a participant's engagement scores on the Visitor (1) to Resident (5) continuum divided by the number of (sixteen) activities (including activities they did not engage in). The highest possible score was 5 (Resident) and the lowest 1 (Visitor).

While all participants engaged, the higher engagement scores were achieved by participants engaging consistently and actively across a high number of activities, while the lower engagement scores reflect higher engagement in some activities than in others. The low or non-engagement with several activities (Inbox, social media) across most participants accounts for the highest average score only being 3.19.

Participant	4	10	6	9	8	7	1	2	3	11	5	12
Average	1.94	2	2.13	2.25	2.31	2.44	2.69	2.75	2.81	2.81	3.13	3.19

Table 6: Mean engagement by participant

Comparison between the lowest and highest mean scoring participants

Figure 29 shows the engagement scores for the lowest (blue line) and highest (green and orange line) mean scoring participants for LTHE and MHCE respectively.

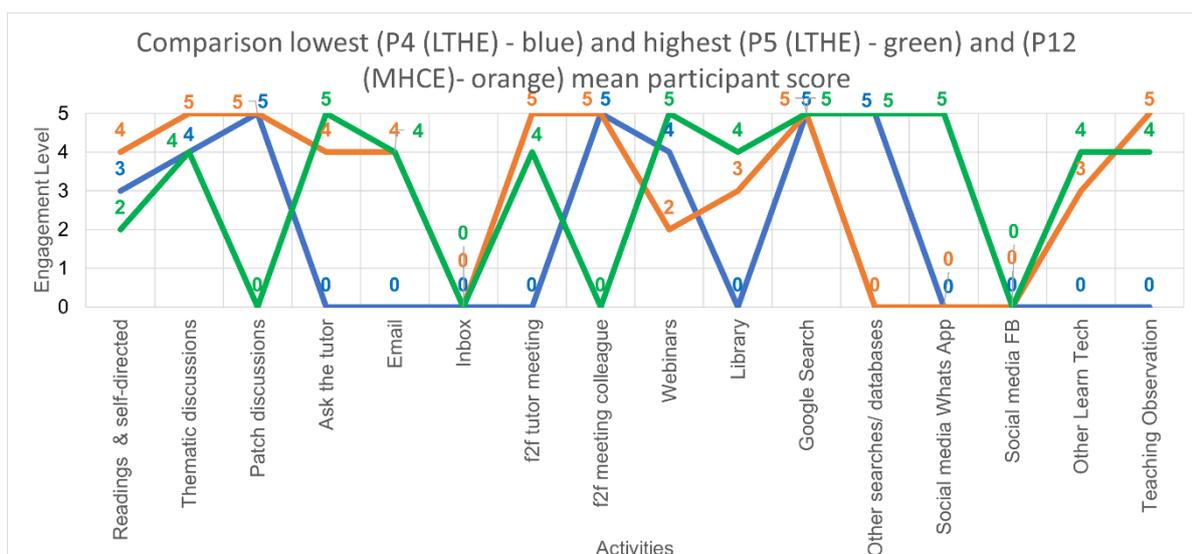


Figure 29: Comparison lowest and highest mean scoring participant

Short portraits and engagement maps providing more details about participants 4, 5 and 12 can be found in Appendix K.

While P4 and P5 both succeeded in the LTHE course, they had different engagement patterns with P4 being more self-directed, involved in fewer activities and low engagement with tutors, and P5 highly engaged with peers, tutors and different sources and readings. P5 also engaged actively with colleagues and management in their workplace. P12 compares well with P5's course engagement with both involved in activities beyond their course such as identifying their own readings.

Participants findings

As acknowledged previously, all participants were affected by time constraints as a barrier. This particularly affected the attendance of the live webinars. Only four participants (P4, P7, P11, P12) were able to attend the live webinars most of the time. For some participants (P4, P5, P6, P7, P11, P12), engagement with peers, tutors and in some cases colleagues was important and most of these participants had higher engagement averages. However, of these, some participants found the immediacy of responses and feedback important as part of engaging with peers and tutors which was best achieved with synchronous webinars. This led to frustration when time constraints did not permit their live attendance. Higher engagement with peers was sometimes part of expectations to contribute by participants (P2, P3, P5), partially fostered by a learning agreement at the modules' beginning.

Participants with lower engagement scores tended to take a more strategic approach. They engaged in the course readings often complemented by their personal searches and as readers in patch discussions because they informed the assessments. Their involvement with the course tutors was often higher to seek clarification and support to achieve a positive outcome.

Tutor support via email, face-to-face meetings, and the Ask the Tutor discussions were more sought after by participants P3 and P9, who felt insecure in their learning and learning at a distance. Both participants were Professional Services staff who found it more challenging to relate the course content and activities to their practice and felt more uncomfortable studying online. However, the third Professional Services participant (P1), while also experiencing a disjunct between the course

content and their practice, used tutor support strategically to minimise their engagement with peers.

Differences in engagement between home, partner and external students were less pronounced. External and partner college students tended to have less or no access to tutors face-to-face and relied on online communication.

Only P3 experienced challenges with technologies as a barrier due to unfamiliarity with the new virtual learning platform and general anxiety about learning online. However, several external participants found the online ARU library difficult to access because of authentication problems, which have since improved.

P12 was negatively affected by design issues in the course, as the course designers implemented timed and selective release in the learning path of the module which conflicted with the flexibility the participant required to progress through the module. However, overall technology was not a barrier, which contrasts with the findings of White and Le Cornu (2011; 2017). Albion, Heffernan, and Jones (2016) whose study involved a 'teacher education program that has up to 70% of its students studying some subjects online' (ibid., para. 12) defined the Visitor and Resident continuum more as a space metaphor:

A Digital Visitor sees the digital space as a collection of disparate tools that are used to achieve specific tasks before beating a hasty retreat, leaving little evidence of having entered the digital space. A Digital Resident sees the digital space as an environment to inhabit, build relationships with other people, and project identity(ies). For a Digital Resident, there is value in inhabiting the digital space. The Visitor and Resident modes are not exclusionary, with individuals likely to practice a mixture of both, dependent on the goals or tasks they have set themselves from time to time (ibid., para. 8)

This relates well to the engagement of the participants in my research whereby participants with lower engagement often acted strategically to achieve their goals, while more active participants engaged with peers, tutors, and colleagues, and were building relationships. Albion, Heffernan, and Jones's (2016) study focused on the adaptiveness of learning technology environments and the digital literacy skills of teachers or course designers to adapt and customise these environments. Their study 'suggests that there is value in teachers being able to engage in digital modification practices to customize and contextualize the digital learning environment to the needs of themselves and their learners' (ibid., para. 27).

These constraints were echoed in the two participants who found the new VLE unfamiliar or difficult to use. With P12 this was due to the course design using new VLE features which did not work well. However, the distance learning LTHE was developed and constantly evaluated over several years, so the technology barriers for learners were limited.

In the Isthmus Project report, White, Manton and Le Cornu (2009) explored student engagement and motivation with social media as part of studying online on a '10-week short courses in the humanities run by the University of Oxford via a Moodle VLE' (ibid., p. 2). While these students, similar to those on the PGCerts of this study, were confident in using technologies and services for their learning:

most indicated that the social networking sites were of little interest and of little perceived benefit to them for their study... [and] for many (but not all) of our learners, learning and socialising clearly did not walk hand-in-hand in the same way as they do for traditional residential students; on the contrary, peer engagement, and/or needing to acquire the skills to interact with peers using technology, was frequently an unwelcome imposition (ibid., pp. 2-3)

While digital literacy and familiarity with peer-to-peer engagement have improved since 2009 and especially during the pandemic (Pellier *et al.*, 2021), learners still do not necessarily choose to engage actively in peer-to-peer learning activities such as the discussions on the PGCerts. For most participants, the reasons for lower engagement in discussions and peer interaction were due to time constraints and thus strategic. Further reasons were anxieties about being seen as competent or relevant, and the lack of immediacy. What has changed since 2009 is the much-improved availability of synchronous engagement using video, audio and chat conferencing. According to the 2021 Horizon Report 'institutions and instructors previously resistant or indifferent to tools such as videoconferencing, team-based platforms, and virtual classrooms have come to rely on those tools as essential ingredients in their work' (Pellier *et al.*, p. 8).

Druce and Howden (2017) considered the engagement of postgraduate medical students in 'an award-bearing e-learning programme (PgDip/MSc)' in comparison with their personal use of technologies. The study proposed four themes explaining variation in engagement:

1. Students valued new knowledge or the 'delivery' of content as the cornerstone of learning for them.
2. Dominance of visitor behaviours for personal and professional use, in relation to online resources in a general sense and in terms of e-learning during their postgraduate programme.
3. Valuing a hierarchical or 'top-down' model of learning with the teacher as the 'provider' of expert and reliable knowledge with the learner as 'recipient', with less value associated with learning from and with peers.
4. Influence of a number of external and internal factors on online behaviour i.e., (i) when students perceived pressures on their time, they selected learning activities that were more 'visitor' in nature than 'resident'; (ii) online postings by peers, which were detailed and developed/shared quickly, appeared to inhibit participation for others; and (ii) 'shyness' or reticence to share ideas was mooted by some as a barrier to 'resident' behaviours (ibid., p. 13)

While the participants in my study, who engaged more passively, tended to concentrate more on the content provided by the tutors there was less evidence for the desire to have a teacher-centred provision (Themes 1 and 3) as engagement also included student-generated content in discussions and webinar recording besides the course reading. Literature searches using the online library, Google Scholar and discipline-specific databases (Theme 2) were often personally motivated by professional interests and needs. However, the factors influencing online behaviour (Theme 4) were also expressed by the participants in my study.

Similar to my research, Druce and Howden (2017) found that

The students in our cohort described an affinity to the mode of learning as an 'individual', in which learning is a matter for 'me, the curriculum and the tutor' (White, 2014). When pressures such as time limits constrain behaviour, these students appear to place a greater value on visitor behaviours, using tools most particularly for the purpose of 'knowledge transfer'. In this situation, their emphasis appears to be around knowledge acquisition through didactic modes such as accessing lectures and reading. The behaviour of others was also relevant, indeed as is the case in a traditional classroom even if proactively managed. For example, some students reported anxiety about posting online because others had 'got there first' (ibid., pp. 14-15)

Druce and Howden (2017) also found that White and Le Cornu's definition of residency may need to be differentiated into passive and active engagement as I have done for example for discussions and webinars with passive engagement constituting a form of residency. Druce and Howden (2017) said that 'some students

related residency with time spent within the course area irrespective of connecting with others or posting online' (ibid., p. 16).

Therefore, the findings from this chapter are that students engage in different ways in an online course depending on their motivation, barriers, circumstances and personal preferences. Hence, it is recommended that a course and activities are designed so that learners can engage in different ways synchronously and asynchronously, self-directed and involving peer learning. Support and feedback from tutors and peers are important as well as guidance on how to navigate the learning environment to overcome potential technological barriers.

Participants' perceptions of whether a virtual learning community and peer engagement are important academically and socially are explored further in Section 5.5 *Virtual learning community*. The assumptions (Lave & Wenger, 1998; Salmon, 2011; 2013) that effective online learning would inevitably involve the creation of a virtual learning community were challenged.

5.4.2 Recommendation

Participants' engagement profiles demonstrate that each student was unique in their approach to learning and engaging in the courses based on personal learning preferences, personal and professional constraints (see Section 5.3 *Barriers*), and motivation (see Section 5.2 *Motivation*). Therefore, to cater for these varied needs, the design, delivery and support recommendations for such an ODWBL course are to

- provide different ways for participants to engage including a balance of synchronous and asynchronous activities, self-directed and peer learning (see next Section 5.5 *Virtual learning community*)
- support participants' time constraints with alternatives to synchronous engagement such as webinar recordings and agreed or timetabled timeslots most participants are available
- motivate participants to actively engage by making activities varied and relevant to participants' (working) contexts (see Section 5.6 *Engaging in the workplace*)

- create or suggest social spaces for participants to engage with and support each other synchronously and asynchronously such as MS Class Teams or a social media platform (e.g., WhatsApp, Facebook)
- manage engagement expectations with a learning agreement
- provide ongoing support for participants, especially for those who find studying online challenging
- remove access and technical barriers by onboarding and ongoing scaffolding and support
- support a course structure which provides flexibility and adaptiveness in progression while scaffolding the different progression speeds and digital literacy levels of participants

5.5 Virtual learning community

Section 5.4 *Engagement in the course* already indicated that there were different engagement patterns ranging from more passive to active engagement often varying between different activities and modules. These different forms of engagement are also reflected in Wenger-Trayner and Wenger-Trayner's (2011, 2020) CoP model, Moore's transactional distance theory (1997; 2018) and Col framework (Garrison, Anderson & Archer, 1999; 2010; Garrison & Anderson, 2003). However, some pedagogic approaches (Salmon, 2011; 2013) emphasise the need to develop a learning community as part of an online course to optimise learning. The exploration of the participants' engagement in this research indicated that while some appreciate and, in some cases, need the immediacy of peer and tutor engagement and a virtual learning community others do not.

As part of the interviews, I explored the role of a virtual learning community with participants and analysed their responses to the questions about their academic and social experiences with a virtual learning community on the PGCerts. The questions inquired into learning and engagement across asynchronous and synchronous activities and were, therefore, wider than the asynchronous text-based discussions, upon which Salmon's Five Stage Model (2011; 2013) and Garrison, Anderson and Archer's (1999; 2010) Col framework (*Social Presence*) were originally based.

The questions I asked at the interview were:

- What are the most important criteria for an online learning community to work well?
- How relevant was the online aspect of the module to you, socially and academically?
- What would it take to improve your satisfaction with the online learning experience?

Most participants felt that a virtual learning community was academically relevant, and more than half the participants ($n = 7$) emphasised the role peer learning played in their learning process albeit with the caveat that time constraints were limiting the degree of engagement:

I think it is because of peer learning, so you might learn quite a lot off other people, but it does come down to that time and being able to engage in the module or modules, having enough time to actually benefit from that peer learning (P3-I)

The webinars, I think they are probably one of the most important bits in terms of being able to touch base and clarify things and learn from each other (P12-I)

From the participants' comments, it is clear that peer learning was about clarification, sharing, and being able to seek support and advice. The last quote highlights the increasing availability and importance of synchronous engagement through webinar technology which developed further, especially during the COVID-19 pandemic. However, participants felt that relevance was important for them to engage which supports the findings from the previous Section 5.4 *Engagement in the course* on participants being strategic in their engagement. This particularly applied to Professional Services staff who needed to relate their practice to the academic content and discussions in the course. P2-I commented: "What did engage me more was when somebody would write something about what they were teaching, or you'd asked us to do a task that was related to something that we were teaching or working on".

For some participants, the main interaction was with their respective tutor(s), some of which was strategic. P11-I commented, "I'm really an independent learner. For me, my only community was yourself, was my contact with yourself". When

participants were asked about the social aspect of a learning community, two-thirds of the participants ($n = 8$) responded that engaging in the online course was academic rather than a “social thing” (P2-I) supporting Garrison and Arbaugh’s (2007) findings that ‘students recognize that they are not there for purely social reasons’ (ibid., p. 159). Participants mentioned different reasons for not engaging socially or the engagement not being social including the course being about academic, not social engagement, not having the time to engage socially, not needing to engage socially, and it being strange or awkward to engage socially in a virtual environment:

I didn’t mean to get to know anyone socially, sort of reach out to somebody and say hi or something’ cause I just couldn’t. I just can’t see how it would fit with everything else that was going on at that time, so I didn’t really get to know people much (P6-I)

But for me, I would be more inclined to the academic one, because I want to get to know what peers are talking about in certain areas, not just sit down there for chatting sake (P8-I)

From the discussion, it also became clear that the definitions of ‘social’ engagement varied from interacting with peers as part of the course to socialising outside the course or discussing topics not related to the course or work. The interview questions were intended to delineate between academically and non-academically focussed engagements rather than social engagement in the wider sense. A further dimension that made a virtual learning community challenging is the transactional distance (Moore, 2018), which is ‘a distance or gap in what a student understands about a reality, and the understanding of that same reality by the person or persons charged with helping that student in the development of his or her knowledge’ (Moore, 2018, p. 33).

The engagement between people as part of a virtual learning community is intended to reduce that distance. However, participants did not necessarily feel this was needed to succeed with the course or achievable. P3-I commented that “If you find like mature learners, my impression is, that they don’t really need that social interaction”.

Individual participants highlighted attributes found in communities of practice (Wenger, 1998) such as the need for a shared purpose, motivation to engage, building trust and identity building. P2-I suggested that “one of the things for the

online learning community to work is about having a shared purpose and that being really clear that we knew why we were there". According to P2-I the result was that "the people on the course did begin to assume identities".

5.5.1 Summary of findings

Participants' recommendations tally with aspects of Salmon's e-moderation approach and Five Stage Model. In Salmon's model, the first stage (Salmon, 2011, pp. 31-35) emphasises the need to provide and support easy access to and navigation through the digital learning environment be it the virtual learning environment and its different functionalities, the webinar tool or other technologies (e.g., WhatsApp, Facebook, online University Library, etc.). As P11-I commented, "for me, it was purely the accessibility of the material at whatever time I wanted, [which] was really key in engaging with the course as well".

Initiating the development of a learning community or onboarding with icebreakers, a learning agreement, walkthroughs of the course and access is part of Salmon's second stage (Salmon, 2011, pp. 36-41) followed by collaborative activities and reminders of the community which were used in both PGCerts. Participants commented on these measures but also suggested that more could be done. These included being aware of the quality of (internet) access participants have as well as the usability and accessibility of the virtual learning environment and the course content. "I think access is a key for the community" (P8-I).

Other measures participants recommended included a more extensive onboarding process (icebreakers, online meetings, learning agreements) and the scaffolding of community development through activities throughout the course:

Maybe the introduction parts could be more elaborated so that you get to know each other a little bit more, [...] so maybe to just find out who people are [a] bit more and have that ice breaker (P6-I)

[If] there was more kind of a personalised walking through how it's going to work online, and this is the social aspect (P11-I)

And actually, have an online session where the students can all connect with each other and talk asides from the webinars. And that's something that they set up, established like from the very beginning. So, they can then go off and have their own chat (P11-I)

Compared to the original context of the Col and Salmon's e-moderation approach, synchronous engagement has developed and is now much more effective to support opportunities for more immediate, collaborative, and social engagement. The MHCE, for instance, used WhatsApp for more direct communication as well as virtual conferencing for discussion and learner exchanges.

Some participants suggested a blended approach with having some face-to-face sessions for students to get to know each other. P6-I for instance suggested, "If it's possible to sort of decide, as a group, a day to meet, so it's not set on the timetable".

While the participants' feedback confirmed the effectiveness of the activities at the beginning of the two PGCert courses to initiate a learning community, the engagement varied based on participants' motivation, time commitment, and need for peer engagement. Consequently, the research found a spectrum from participants who felt they did not need peer-to-peer engagement to succeed in the course to others who found the (social) distance of online learning too great that they changed to the face-to-face version for the second module. The challenge is, therefore, to find the optimal balance for participants on either side of this spectrum, and to develop and scaffold a virtual learning community for those who want, need and benefit from it. The development of MS Teams and other synchronous learning platforms, and improved internet connectivity occurring during the pandemic, also offered more opportunities for online collaboration in synchronous spaces. This implies that new models and frameworks need to emerge, or existing ones need to be reviewed to include synchronous *Social Presence* in different media formats (text, voice, video, and virtual 3D reality) to truly 'shift the design to scaffolding the learning for students, to active rather than passive approaches to learning online' (Salmon, 2020b). Then statements focusing mainly on asynchronous learning being the most successful online approach may have to be reconsidered:

There are two key threshold concepts to grasp for entirely digital learning. First, to generate flexibility, pace, motivation and completion of activities, the most successful online experiences are mainly asynchronous. Second, the focus shifts from what the academic does (contact hours) to total student study hours, by working through clearly laid out expectations and activities (Salmon, 2020a, para. 9)

Both Col and Salmon's approaches advocate that the teacher (*Teacher Presence* in Col) or e-moderator is crucial for successful online learning. According to Salmon

(2022), online learning requires well-equipped e-moderators. ‘The pre-requisite for staff [is] to find comfort in their own online identities. They need to create their ‘presence’ without dominating or distracting. Easier said than done, of course!, (ibid., para. 10).

5.5.2 Recommendations

Some of the recommendations from the discussion around the role of virtual learning communities align well with Salmon’s (2011) first two stages of her Five-Stage Model. The findings also pick up on the recommendations from Section 5.3 *Barriers* and 5.4 *Engagement in the course*. Participants’ recommended that

- the course is easy to access and navigate and that onboarding for all technologies used is well supported to reduce access barriers (Salmon, 2011, Stage One)
- participants are provided with activities to get to know each other and opportunities to develop a virtual (learning) community (Salmon, 2011, Stage Two)
- tutors are actively engaged and present as facilitators throughout a course
- opportunities are explored for formal and informal peer-to-peer learning and support to develop a virtual learning community. This may involve less used and emerging technologies such as social media and virtual worlds
- different opportunities are offered for designated communication channels (peer-to-peer, peer-to-tutor, informal, formal, personal)
- blended or HyFlex options are explored to provide some formal and/or informal face-to-face sessions such as induction, orientation, and residential

5.6 Engagement in the workplace

After having considered participants’ motivation and barriers, engagement in the course, and virtual learning communities, this part of the research focuses on how participants applied their learning to their workplace, shared their learning with

colleagues and transformed not only their practice but the practice of their colleagues, and department.

The main source of this data was the interviews and participants' reflections on their assignments. The LTHE used a patchwork text assignment (Akister *et al.*, 2003; Scoggins & Winter, 1999; Smith & Winter, 2003; Winter, 2003) as an assessment method with the different patches requiring participants to apply concepts, theories or techniques to their own practice and then reflect on the outcomes. The reflection may involve feedback from students, such as module evaluation or formative comments, and feedback from colleagues including line managers and teaching observers. The final patch was called a *stitching piece* because participants were asked to 'stitch' all the patches together as part of reflecting on their learning in the modules. I used these final patches as part of the data which was particularly informative about engagement in the workplace.

Patchwork text is an authentic assessment (Wiggins, 1990; Darling-Hammond & Snyder, 2000; Herrington & Oliver, 2000), which Koh (2017) defined as:

Authentic tasks replicate real-world challenges and standards of performance that experts or professionals typically face in the field. Authentic assessment is an effective measure of intellectual achievement or ability because it requires students to demonstrate their deep understanding, higher-order thinking, and complex problem solving through the performance of exemplary tasks (ibid., p. 1)

The analysis revealed several interconnected themes. The engagement in the course, the readings and the assessment led to reflection on their practice, identifying gaps or potential improvement which then led to changes in participants' practice, evaluation and dissemination to colleagues, line managers and wider audiences. How far-reaching these activities were depended on how accessible and open the work environment was for dissemination and potential change in practice beyond the practitioner's courses.

Reflection was often tied closely to the examples or modelling of practice by the course and participants reflected on and applied these to their practice as part of the patches frequently resulting in direct improvements in student learning. Participants' reflections included:

What this module gave me was an idea of what I could do to change the current lack of awareness of how academic staff should support students with needs (P1-A)

One of the things I really appreciated about the course, was that some of the concepts and models fitted very nicely with my practice [...]. What was reassuring, was that there was some theoretical underpinning to that kind of approach (P2-I)

This module provided me with an excellent opportunity to further develop my teaching skills, in particular through reflective practice (P10-A)

Some of the reflections related to the teaching observation which most participants found very useful. For the external participants, the teaching observation was undertaken by an experienced colleague, line manager or mentor at their institution, which frequently initiated wider discussions within the participant's work area:

I found the assessor's comments within the teaching observation useful in developing my teaching. I found this a useful reflection on my practice and a helpful exercise to provide some sensemaking on the way I facilitate sessions as I continually look to improve in the future (P3-A)

The patchwork text assignment had a significant impact on participants relating and applying theories and concepts to their practice:

And that report [to the line manager], to some degree, was factual. It actually did happen, so I was actually using a real-life scenario (P5-I)

This not only has had a great impact on my personal development but also has effectively enhanced my confidence in supporting my students' learning. It was because I think that patch design was extremely helpful. And then it was very practical to actually learn something and put it in[to] practice and have a reflection on that (P10-A)

Taking part in the course resulted in a change of practice through applying their learning to their practice. This could be more subtle such as learning the terminology to express pedagogic concepts, the reading on the course providing supporting evidence for their practices and an increase in their confidence. Often changing their practice or trying something new resulted in improved learning and assessment:

The whole course opened my mind. It's like I said, it's completely changed the way I am now in the classroom. And it also at the same time gives me confidence because I kind of feel that I am now teaching from an informed point of view (P11-I)

The Lesson Planning patch (in combination with the teaching observation) was a process that frequently resulted in changes to teaching practices:

Going through this process [of lesson planning] has enabled me to create more of a structure to the sessions. I have also been able to enhance learning through formative assessment and develop further digital tools for assessment and learning (P3-A)

Other patches which changed practice were on assessment and threshold concepts:

The findings superseded my expectations and the formative assessment indicated that students had fully comprehended the threshold concept (P11-A)

But I haven't quite done it in that way before, and so it meant that actually, I was introducing things, that I wouldn't have used before, for example wanting a more, kind of peer-based learning (P12-I)

Part of the learning cycle is receiving feedback from learners on the effectiveness of the teaching and especially new interventions and practices. Feedback is often built into a lesson or course as formative and/or summative assessment, which is not necessarily the case with training or skills sessions. Some participants used feedback mechanisms such as short polls, one-minute papers or the module evaluation survey as well as observation. Feedback depended on participants' interaction and access to the learners. For instance, for a learning technologist (P1), the feedback would be from colleagues in staff development. For some participants such as librarians and study coaches (P9) they only have access to their learners in a session rather than teaching a complete module:

I got them to do a little reflective thing the other day at the end of the class. It was one of these one-minute papers. One like [where] they got a choice of what they'd enjoyed, or sort of found useful, what something they'd learned, knew, or what they felt was missing, and that worked really well. I got it back from them at the end and used some of it in the later class (P4-I)

And the feedback from students [on peer feedback] was very much: 'this is fantastic. It gives us the opportunity to feed back to our own peers what we actually feel or how we actually feel' (P5-I)

I can already see this reflected in feedback from my learners and by evaluating their knowledge and understanding compared to previous cohorts (P7-A)

Some participants engaged with colleagues in their departments and institutions and received feedback besides their teaching observation. However, this depended on having access to colleagues and the openness of the environment for active discourse, critique, and potential change in practice (Boyd, Murray & White, 2021). There were therefore fewer participants who received feedback from colleagues,

some from their line manager (P5, P11), or colleagues outside their department (P3, P5, P10):

It [Report to line manager] gave me the door opener, if you like, to me having a discussion with my line manager (P5-I)

I am also asking other lecturers in Higher Education to provide me with feedback on my own practice to continue working on enhancement of my work effectively (P10-A)

That meant, I was able to access more things and having done that, it's then made the people come to me to ask me to do extra teaching sessions. And because of that, I've been able, because I've got extra teaching, to build on feedback that I've been given from different things and learn from that and change things. Then I've got feedback from colleagues, who had feedback on my teaching from the medical students (P12-I)

In addition to feedback from colleagues, some participants were able to share their learning with colleagues. P1-A said, "I was able to give advice to colleagues on how they can support international students when teaching a module".

Some participants were also able to disseminate their experiences in more formal ways such as through staff seminars and professional development. P10-A for instance commented how "I have started sharing my knowledge of the effective teaching and learning theories with other colleagues during professional meetings in order to assist my colleagues in improving their practices".

Achieving a transformation within a department or college could be a challenge and depended on the openness of colleagues and the work environment. However, some participants were able to do so:

I invested a lot of time in developing AfL [Assessment for Learning] tools and was very pleased when my teaching observer suggested that I explore opportunities to develop the tool further. I am pleased to include in my reflection, having followed up with the recommendations, permission was given by the Principal to commence developing the tool and steps are now underway to explore modelling the tool across modules (P5-A)

However, others explained the barriers such as time for planning and changes to settle down, the mindset of colleagues, and the institutional culture:

I work in a [FE] college in an HE department. The other people, who are here, have been teachers for about 20 years. None of them has a PGCHE. And I have to say, that their form of teaching is almost so different to what I know should be taking place. So, it is a bit difficult because they are a lot older than I am. They have been teaching a lot, they kind of feel they know

better. From an experience point of view, they probably do. But I feel that they are more FE-type teachers than HE-type (P11-I)

5.6.1 Summary of findings

In summary, learning in the workplace or *workplace recontextualisation* took different forms. The course enabled participants to reflect on their learning through authentic assessment tasks in the form of the Patchwork Text assignment, which linked the conceptual knowledge of the course to participants' practice.

Within their teaching or training, participants received formative and summative feedback in a variety of ways from students, colleagues, line managers or mentors which they reflected upon in their Patchwork Text assignment.

Some participants were able to share their practice with colleagues informally in discussions and formally through staff meetings and in a few cases, their practice led to wider dissemination and transformation of practice at departmental, faculty, or institutional level.

Key to these reflective and dissemination processes (Helyer, 2015; Hughes, 2016; Kushnir & Spowart, 2021) were the authentic assessments and activities (*pedagogic recontextualisation*) and the context within which participants worked (*workplace recontextualisation*). For instance, sharing their practice more widely required a work environment that was open to listening and changing practice as well as practitioners being in a position to access colleagues and management (Boyd, Murray & White, 2021).

As a process, different levels of *workplace contextualisation* and (potential) impact can be identified (see Table 7):

Process	<i>Pedagogic Contextualisation / Teaching Presence</i>	<i>Workplace Recontextualisation</i>	Impact and Requirements
Self-reflection on an authentic assessment task	Scaffolding of reflection part of the task	Within the teacher's/trainer's practice	Limited to self-development
Feedback from students	Part of task and/or formative/summative evaluation or assessment	Within the teacher's/trainer's practice	Limited to self-development with the potential to share with other colleagues as good practice

Process	<i>Pedagogic Contextualisation / Teaching Presence</i>	<i>Workplace Recontextualisation</i>	Impact and Requirements
			Needs the opportunity to evaluate/assess practice
Feedback from colleagues	Part of a task (e.g., teaching observation, letter to line manager patch) and/or formative/summative evaluation or assessment (mentorship, module/course leaders)	Within course team	With close colleagues (e.g., course team) with the potential to share with other colleagues as good practice Needs the opportunity to have access to colleagues (who are invested)
Sharing with colleagues	Identified as good practice and asked to share more widely with colleagues (e.g., at team meetings, staff development events)	Within the course team and discipline/department	With wider colleagues (e.g., department/ faculty) with the potential to share institutionally as good practice Needs the opportunity to have access to colleagues to share, and an institutional culture which is receptive and open to share
Sharing with a wider audience	Identified as good, evaluated practice, and asked to share more widely with colleagues internally and externally (e.g., university events and conferences)	Within an institution and beyond an institution as pedagogic research and practice	Within the institution and the potential to share nationally and internationally as good practice Needs the opportunity to have to share institutionally supported by an institutional culture which promotes sharing of good practice For conference presentations and publications, the pedagogic practice would need to be

Process	<i>Pedagogic Contextualisation / Teaching Presence</i>	<i>Workplace Recontextualisation</i>	Impact and Requirements
			supported by an evaluation/research approach and a literature review

Table 7: Levels of workplace recontextualisation and impact

The research identified limitations between the level of impact based on a participant's inclination and motivation to share their effective practice. Activity and assessment design can scaffold such reflections and dissemination at an individual level. However, within a work and organisational context sharing and dissemination of good practice may be part of or trigger a local or wider change process. Therefore, it may depend on whether the organisation is open to sharing and dissemination and promotes such practices.

Courses such as the two PGCerts in this research had to meet accreditation requirements such as alignment to the Advance HE UK PSF and institutional educational strategies. Especially the latter may create tensions for participants from institutions or organisations which do not follow similar strategies. Therefore, participants may immerse, develop, or be at odds with their organisational culture and communities of practice which will enhance or limit sharing of the pedagogic practices they acquired on the PGCert more widely.

5.6.2 Recommendations

Table 7 describes the different levels and types of *workplace recontextualisations*. Some of the activities can be part of the design (*content recontextualisation*) and delivery (*pedagogic recontextualisation*) of the ODWBL course, others are dependent on the openness, culture, and strategic direction of the workplace and its organisation. The recommendations are therefore twofold. From a course design point of view, the findings recommend that:

- activities and assessments are authentic, linking course learning to the workplace and asking participants to apply their learning to their practice

- activities and assessments encourage participants to reflect, evaluate and share their (new) practice with students, colleagues, and line managers or mentors. This may involve designing activities which actively ask participants to evaluate and receive feedback from their learners or trainees and work colleagues. Engaging students and colleagues in evaluation can empower them as co-assessors and co-creators
- teaching or practice observations and related feedback by course tutors and/or experienced work colleagues are embedded in the course learning process

From a workplace and organisational perspective, the findings recommend that:

- the ODWBL course curriculum is aligned with the external accreditation requirements and/or subject benchmarks (from PSBRs, Advance HE, QAA, and others) and institutional (education or training) strategies
- opportunities are provided (and rewarded) to share and disseminate good and innovative practices amongst practitioners in a team and the wider institution

6. Conclusion and Recommendations

The two PGCerts which were the focus of this study were ODWBL courses where the content was aligned to the UK Professional Standard Framework and in the case of the LTHE to ARU's Education and other strategies. They, therefore, fell under a discipline-centred approach but were also informed by employers (Nottingham, 2016). The courses were content- and communication-rich but less community-based (Lynn, Mason & Reynolds, 2002). This meant that these courses were highly structured in content provision, activities, assessments, and scaffolding with limited opportunities for students to negotiate their learning content (Moore, 2018).

The three research questions

1. How is learning taking place on a university ODWBL course and in the (related) workplace?
2. Which factors affect this kind of learning?
3. How do the findings apply to the curriculum design of ODWBL courses?

were investigated by using Evans *et al.*'s (2010) and Evans, Guile and Harris's (2011) framework of recontextualisation, which assumes that knowledge needs to be recontextualised as a learner moves from one learning context to another such as from a course learning environment to the workplace. Kersh (2019) refers to recontextualisation as 'crossing knowledge boundaries' (*ibid.*, p. 255), which indicates that boundaries can be experienced as barriers including transactional distance (Moore, 2018).

6.1 Content recontextualisation

Whilst not a specific focus of this research, participants' feedback identified the importance of a positive experience with accessing, navigating and getting familiar with the learning environment and course including with co-learners and tutors. These findings underlined the importance of the two initial stages (access and motivation; online socialisation) of Salmon's Five Stage Model (2011; 2013) which informed the design of both PGCerts.

Recommendations from participants regarding designing and delivering an ODWBL course included onboarding, managing expectations, variety of media and

accessibility, communication, content structure, and getting to know each other (socialisation):

Having all of the resources that I needed, the people coming to that webinar to read or access, having those available in advance and having really clear links, having the webinar very, very scheduled (P2-I)

So almost the first session would not be any kind of teaching or training. It would be introducing myself, and me getting to know the people online so that there you would connect with them from the outset (P11-I)

Participants' comments highlighted the tension between some needing a highly structured course to scaffold their learning and time while others preferred flexibility (Lynn, Mason & Reynolds, 2002; Brennan, 2005; Mumford & Roodhouse, 2010; Moore, 2018). The other tension was between learners who needed the personal, social and immediate engagement mentioned previously and those who were comfortable with just engaging passively with content. Those needing more social interaction often recommended a blended approach with some face-to-face meetings. P3-I mentioned, "What would have been nice if there was a blended element, so there might have been one day, one or two days throughout the module, which you could come in and speak to a tutor and maybe do a face-to-face session".

6.2 Pedagogic recontextualisation

A central part of this research was to identify how participants engaged in the online course and why they engaged the way they did. I used a modified version of White and Le Cornu's Visitors and Residents typology (2011; 2017) to identify participants' course engagement, the level of engagement (passive versus active) and their reasoning.

The results were very individual learner profiles reflecting the different types of participation identified by Wenger-Trayner and Wenger-Trayner's (2011) CoP from core group, active, and occasional to peripheral engagement. In my research, there were no outsiders or transactional participants as all participants intended to pass the course which involved at least a minimum, often strategic engagement. The engagement patterns also varied by activities and were influenced by participants' confidence, motivation, and barriers. The main motivations were on the one hand that for most participants the LTHE was compulsory. On the other hand, participants were motivated by developing themselves and improving their professional practice.

The main barrier by far was the time constraints, with most participants not having been provided with ringfenced time during their working week for their studies.

It is, therefore, important that the pedagogic design of an ODWBL course provides different engagement opportunities and learning paths through modules to cater for the different engagement patterns and individual participant's needs (Hughes *et al.*, 2016; Hughes, 2018; Hughes & Price, 2018; Fuller, 2022). This is where my research results deviated from social constructivist approaches (e.g., Garrison, Anderson & Archer, 1999; 2010; Kirschner, 2001; 2006; Salmon, 2011; 2013; Kreijns, Kirschner & Vermeulen, 2013), which centre around a virtual learning community. The need for *Social Presence* (Garrison, Anderson & Archer, 1999; 2010) differs between participants while success (or failure) does not depend on active social engagement. Rovai (2002) for instance found that lurkers performed as well as active participants. However, some participants need peer-to-peer and learner-to-tutor engagement to be contented with and effective in their learning. Therefore, the pedagogic course design needs to provide a wide variety of activities in different media formats while at the same time creating a social space for a learning community to thrive (Stenbom, 2018).

Participants' recommendations for an effective pedagogic learning environment that enables and promotes *pedagogic contextualisation* included providing more opportunities for immediate engagement in synchronous sessions using voice and video chats, and structured activities, but also providing flexibility in how to engage and when:

Methods through sort of try and make sure everyone's engaging to some degree, even if sort of had this variation in the degree to which individuals actually speak or take part in a chat. Some way to try and make sure everyone's participating at least minimally (P4-I)

Flexibility in [content] deliveries and flexibility in how people can engage as well, it's probably something that, maybe I'd like to see a little bit more in [the MHCE course] (P12-I)

6.3 Workplace recontextualisation

Taking knowledge from the course and applying, sharing and disseminating it in participants' work and work environment involved different qualities (Evans *et al.*, 2010; Guile, 2019; Kersh, 2019). Crucial conduits to enable and encourage

participants to make links between the course and their work were authentic activities and assessments (Margaryan, 2008; Kettle, 2013; Coldham & Armsby, 2016). Two boundaries were identified – first, participants had to relate the generic content of the course to their discipline or professional practices. The second boundary was to apply these practices, models, and concepts in their work (e.g., in their teaching and/or training). In both cases, participants from Professional Services often had further to travel as teaching was usually not a central part of their job.

Another quality was about sharing and disseminating their experiences and newly acquired knowledge with colleagues and the wider work environment. Depending on openness, culture and access to colleagues, line managers, and organisational structures (e.g., staff meetings, Away or CPD days) (Reimann *et al.*, 2010; Hughes *et al.*, 2016; Kersh, 2019; Boyd, Murray & White, 2021), the depth of impact of participants' learning through sharing and dissemination varied. While activity and assessment design can scaffold and foster the application and evaluation of course knowledge to participants' work context, how far-reaching the recontextualisation was depended on whether the environment was restrictive or expansive (Boyd, Murray & White, 2021):

It's about recognizing that the way in which the course is structured gives me the opportunity to translate that learning into my workplace. And I think students, who are thinking about doing this course, this is something that I really have to get to grips with that it is very much about your industry and pulling the information that you are gathering into an environment that you can best use. It's not just about you having this information and then just sitting on it, it's about you translating it (P5-I)

Participants' recommendations included access to an environment to apply their learning in teaching or training, the role of assessments, time release to study, and support through mentors, colleagues and line managers:

I found the patches were useful to engage because you had to constantly [engage] (P1-I)

Some way of getting an agreement that there's a local mentor or local supervisor kind of role (P4-I)

Some suggestions were also about the learner's responsibility to 'recontextualise' the knowledge from the course to the workplace. Sensemaking and reflection played a crucial role in this process (Helyer, 2015):

But for me, knowing that something that I'm doing has a practical impact will then stem, or the motivation with stem from it, and then I will do the reading and engage and so on. So, I think really try to find the usefulness of the course, whether it is the reading, the assignment, into what you're doing. Try to reflect on it. Yes, make that connection straight away because there is a connection and in whatever, maybe in an area more than another, but there is (P9-I)

6.4 Learner recontextualisation

As mentioned above learners have to make sense of the course content and translate it into their work. While the majority of participants on the PGCerts were experienced and reflective learners already, with other learners such as undergraduate students, reflectivity, critical thinking and self-efficacy may have to be developed as part of the course. Other recommendations included self-motivation, time management, discipline, dedication, and commitment to engage in activities and assessments (Moore, 2018):

You've got to know why you're doing the course. What is the intrinsic motivation for you to do the course, because if you just do it, turning up and saying you're doing the course, then you're not really doing anything, then you're going to fail (P3-I)

You're learning should not be regarded as a selfish act. You're learning should be that you are prepared to give your learning to the environment in which you are working in, one, and number two more importantly to the students you are teaching. So, it's about translating that learning into your workplace (P5-I)

Time management is very, very crucial within this process (P5-I)

The advice I would give is just to engage and to reflect and to make changes (P7-I)

Figure 30 illustrates the findings and recommendations of this study for the design and delivery of ODWBL courses as an overlay to the conceptual framework.

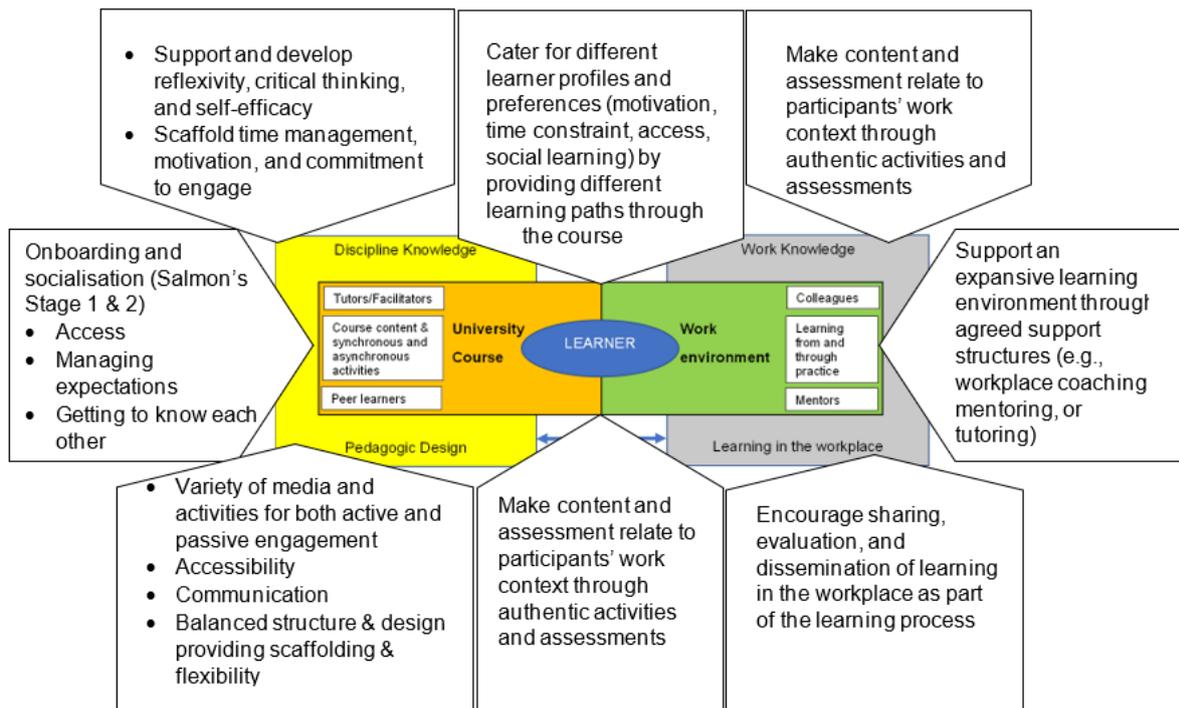


Figure 30: Recommendations for design and delivery of ODL courses

For engagement in the workplace, the study found that it made a difference if a workplace is restrictive or expansive. Aligning the PGCerts to institutional education or learning and teaching strategies help internal participants of an institution to relate to the objectives of the course especially if institutional strategies are aligned with its culture (Smith, 2011; Spowart *et al.*, 2020). However, while most participants had all or part of their fees paid for by their institutions, not having ringfenced time in their workload model and weekly diary, was a challenge. Providing ringfenced time like the 20% Off the Job Training (OJT) hours in degree apprenticeships may be a way forward. The Institute for Apprenticeships and Technical Education (IATE, 2023) describes the OJT as

You should receive a minimum of 6 hours off-the-job training if you are a full-time apprentice (working at least 30 hours per week). You are not expected to complete your apprenticeship training in your own time. (ibid., para 14) [...] 20% of training is off-the-job, but the apprentice is also doing 80% training on-the-job and there must be coherence between the two to reinforce and embed learning' (ibid., para 8)

Participants also suggested mentors and tutors who work closely with the learners in the workplace. These are less common in Higher Education PGCerts beyond mentors and line managers supporting the integration of new

staff. The latter are usually not connected to the PGCert. Such mentorship is recommended for Degree Apprenticeships e.g., ‘apprentices should be given a mentor that could be separate from their line manager, that is structured and encourages the apprentice to challenge themselves and grow’ (IATE, 2023, Section 6, para. 4) and work-based mentors (since 2018 replaced with practice supervisors (RNC, 2019)) in nursing, midwifery, and other health care education. ‘As a mentor, you have the privilege and responsibility of helping students translate theory into practice, and making what is learned in the classroom a reality’ (RCN, 2007). Margaryan (2008) who focused on work-based learning within an organisation proposed that ‘work-based learning is effective when work-based activities provide opportunities for learners to learn from others – course and workplace peers, supervisor, coach, and other individuals with relevant expertise throughout the organisation’ (ibid., p. 38). These measures can help make a work environment supportive and expansive for work-based learners.

6.5 Conclusion

The literature review identified that there is little research into ODWBL PGCerts and the literature that exists tends to focus on specific delivery aspects. This research looked across the four types of recontextualisations and different forms of engagement that lead to successful outcomes in the course, learners’ and workplace experiences. While the PGCerts provide case studies, this research identified characteristics which are transferable to other degrees that are of similar format regarding design, delivery and the transfer of knowledge from the course into the workplace.

This research demonstrated that there are interlinked processes where knowledge is recontextualised as part of engaging in an ODWBL course and then in the workplace of the learners. Factors as part of *learner recontextualisation* involved motivation and barriers for learners as well as skills and attitudes to enable learning at a distance, online, and engaging in the workplace. *Workplace recontextualisation* was determined by authentic activities and assessments encouraging and scaffolding the translation process of course to work knowledge but also the nature and culture of the workplace.

My main contributions to knowledge and practice are summarised as follows:

Engagement in an ODWBL course

My research found that the 12 participants had distinct learner profiles and engagement patterns, which indicated that

- Active and passive engagement (lurking/browsing) can both lead to successful outcomes (Hughes, 2018; Hughes & Price, 2019; Wasson & Kirschner, 2020).
- A learning community and peer engagement are important for some but not all learners (Reimann *et al.*, 2010; Salmon, 2011; Kreijns, Kirschner & Vermeulen, 2013; Fuller 2022).

The design implication for ODWBL courses of these findings are:

- We need to provide different learning opportunities and paths through our courses.
- Dominant online course design approaches such as Salmon’s Five Stage Model which “require” active (peer) engagement and the development of a learning community to achieve optimum outcomes need to be reviewed.

Knowledge transfer from course to workplace

Authentic learning activities and assessments are crucial enablers to link the course to workplace learning with feedback and reflection included throughout the process (Kettle, 2013; Coldham & Armsby, 2016) (Figure 31):

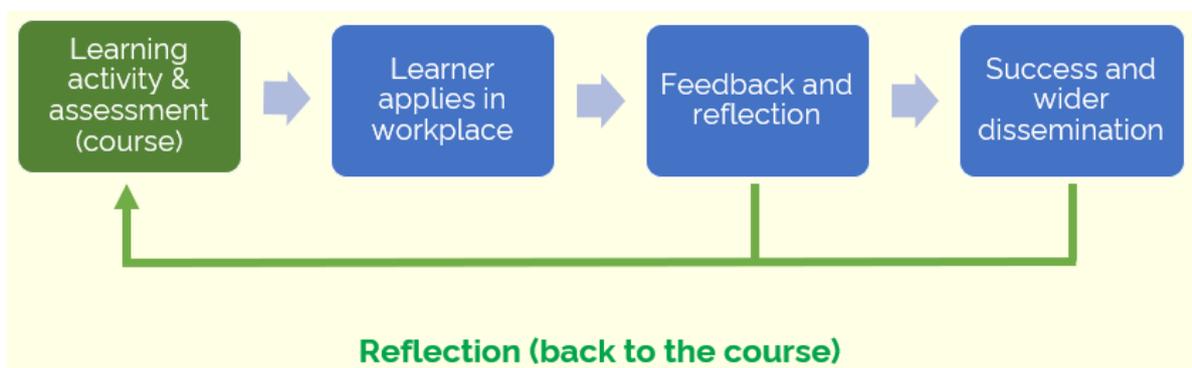


Figure 31: Knowledge transfer from course to workplace

Therefore, workplace learning should be constructively aligned with learning in the course (Smith, 2011; Spowart *et al.*, 2020).

Engagement with and in the workplace

Engagement of the learner with and in their workplace can take place at different levels:

- Within the learner's own practice
- Sharing with colleagues
- Wider dissemination (department, institution, externally)

My research found that the level of engagement often correlated to the learner's workplace cultures i.e., if they are expansive or restrictive (Kersh, 2019; Boyd, Murray & White, 2021), and how well the course aligns with the participants' workplace practices and organisational learning culture (including related visions and strategies).

Therefore, for the design of ODWBL courses, the alignment to the work environment and organisation needs to be considered and an open, supportive workplace fostered (Hughes *et al.*, 2016). A course can be designed to scaffold the engagement of learners in the workplace through authentic activities and assessments, therefore, lowering the boundaries for *workplace recontextualisation* (Kersh, 2019). The following recommendation for degree apprenticeships should apply to ODWBL courses as well: 'Employers' organisational culture should support apprentices and it should be communicated why the apprentice is important to the employer' (Institute for Apprenticeships, 2023, Section 6, para. 2).

In summary, my research applied Evans *et al.*'s (2010) and Guile's (2019) recontextualisation framework to a case study and found that all four types of *recontextualisations* are interlinked and need to be considered in optimising an ODWBL course, and achieving an integrated design of an online course with its workplace.

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Appendices

Appendix A: Course Descriptions

Appendix B: Margaryan's eleven principles of effective work-based learning

Appendix C: Survey Questions

Appendix D: EdD Interview Questions (Outline)

Appendix E: Interview PowerPoint slides

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Appendix G: NVIVO Codebook (Nodes)

Appendix H: Sampling – The participants' profiles from the participant survey (extended Chapter 5)

Appendix Ia: Motivation (Participant survey free-text comments)

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Appendix K: Short Portraits and Engagement Maps

Appendix A: Course Descriptions

The following course descriptions are taken from the official documentation on the ARU distance learning course website (<https://distancelearning.anglia.ac.uk/>) (description from academic year 2018/9)

PGCert Learning & Teaching in Higher Education (confirmed)

Overview

If you're new to teaching in higher education or already teach higher education courses in the further education environment, our course is for you. Accredited against the Higher Education Academy Professional Standards Framework (UKPSF), our PG Cert encourages participants to reflect upon their own practice, learn from sharing practice with others, and develop a deep understanding of educational models framing Higher Education in contemporary university settings.

Full Description

Regardless of whether you study it face-to-face or online, our highly interactive course exposes you to the very best teaching practice. Our qualified and experienced team offer face-to-face sessions at both our Chelmsford and Cambridge campuses; if you need the flexibility to study when and where suits you, our distance learning option will give you all the skills you need to succeed in this environment. Each module of our course has a compulsory teaching observation.

You'll have access to our Virtual Learning Environment (VLE), which gives you a wide range of teaching and learning material as well as hosting interactive opportunities for you to engage with other students. You'll be encouraged to try out new approaches to your own practice, as well as share your existing practice with others.

Before you start your course you'll be invited to a face-to-face induction at our Chelmsford or Cambridge campus, giving you the opportunity to get to know the course, your fellow students and the campus better. If you're studying by distance learning you're more than welcome to come to an induction.

Source: <https://distancelearning.anglia.ac.uk/course/education/learning-and-teaching-higher-education-pg-cert/>

MSc Medical and Healthcare Education

Overview

This inspiring course will give you a good grounding in methods of learning and teaching specifically in the healthcare context.

Teaching includes large group discussions, seminars, group work, work-based discussions and e-learning. By the time you graduate, your independent thinking and practice and your advanced knowledge base will mean you're well placed to act as a role model, educator and mentor in an inter-professional context.

Full Description

Our course is also designed to make sure you fully recognise the significance of the values and principles of care promoted by the NHS Constitution (Department of Health, 2010).

You'll be able to engage in reflective activity in the workplace as well as attend formal teaching lectures, seminars and workshops. When you're on campus, you can make full use of our libraries and computer suites; you can also access our Virtual Learning Environment anywhere with internet access.

As our course is open to people from a wide range of healthcare environments, you're likely to find yourself studying alongside doctors, consultants, nurses, dentists, midwives and allied health professionals, enriching your student experience. Inter-professional learning is key to the development of this course and many of our lecturers are also professionals in the healthcare field.

Source: <https://distancelearning.anqlia.ac.uk/course/education/medical-and-healthcare-education-msc/>

Appendix B: Margaryan's eleven principles of effective work-based learning

Based on Merrill's (2002a and b) First [five] Principles of Instruction, Margaryan developed eleven principles of effective work-based learning:

Principle 1: Work-based learning is effective when learners are engaged in solving real-world problems through work-based activities.

Principle 2: Work-based learning is effective when work-based activities enable activation of existing knowledge and skills as a foundation for new knowledge and skills.

Principle 3: Work-based learning is effective when work-based activities provide for modelling and demonstration of new knowledge and skills to learner by instructor and relevant workplace experts.

Principle 4: Work-based learning is effective when work-based activities engage learners in applying new knowledge and skills in their workplace at the same time when such new knowledge and skills are being acquired.

Principle 5: Work-based learning is effective when work-based activities enable learners to integrate new knowledge and skills into their workplace.

Principle 6: Work-based learning is effective when work-based activities provide opportunities for learners to learn from others – course and workplace peers, supervisor, coach, and other individuals with relevant expertise throughout the organisation.

Principle 7: Work-based learning is effective when work-based activities provide for direct involvement of learner's supervisor in the course. Supervisor or other expert(s) nominated by her [sic: them] should be involved throughout a work-based course.

Principle 8: Work-based learning is effective when work-based activities are supported by learning resources reused from outcomes of work-based activities contributed by learners, from learner's workplace, and elsewhere in organisation, sourced through knowledge sharing repositories.

Principle 9: Work-based learning is effective when work-based activities are carried out collaborately, in teams.

Principle 10: Work-based learning is effective when work-based activities enable differentiation and accommodation of the diverse needs of learners.

Principle 11: Work-based learning is effective when *functional* and *usable* tools and environments are used to support work-based activities. These tools must provide *consistent* accessibility, sourcing, archiving and sharing of learning resources and learning supports for as well as *interaction* and *communication* around work-based activities. (ibid., pp. 37-41)

Appendix C: Survey Questions

Quantitative questions

- Age band
- Gender (selection)
- Highest Qualification (selection)
- British or non-British education system attendance (yes/no)
- Are you given time off from your work to participate in this course? (yes/no)
- Is this the first PGCert module you study at a distance? (yes/no)
- How much experience do you have as a distance learner? (5-point Likert scale – This is my first time I study at a distance. Vs I have studied on many distance learning courses)
- How comfortable do you feel studying at a distance? (5-point Likert scale – Very uncomfortable vs Very comfortable)
- How comfortable do you feel with online learning? (5-point Likert scale – I find it very challenging to get used to the technology vs I easily adapt to new technologies all the time.
- How much is your workplace an essential part of your learning on the PGCert? (5-point Likert scale – Not essential at all vs Very essential)

Qualitative (open text) questions:

- What is your motivation to attend this course?
- Are there any other ways in which your employer supports your studies (besides time off)?
- Describe briefly what role your workplace plays in your learning on this course.

Appendix D: EdD Interview Questions (Outline)

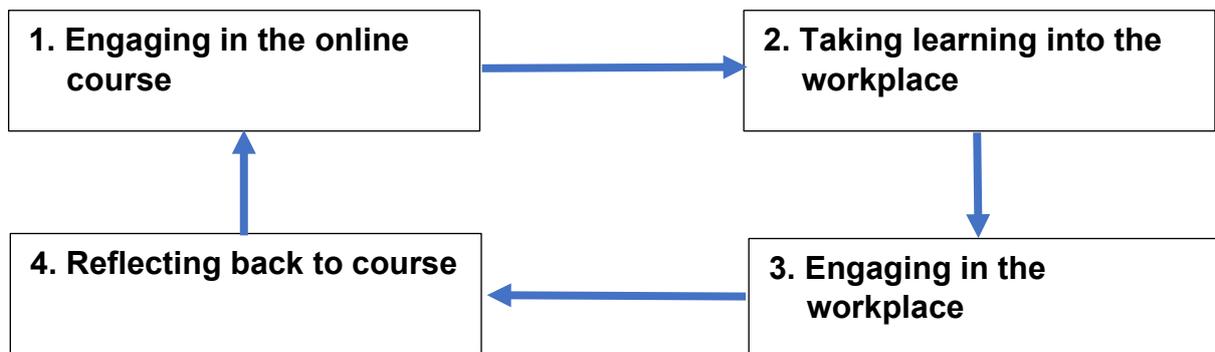
Introduction

- Interviewer
- Interviewee

Research Questions

1. How is learning taking place on a university Online Distance Work-based Learning course (ODWBL) and in the (related) workplace?
2. Which factors affect this kind of learning? (pedagogic design, learner environment and context, learner profile and motivation, support)

Learning on an online distance work-based learning course



Questions

Engaging in the online course

- How would you describe your overall engagement in the course on a continuum of Visitor to Resident

“Visitors and Residents is a simple way of describing a wide range, or continuum of, modes of online engagement.”

“When in **Visitor** mode, individuals decide on the task they wish to undertake. For example, discovering a particular piece of information online, completing the task and then going offline or moving on to another task.

In Visitor mode individuals do not leave any social trace online.”

“When in **Resident** mode the individual is going online to connect to, or to be with, other people. This mode is about social presence.

Resident behaviour has a certain degree of social visibility. This type of online behaviour leaves a persistent social trace.”

White, D., 2016. <http://daveowhite.com/vandr/>

Types of engagement

- Weekly / topic readings and activities (non-student engaging)
- Online Discussions
- Patch discussions (formative feedback)
- Webinars (synchronous / asynchronous recording)
- Face-to-Face meetings with colleagues

Motivation and Barriers

- What were the factors that motivated you to engage online?
- Which barriers, if any, existed that prevented you from engaging more fully in the online course?

Virtual Learning Community:

- What are the most important criteria for an online learning community to work well?
- How relevant was the online aspect of the module to you
 - socially and
 - academically?
- What would it take to improve your satisfaction with the online learning experience?

Taking your course learning to the workplace

- What do you take from the course into your workplace and what do you do with it e.g., apply, test, evaluate, create, etc.? Give examples.

Learning in workplace

- How did you learn in the workplace?

Reflecting learning back to online course

- How do you process, reflect and disseminate your learning?

Closing Questions

- If you had to design a distance work-based learning course or seminar what are the three most important aspects to consider in the design and delivery?
- How is learning in the workplace best supported?
- If you had to advise students who are interested in taking an online distance work-based learning course – what advice would you give for a satisfying and successful outcome?

Appendix E: Interview PowerPoint slides



EdD Interviews January / February 2019

Uwe Matthias Richter



Interviewer Introduction

- Academic Lead: Distance and Online Learning, Anglia Learning & Teaching
- Module Tutor on the distance learning PGCert *Learning & Teaching in HE* and a learning technology module (MA Education)



Interviewee Introduction

- Your work & professional role
- Your motivation to undertake the PGCert

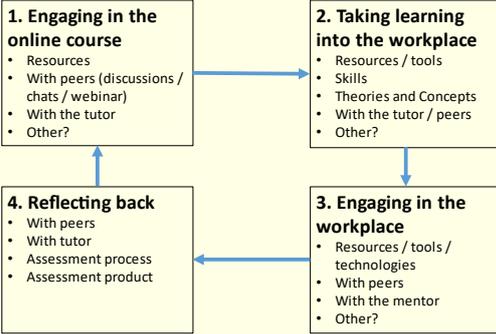


Research Questions

1. How is learning taking place on a university Online Distance Work-based Learning course (ODWBL) and in the (related) workplace?
2. Which factors affect this kind of learning? (pedagogic design, learner environment and context, learner profile and motivation, support)



Areas to explore



Consent

Project Title: Understanding (professional) learning in online and distance work-based university degree courses: an exploratory study

- I agree to take part in the research. I have read the Participant Information Sheet which was circulated via e-mail. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.
- I understand that I am free to withdraw from the research at any time while the research is undertaken, for any reason and without prejudice. However, I also understand that once research data has been captured and processed it cannot be extracted or withdrawn.
- I have been informed that the confidentiality of the information I provide will be safeguarded.
- I am free to ask any questions at any time before and during the study.
- I have been provided with a copy of this consent form and the Participant Information Sheet.

By participating in this interview I agree with the above conditions.

Data Protection: I agree to the University processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me.



Engaging in the online course

How would you describe your overall engagement in the course (on a continuum of Visitor to Resident)



Definition Visitor & Resident

"Visitors and Residents is a simple way of describing a wide range, or continuum of, **modes of online engagement**. [..]"

"When in **Visitor** mode, individuals decide on the task they wish to undertake. For example, discovering a particular piece of information online, completing the task and then going offline or moving on to another task.

In Visitor mode individuals **do not leave any social trace online**. Much online activity is undertaken in this mode as illustrated by our research participants."

"When in **Resident** mode the individual is going online to connect to, or to be with, other people. This mode is about social presence.

Resident behaviour has a certain degree of social visibility [..]. This type of online behaviour **leaves a persistent social trace** [..]"

White, D., 2016. <http://daveowhite.com/vandr/>



Anglia Ruskin University

Types of Engagement (LTHE)

- (Two) Weekly readings / topic
- Activities (non-student engaging)
- Online Discussions on topics
- Patch discussions (formative feedback)
- Webinars (synchronous / asynchronous recording)
- Ask the Module Tutor discussion
- Inbox
- Email
- Face-to-Face meetings with colleagues / mentors / tutors
- External media (e.g. Facebook, Whats App, Skype, Twitter, Blogs, Office 365, Google Docs, Google Search, etc.)



Anglia Ruskin University

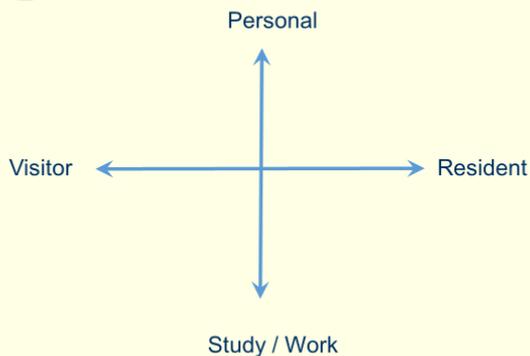
Types of Engagement (MED)

- (Two) Weekly readings / topics
- Activities (ePresentation with e-submission: passcode)
- Online Discussion (Introduction)
- Wiki Activities (lesson planning / group)
- File upload (teaching video / peer feedback)
- Webinars (synchronous / asynchronous recording)
- Inbox
- Email
- WhatsApp group
- Face-to-Face meetings with colleagues / mentors / tutors
- External media (e.g. Facebook, Whats App, Skype, Twitter, Blogs, Office 365, Google Docs, Google Search, etc.)



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Visitor & Resident Map



Used in Adobe Connect whiteboard and on paper in face-to-face interview

Motivation and Barriers

- What were the factors that motivated you to engage online?
- Which barriers, if any, existed that prevented you from engaging more fully in the online course?

Virtual Learning Community

- What are the most important criteria for an online learning community to work well?
- How relevant was the online aspect of the module to you
 - socially and
 - academically ?
- What would it take to improve your satisfaction with the online learning experience?

Taking your course learning to the workplace

What do you take from the course into your workplace and what do you do with it e.g. apply , test, evaluate, create, etc.? Give examples?

- Resources / tools
- Skills
- Concepts / models / theories
- Engaging with
 - tutor
 - Work-based mentor
 - Work-based colleagues
- Other?

Learning in workplace

How did you learn in the workplace?

Activities: Initiating, experiencing, imagining, reflecting, thinking, deciding, analysing, acting

- Engagement** with
- Work colleagues
 - Work mentors
 - Other students
 - Tutors

Reflecting learning back to online course

How do you process, reflect and disseminate your learning?

- Engaging with / feedback to peers / tutors / work colleagues / mentors
- Assessment
- Reports
- Others

Closing Questions

- If you had to design a distance work-based learning course or seminar what are the three most important aspects to consider in the design and delivery.
- How is learning in the workplace best supported?
- If you had to advice students who are interested in taking an online distance work-based learning course – what advice would you give for a satisfying and successful outcome?

Closing Remarks

Do you have any questions or comments?

Thank you very much for participating in this interview.

Appendix F: Participant Information Sheet and Consent Form

PARTICIPANT INFORMATION SHEET



Investigator Contact Details:

Uwe Matthias Richter

Research Title: Understanding (professional) learning in online and distance work-based university degree courses: an exploratory study

You are invited to take part in evaluating your learning experience on the PGCert Medical and Healthcare Education for my EdD research on online distance work-based learning. Participation in the research is entirely **voluntary**.

My research into online distance work-based learning is to promote the development and delivery of effective online distance learning at Anglia Ruskin University including the improvement of the module / course you study / studied.

The data will be used to develop guidelines for the design and delivery of effective online distance work-based learning practices with particular focus on how you as learner engage with and learn from the online course and your related workplace. The findings will be used as part of my EdD studies and may also be presented at conferences and in publications. The data will be anonymised.

If you agree to take part in this research the process will involve you participating in:

- An online pre-course survey to identify your previous experience with online distance learning
- An online survey on your learning experience on the module at the end of each semester.
- An interview of maximum 1 hour to explore your learning experience on the course and how your learning engaged you with your workplace at the end of the second module.

I may take written notes of, and voice record, any discussions. All original notes and recordings will remain confidential to you and me. Transcripts from notes and recordings will be anonymised for storage on computer and publication. Publications

based on research into the data generated as part of this process may be made widely available in a number of forms including electronic documents, web pages, hard copy and presentations. Within these publications, unless I have your expressed signed prior permission, I will not identify you or any other participant to whom you refer.

Project data, including original notes and recordings, will be kept in a secure locked place for the duration of the project and – as required by research convention – for a period of 5 years after the end of the project, after which they will be destroyed.

Thank you very much for taking the time to read this information sheet.

You will be asked to give consent at each stage of the research. If you have any further questions, you can reach me at [researcher email].

This project has been reviewed and approved by the UCL IOE Research Ethics Committee.

Many thanks for your assistance.

Uwe Richter (Researcher)

PARTICIPANT INFORMATION SHEET

Investigator Contact Details: Uwe Matthias Richter

Research Title: Understanding (professional) learning in online and distance work-based university degree courses: an exploratory study

You are invited to take part in evaluating your learning experience on the module MOD001546 Developing Assessment for Learning and the PGCert Learning and Teaching in Higher Education for my EdD research on online distance work-based learning. Participation in the research is entirely **voluntary**.

My research into online distance work-based learning is to promote the development and delivery of effective online distance learning at Anglia Ruskin University including the improvement of the module / course you study / studied.

The data will be used to develop guidelines for the design and delivery of effective online distance work-based learning practices with particular focus on how you as learner engage with and learn from the online course and your related workplace. The findings will be used as part of my EdD studies and may also be presented at conferences and in publications. The data will be anonymised.

If you agree to take part in this research the process will involve you participating in:

- An online survey to identify your previous and current experience with online distance learning, followed by
- An interview of maximum 1 hour to explore your learning experience on the course and how your learning engaged you with your workplace.

I may take written notes of, and voice record, any discussions. All original notes and recordings will remain confidential to you and me. Transcripts from notes and recordings will be anonymised for storage on computer and publication. Publications based on research into the data generated as part of this process may be made widely available in a number of forms including electronic documents, web pages, hard copy and presentations. Within these publications, unless I have your expressed signed prior permission, I will not identify you or any other participant to whom you refer.

Project data, including original notes and recordings, will be kept in a secure locked place for the duration of the project and – as required by research convention – for a period of 5 years after the end of the project, after which they will be destroyed.

Thank you very much for taking the time to read this information sheet.

You will be asked to give consent at each stage of the research. If you have any further questions, you can reach me at uwe.richter@anglia.ac.uk.

This project has been reviewed and approved by the UCL IOE Research Ethics Committee.

Many thanks for your assistance.

Uwe Richter (Researcher)

Participant Consent Form (Interview)

NAME OF PARTICIPANT:

Title of the project: Understanding (professional) learning in online and distance work-based university degree courses: an exploratory study

Main investigator and contact details: Uwe Matthias Richter

1. I agree to take part in the above research. I have read the Participant Information Sheet which is attached to this form. I understand what my role will be in this research, and all my questions have been answered to my satisfaction.
2. I understand that I am free to withdraw from the research at any time while the research is undertaken, for any reason and without prejudice. However, I also understand that once research data has been captured and processed it cannot be extracted or withdrawn.
3. I have been informed that the confidentiality of the information I provide will be safeguarded.
4. I am free to ask any questions at any time before and during the study.
5. I have been provided with a copy of this form and the Participant Information Sheet.

Data Protection: I agree to the University processing personal data which I have supplied. I agree to the processing of such data for any purposes connected with the Research Project as outlined to me*

Name of participant (print).....Signed.....Date.....

YOU WILL BE GIVEN A COPY OF THIS FORM TO KEEP

If you wish to withdraw from the research, please complete the form below and return to the investigator named above.

Title of Project: Understanding (professional) learning in online and distance work-based university degree courses: an exploratory study

I WISH TO WITHDRAW FROM THIS STUDY

Signed: _____ Date: _____

Appendix G: NVIVO Codebook (Nodes)

Name	Description	Files	References
Assignment	All nodes for Assignment MOD001545 and MOD001546	0	0
Dissemination		11	21
HE understanding		11	23
Practice application		20	81
Prior Experience		10	19
Reflection		18	49
Interviews		0	0
Barriers		11	53
Engagement		3	5
Ask the Tutor		11	16
Discussion		12	41
Email		9	15
External resources		12	33
Face-to-face		4	5
Inbox		4	5
Mentor_colleagues		8	15
Observation		5	8
Peer feedback		1	7
Reading		12	31
Self-directed activities		7	11
Webinar		11	25
Improve satisfaction		1	2
Motivation		1	1
Engagement		9	24

Name	Description	Files	References
Mot_extrinsic		10	17
Mot_intrinsic		11	24
Prior Experience		10	20
Recommendations		0	0
Design and Delivery		12	35
Learner advice		12	25
Support learning in workplace		12	27
Reflecting back		2	6
Assessment		10	11
Dissemination		9	17
Virtual Learning Community		1	1
Academic		11	25
Identity		1	2
Improvement		10	20
Social		10	29
Workplace		1	3
Applying learning to the workplace		10	36
Engaging with colleagues and mentors		12	34
Sharing learning in the workplace		7	13
Surveys	All nodes for surveys	0	0
Age		0	0
31-40 years	31-40 age	4	4
41-50 years	41-50 age	5	5

Name	Description	Files	References
51-60 years		3	3
over 61 years		0	0
Distance Learning		12	12
Comfortability		12	13
1 very uncomfortable		1	1
2 Not comfortable		2	2
3 somewhat comfortable		1	1
4 comfortable		3	4
5 Very comfortable		5	5
Comfortable with online, learning technologies		11	11
2 not comfortable		1	1
3 somewhat comfortable		1	1
4 comfortable		3	3
5 Very comfortable		7	7
Prior experience		12	12
1 No experience		4	4
2 Little prior experience		3	3
3 Some experience		2	2

Name	Description	Files	References
4 Experience		1	1
5 A lot of experience		2	2
Gender	male/female/other	0	0
female		7	7
male		5	5
Institution	ARU / ARU Partners / External	0	0
ARU		6	6
ARU Partners		2	2
External		3	3
Motivation		12	12
Qualification	ug/pg/doctorate/PGCert/FETeachQual	0	0
Bachelor		0	0
Doctorate		4	5
Masters		8	8
PGCert (FE)		0	0
Prof Qual		3	3
Role	Academic/ProfServ/	0	0
Academic		8	8
Other		1	1
Professional Services	Learning Technologists	3	3
Support learning in Workplace		12	12
Workplace		12	12
1 Not essential at all		1	1
2 not essential		1	1

Name	Description	Files	References
3 somewhat essential		2	2
4 essential		1	1
5 very essential		7	7

Appendix H: Sampling – The participants' profiles from the participant survey (extended Chapter 5)

General data

Twelve students participated in the participant survey and the interview, of which 11 were from the LTHE and one from the MHCE. The surveys and the interviews were undertaken between May 2018 and March 2019. The survey provided data on participant demographics, motivation, support, distance learning experience and their comfort of studying online.

Participant demographics

Participants' ages ranged from 31 to 60 with half (median) being between 41 and 50 ($n = 6$) followed by 31-40 ($n = 4$) and 51-60 ($n = 2$). The gender distribution was eight female and four male participants, with four holding a doctorate and eight with a postgraduate qualification other than PhDs. Nine of the twelve participants were educated entirely in the British education system, with three participants attending secondary and/or part of HE in mainland Europe ($n = 1$) and abroad ($n = 2$).

While the LTHE was a teaching qualification focused on new academics at ARU as part of their probation, it was open to ARU partner colleges and the distance learning version in particular to external participants, including participants from across the globe. Partner colleges are institutions where staff deliver programmes that are accredited by ARU. These partner colleges or HE partners were either specialist institutions or FE partners delivering HE courses.

Participants held one of the following three roles:

- Academic teachers ($n = 8$) (Participants 2, 4, 5, 7, 8, 10, and 11)
- Professional Services staff ($n = 3$) (Participants 1, 3, and 9) - in addition to academics, the LTHE attracted Professional Services staff at ARU, many of whom were student-facing, such as learning technologists, student support staff, and librarians.
- Other ($n = 1$) this category applied to P12, who attended the MHCE. As someone who taught or trained junior doctors, their teaching fell between academic teaching and training. Their institution was a teaching hospital and

as such not a HE institution, but their subject matter related to the tertiary postgraduate level.

Participants belonged to three different types of institutions:

- Home institution ($n = 6$) where staff are members of the university where the LTHE is delivered (Participants 1, 2, 3, 6, 9, and 10)
- Institutions partnered with the home institution ($n = 2$) (Participants 5, 7)
- External institutions ($n = 3$ plus one participant from MHCE) which had no association with the home institution. Participants (Participants 4, 8, 11, and 12) falling under this category were diverse, but most were similar to the partner institutions being either specialist (e.g., military academies) or HE in FE institutions. There were no international participants in this group which was therefore out of scope for this analysis.

The MHCE was newly accredited in 2016 and had a small number of participants during the period these interviews took place. Only one participant (a health care professional who had or would have a training or teaching role) volunteered to be interviewed.

The diversity of the 11 LTHE participants in my study represented the diversity of participants on the course (see Table 4, Section 4.2.1) resulting in a representative sample.

Motivation

Participants' motivation to participate in the LTHE included the desire and/or requirement to have a teaching qualification ($n = 5$). Others responded that they wanted to improve their teaching and the skills to cater for diverse students and learning environments. They commented:

I regard the PGCE as a requirement for me evidencing my abilities, knowledge and understanding to teach students in Higher Education. My motivation is also centred on developing my understanding of teaching students from international communities, obtaining a recognised qualification, and developing the tools that support students' assessments and learning processes (P5-S)

Acknowledging we are working in a more complex skills-sharing environment which will require me to teach professionals from a range of environments/specialities (P12-S)

The responses (see Appendix Ia: *Motivation – Participant Survey Free Text Comments*) revealed that some participants were more intrinsically motivated while others extrinsically because it was required of them as part of probation, for example, or they felt it was expected of them to have a PGCert or HE teaching qualification to progress their career.

Support

Only one participant was given time off from work to participate in the course, but others were supported in other ways by their employer including financial support such as fee payment or waiver ($n = 4$), flexibility in working arrangements ($n = 4$) and providing the teaching environment to develop their teaching skills and offering feedback and teaching observation (see Appendix Ib: *Support – Participant Survey Free Text Comments*). Two participants had no support.

P2 highlighted that the work environment was often very pressured, so it was difficult for some participants to have any time during their working day to commit to studying. P2-S) commented

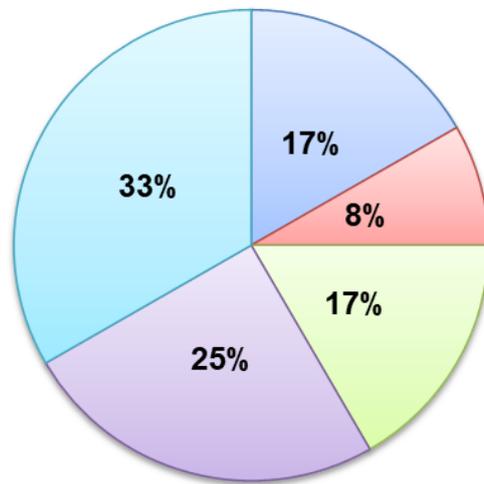
they are aware that I am doing the course and if I asked for time away from teaching that might be possible to negotiate, but I work in a small team where we all share significant teaching responsibilities and have not asked for additional time to complete the course.

Distance learning experience

This aspect of the survey considered participants' experience with distance and online learning.

Participants' distance learning experiences (see Figure 32) before taking the LTHE varied with three interviewees reporting considerable experience, four with no experience, and five who had some distance learning experience.

How much experience do you have as distance learner?



- I have studied on many distance learning courses
- I have studied on several distance learning courses
- I have studied on a few distance learning courses
- I have studied on one or two distance learning courses
- This is my first time I study at a distance

Figure 32: Distance Learning Experience (Survey)

Participants' comfort with distance learning (see Figure 33) related, to a certain degree, to their previous distance learning experiences.

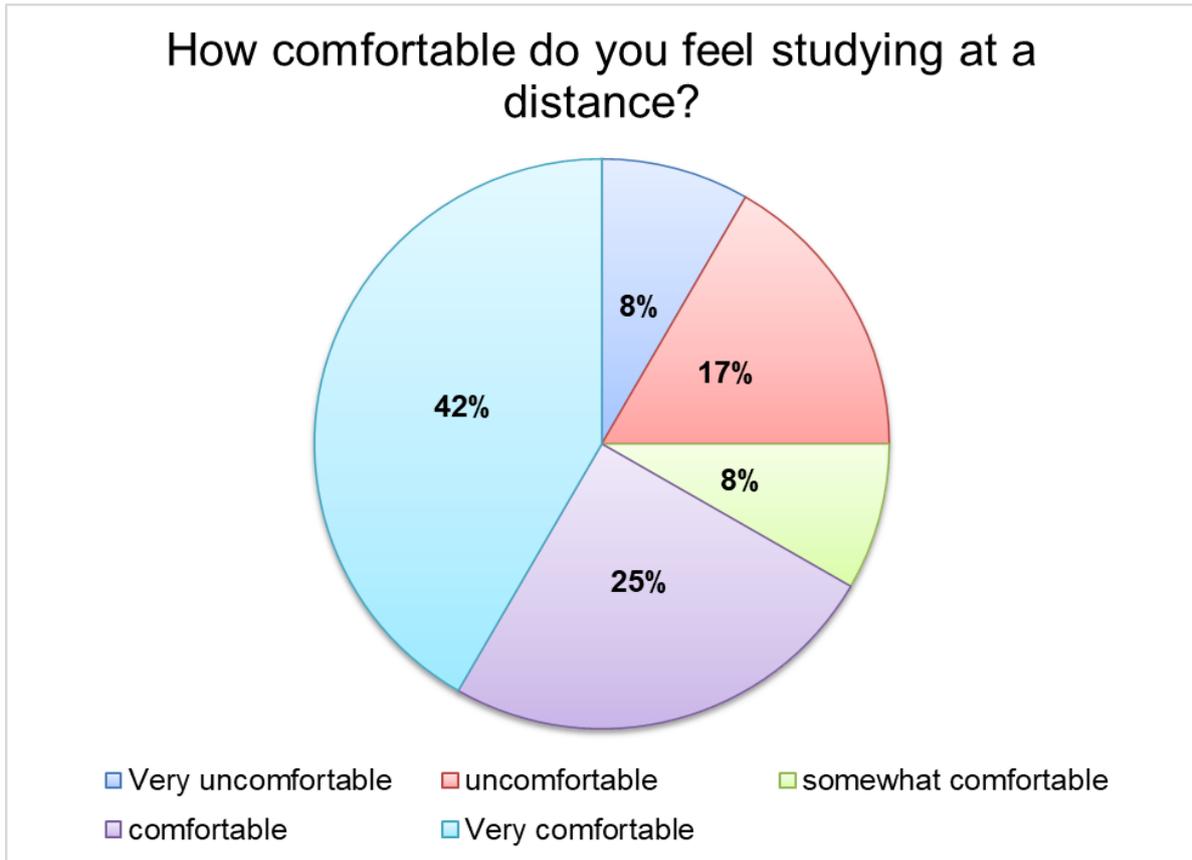


Figure 33: Comfort with distance learning (Survey)

While two-thirds of participants ($n = 8$) felt comfortable or very comfortable studying at a distance, a third ($n = 3$) felt less or not comfortable with this mode of learning.

The three participants who studied on some or many distance learning courses before the PGCerts felt very comfortable or comfortable with studying online but two out of the four with no prior experience felt very comfortable as well. Two with limited or some experience also felt very comfortable with distance learning and one with some experience of distance learning was not comfortable (see Figure 34).

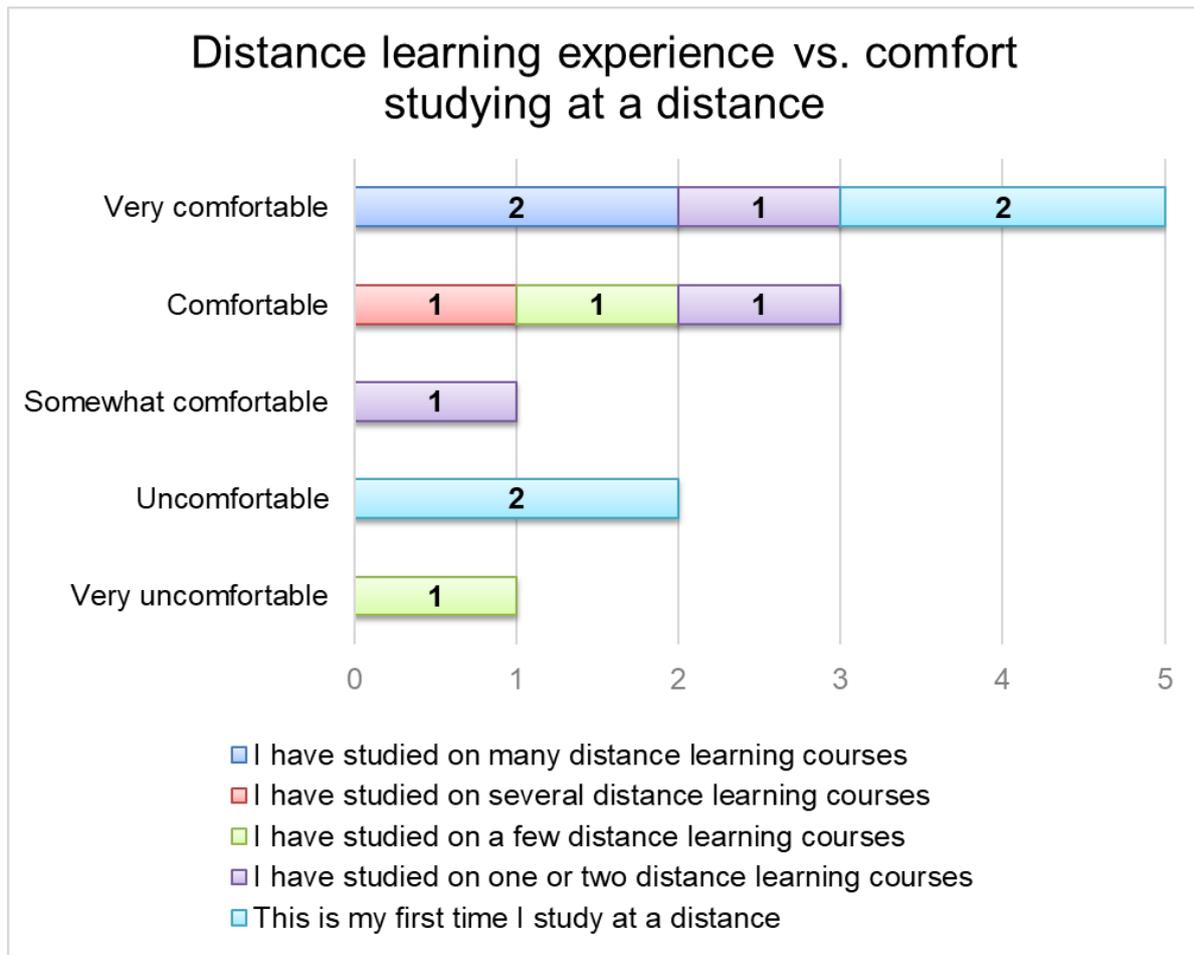


Figure 34: Distance learning experience versus comfort studying at a distance

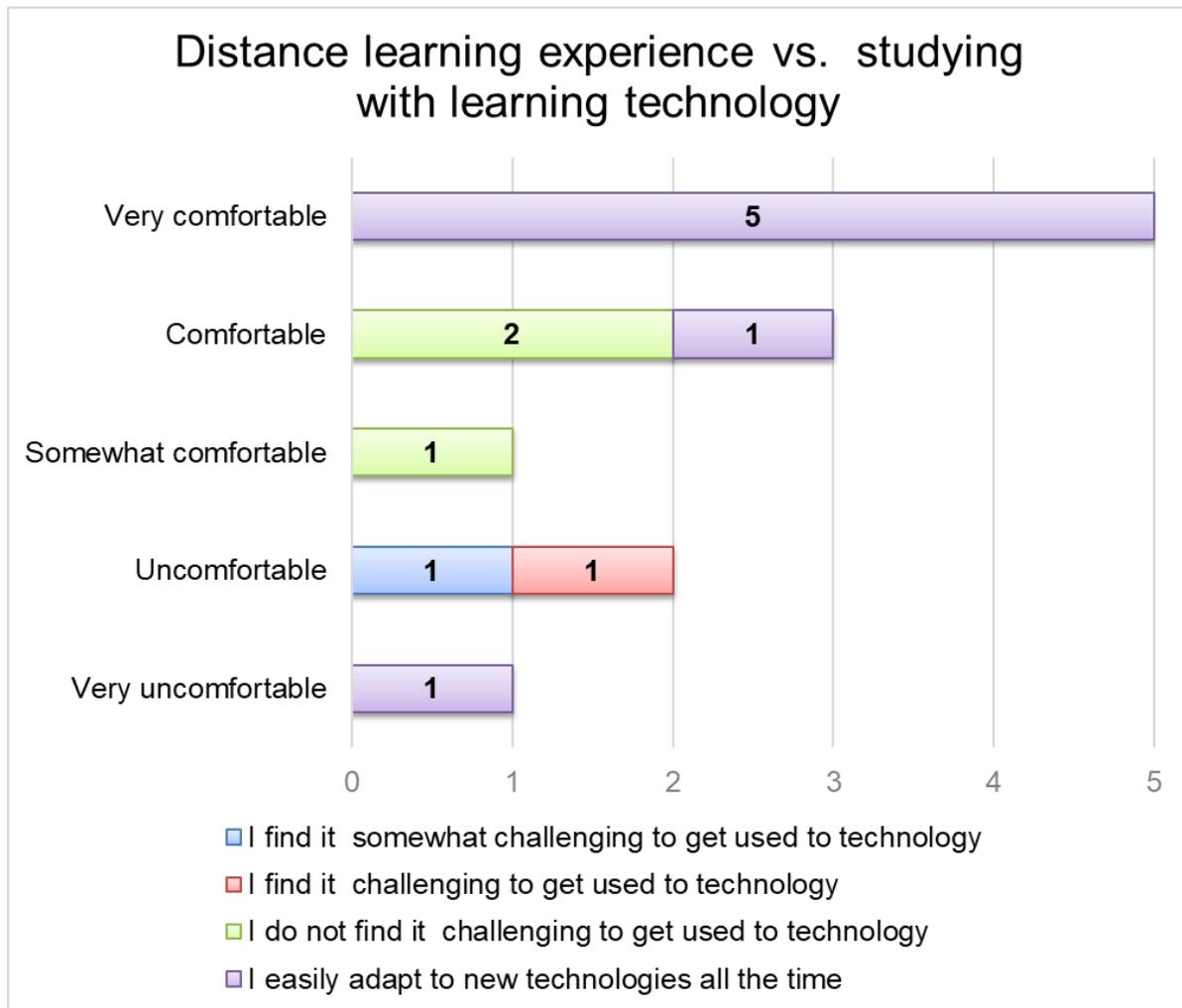


Figure 35: Distance learning experience versus studying with learning technology

Therefore, while some correlation exists between participants' degree of experience with distance learning and being comfortable with learning at a distance, this experience was not consistent across participants. During the interviews, it became clear that being comfortable with studying online (see Figures 34 and 35) may be influenced by whether this mode of attendance was the participant's preferred choice or not. For instance, one participant, who had some experience with distance learning, had to attend online because they did not have a choice, which explains their being very uncomfortable and subsequently changed to face-to-face delivery for the second module.

Another factor that affected the experience of distance learning is how well participants cope with the learning technologies (see Figure 36) supporting the delivery and learning activities. Most participants ($n = 10$) said that they found it easy or relatively easy to adapt to new technologies, and only one participant found it

challenging to use the technology. This tallies with this participant being a distance learning novice and not feeling comfortable with distance learning (Daly *et al.*, 2007).

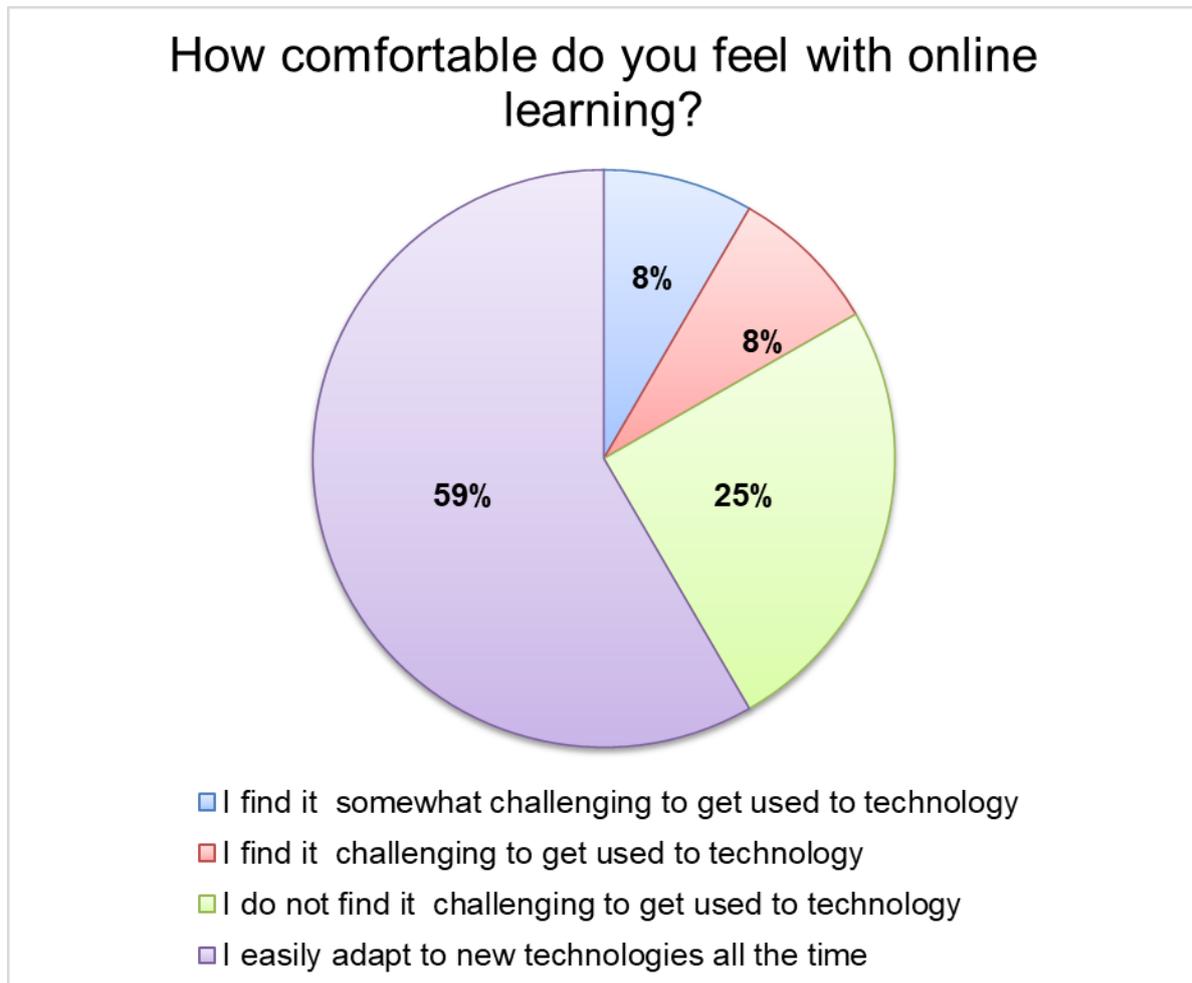


Figure 36: Comfort with learning online (Survey)

The role of the workplace in the learning process

Two-thirds of participants ($n = 8$) felt that their workplace was an essential or very essential part of their learning (see Figure 37). Two participants said it was not essential at all or less essential, and two felt it was somewhat essential (neutral). Most participants ($n = 10$) felt that the workplace was essential as it provided opportunities to apply their learning on the course to their teaching practice, for reflection on their practice, and to improve their practice (see Appendix 1c: *How much is your workplace an essential part of your learning on the PGCert?*)

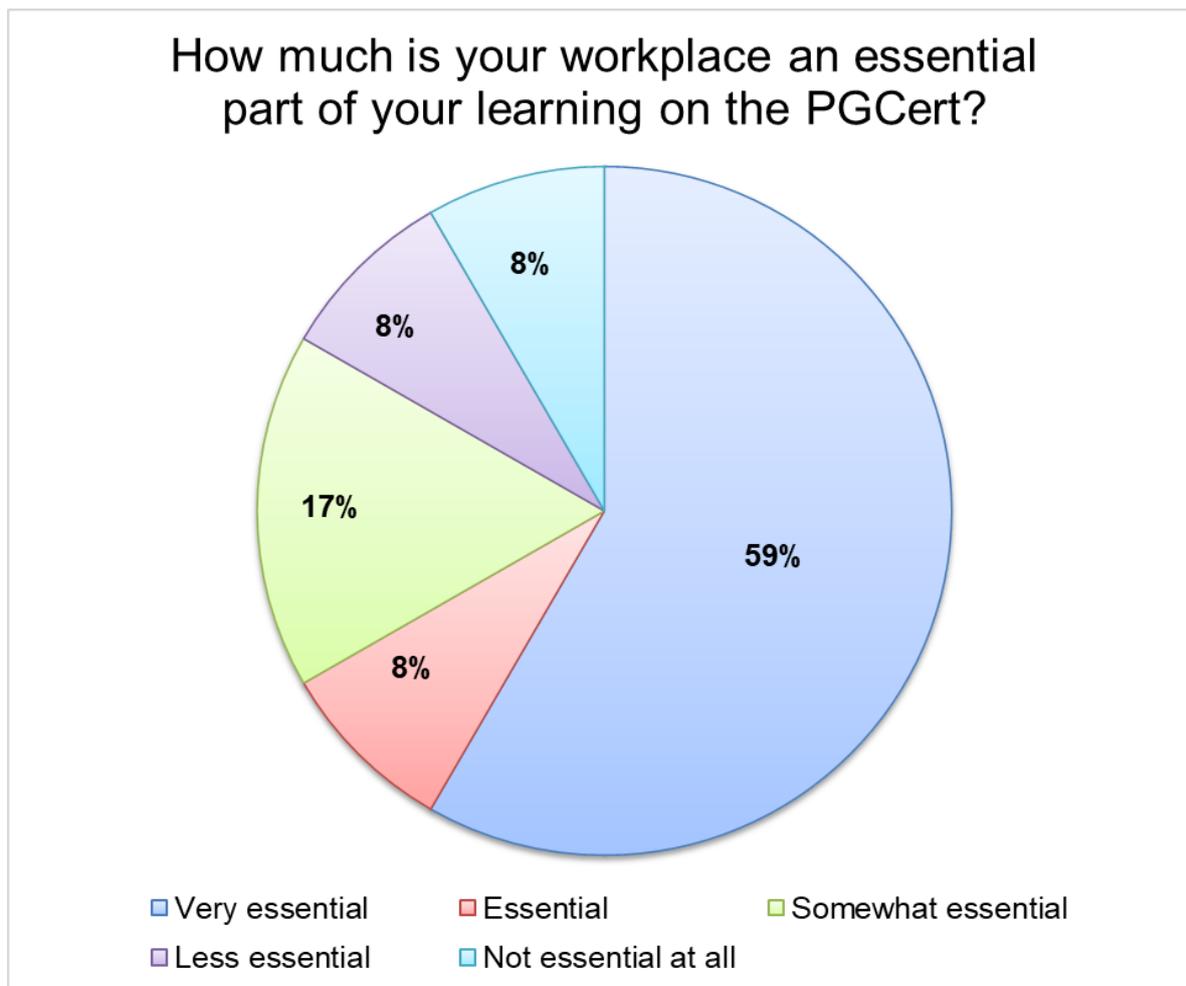


Figure 37: Importance of workplace (Survey)

Participant survey free-text comments included:

My workplace also provides opportunities where I am able to discuss and challenge my colleagues in my learning process (P5-S)

It gives me the opportunity to put into place what I have learned, reflect on the outcome and amend as necessary (P7-S)

The workplace was also important because of the required teaching observation. For instance, P2 mentioned: “It has been essential as the course has involved teaching observations which I could not have done without my workplace” (P2-S).

A few participants focused on achieving the expected or required teaching standard and qualification:

All lecturers are required to have a teaching qualification, preferably a postgraduate certificate (P11-S)

As a trainee myself..., much of what I am doing is to prepare me for a role which would have significant teaching elements (P12-S)

Participants, who felt the workplace was less essential often did not have opportunities to directly apply their knowledge to academic practice as they were not academic teachers at this point (e.g., Professional Services colleagues or becoming a trainer for medical doctors).

Analysis of the interviews also revealed that not all academic work environments were available for participants to apply their new teaching ideas, strategies, and methods.

Bivariate analysis

Distance learning experience by institution

ARU participants (*mean* = 2.8) and ARU partners (*mean* = 3.0) had more prior experience with distance learning (DL) than external participants (*mean* = 1.8) with an overall mean of 2.5. The distribution of DL experience by institution is diverse (see Figure 38) from the PGCert being the first DL experience (1) to having studied on many DL courses (5).

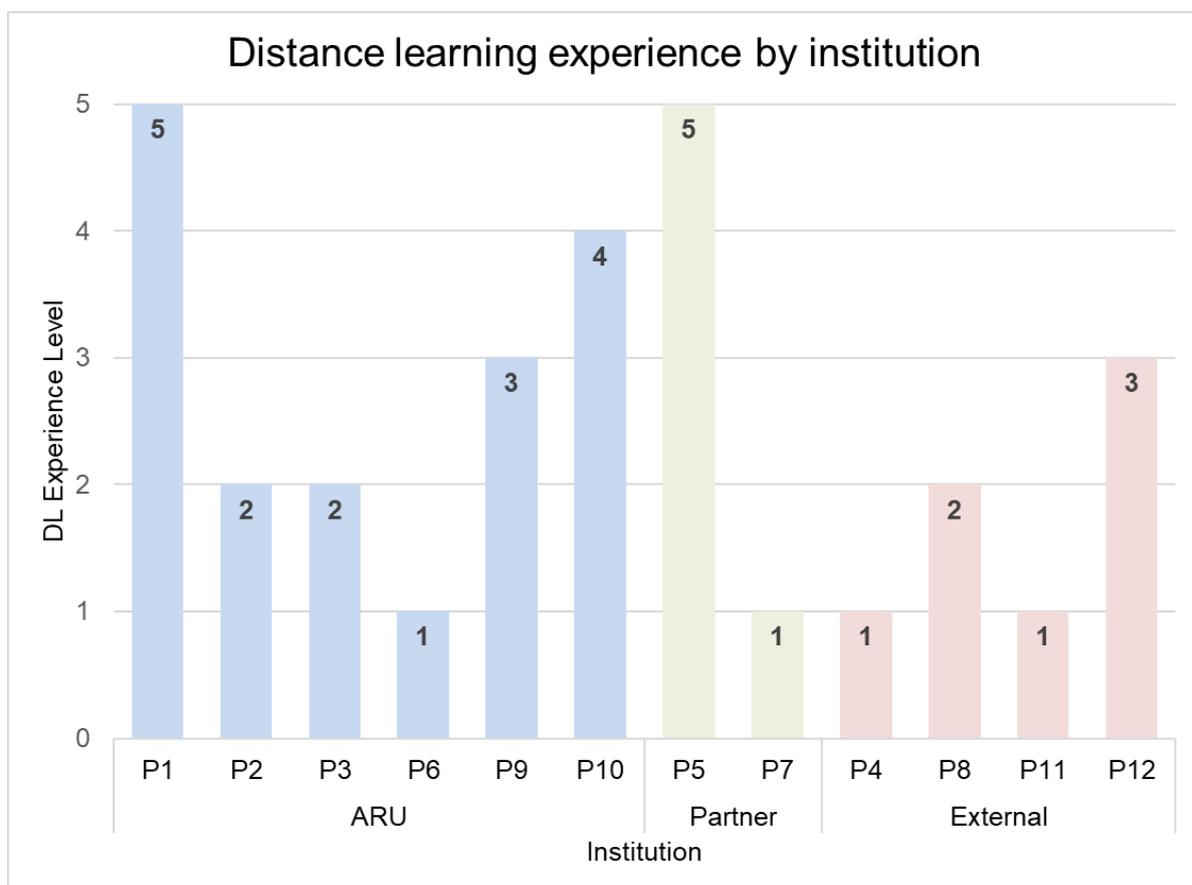


Figure 38: Distribution of Distance learning experience by institution

Distance learning experience by age group

The mean DL experience by age group was similar for 31-40 ($mean = 2.3$) and 41-50 ($mean = 2.2$) and higher for 51-60 ($mean = 3.3$) with a diverse distribution within age groups (see Figure 39).

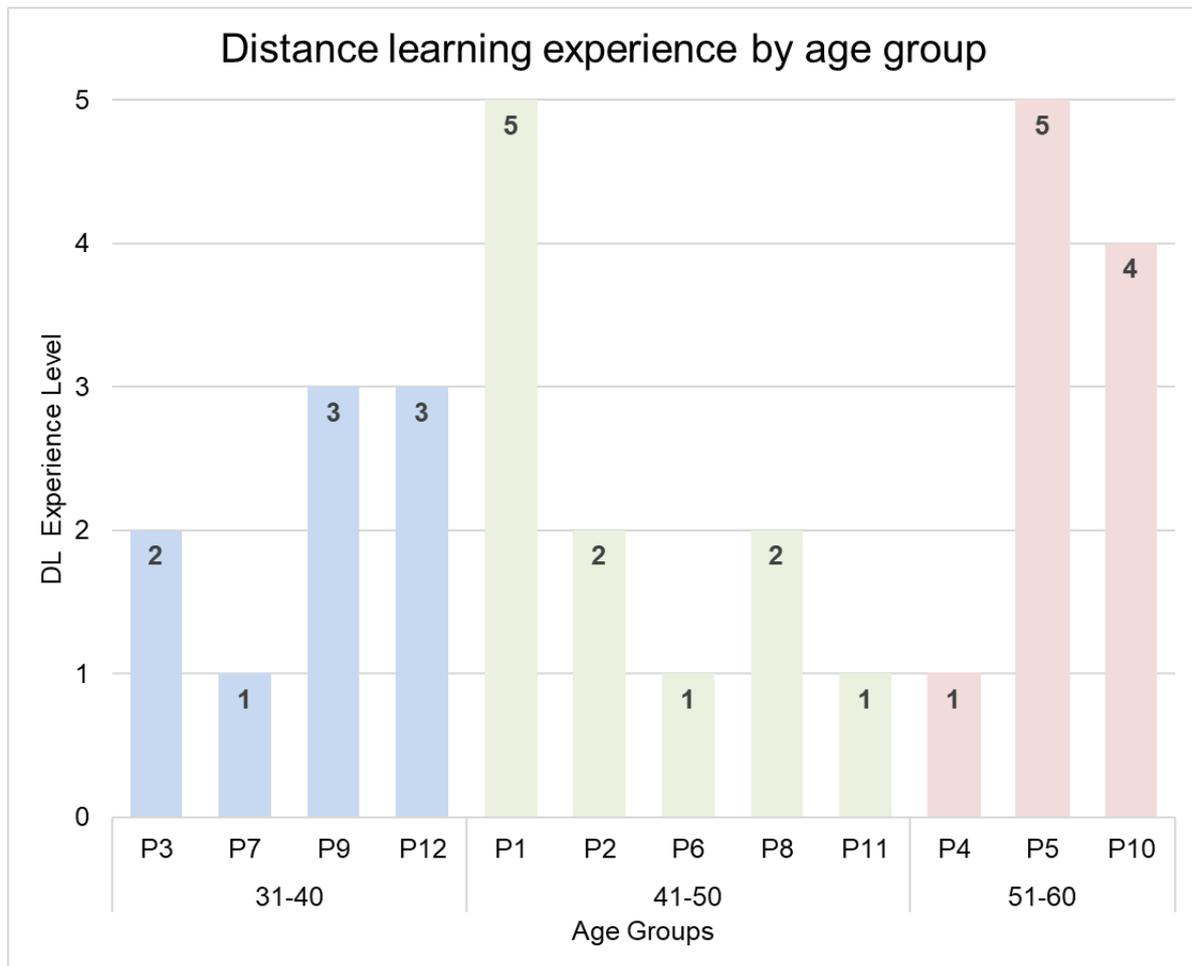


Figure 39: Distance learning experience by age group

Distance learning experience by gender

The mean DL experience by gender was lower for female ($mean = 2.1$) compared to male participants ($mean = 3$) but with a slightly more diverse distribution among male participants (see Figure 40).

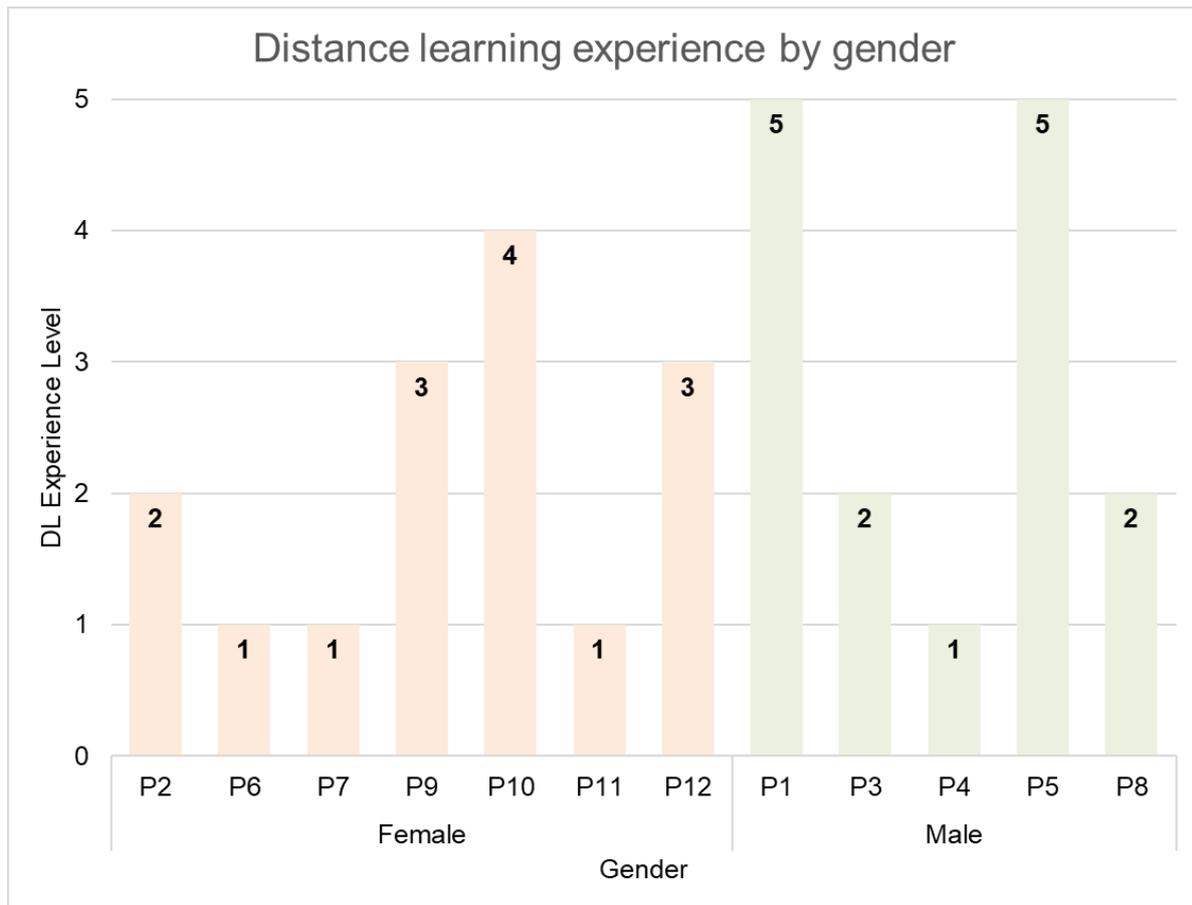


Figure 40: Distance learning experience by gender

While there were some differences in DL experiences by the categories: institution, age group, and gender, the diverse distributions within each category do not support general conclusions.

Comfort with distance learning by institution

The mean of DL comfort by institution was similar between ARU ($mean = 3.3$) and external institutions ($mean = 3.8$), with ARU partners being an anomaly with both participants being very comfortable with distance learning. However, most participants felt comfortable with learning at a distance ($n = 9$) with three feeling uncomfortable ($n = 2$) or very uncomfortable ($n = 1$) and an overall mean of 3.75 (see Figure 41).

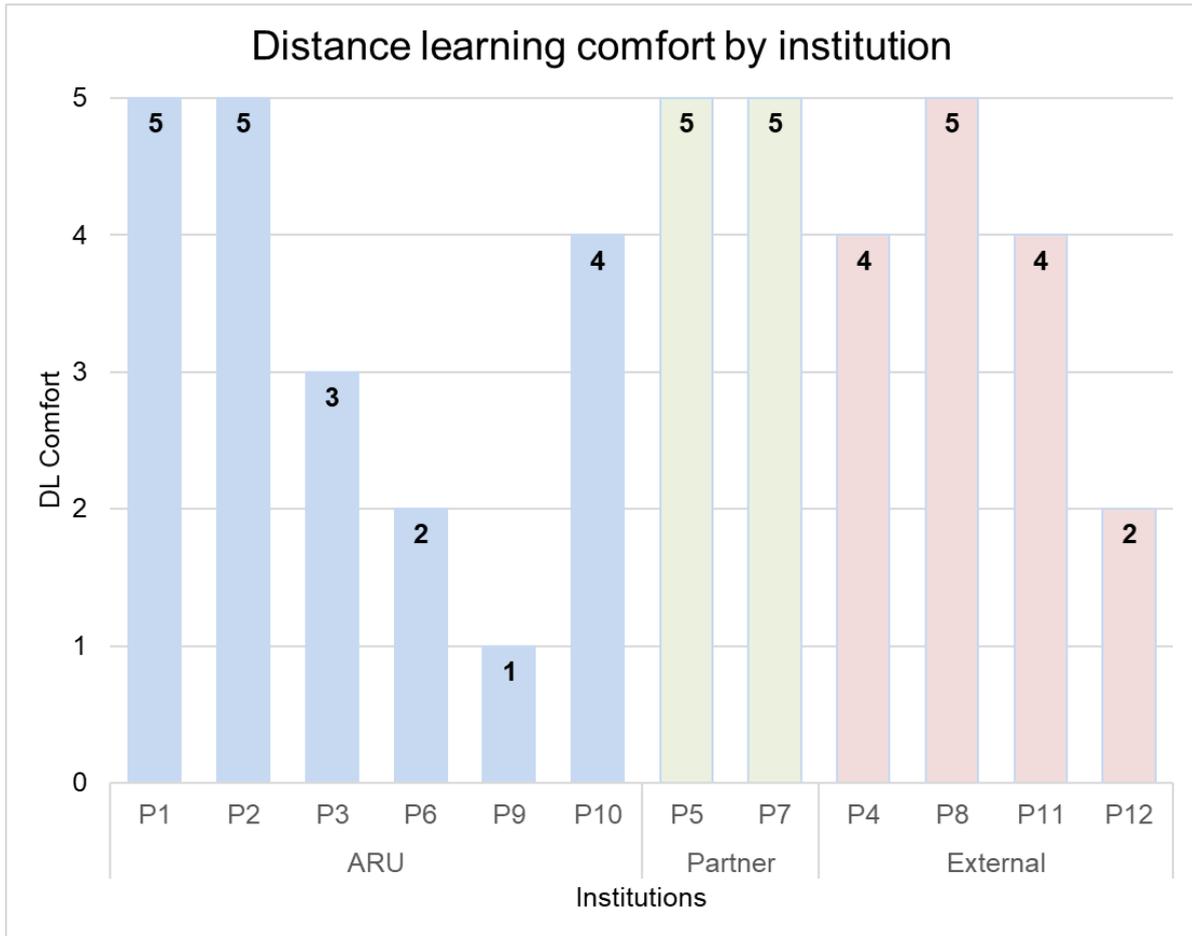


Figure 41: Distance learning comfort by institution

Comfort with distance learning by age group

There was slightly more variation in DL comfort in the age group 31-40 with a mean of 3.3, compared with 41-50 (*mean* = 4.2) and 51-60 (*mean* = 3.8) and an overall mean of 3.8 (see Figure 42).

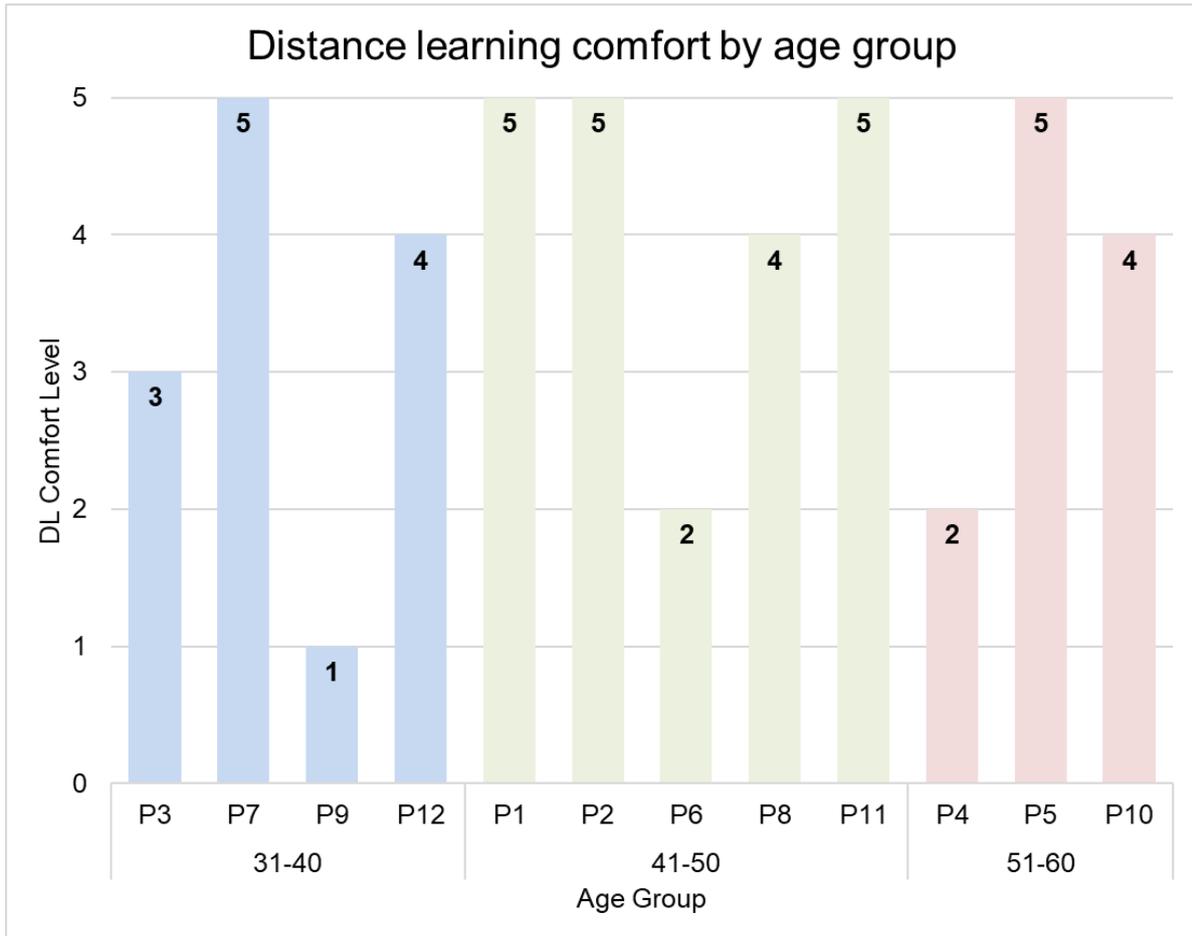


Figure 42: Distance learning comfort by age group

Comfort with distance learning by gender

The DL comfort level also had a similar distribution within genders with similar means (female *mean* = 3.7 and male *mean* = 3.8) and an average mean of 3.8 (see Figure 43).



Figure 43: Distance learning comfort by gender

While there were some differences in DL comfort by the categories: institution, age group, and gender, the diverse distributions within each category do not support general conclusions.

Ease of learning with technology by institution

Overall, most participants ($n = 10$) were comfortable with learning with technology with only two finding it somewhat challenging ($n = 1$) or challenging ($n = 1$) to get used to learning with technology with a high mean of 4.3.

There was little difference between institutions (ARU *mean* = 4.5; ARU partners *mean* = 5, and External *mean* = 4.3) and minor variation within an institution (see Figure 44).

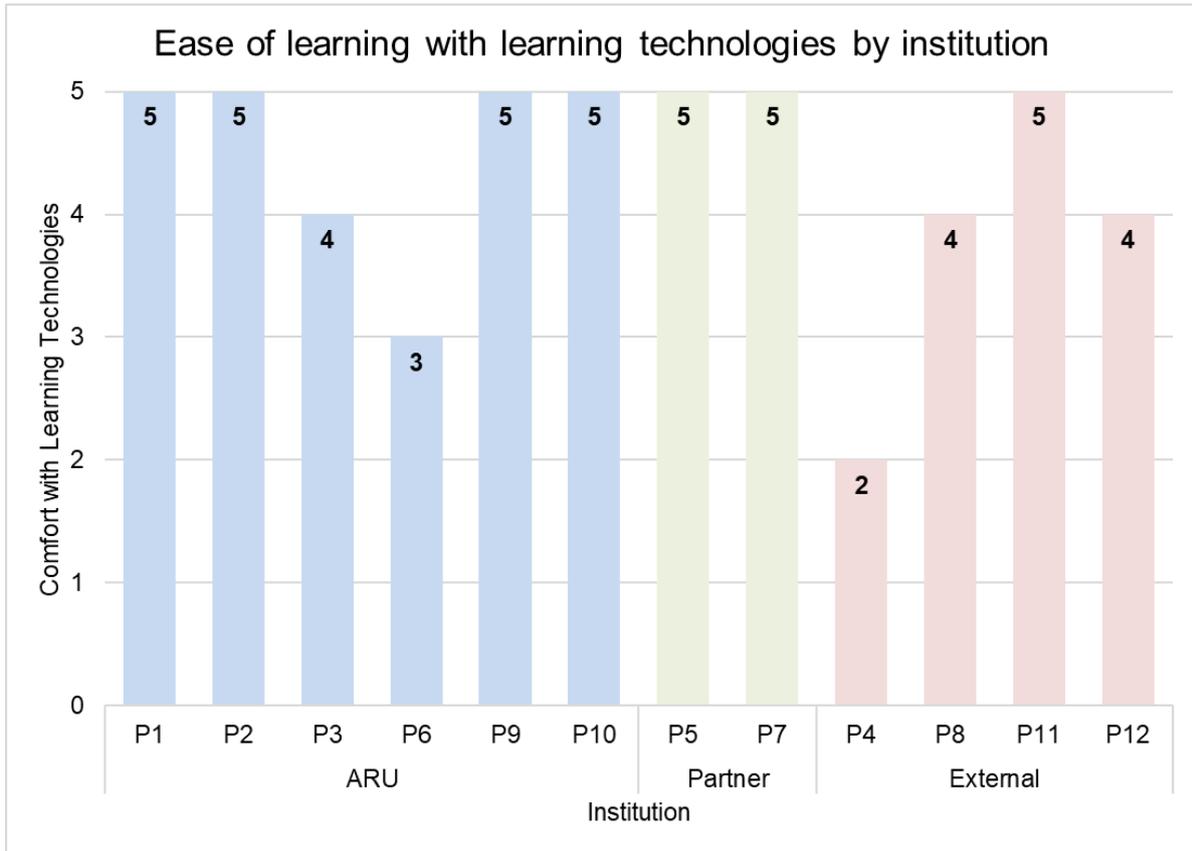


Figure 44: Ease of learning with learning technologies by institution

Ease of learning with technology by age group

As above there was little difference between the age groups with a mean of 4.5 for the age group 31-40, mean = 4.4 for 41-50, mean = 4.0 for 51-60, and an overall mean of 4.3 (see Figure 45).

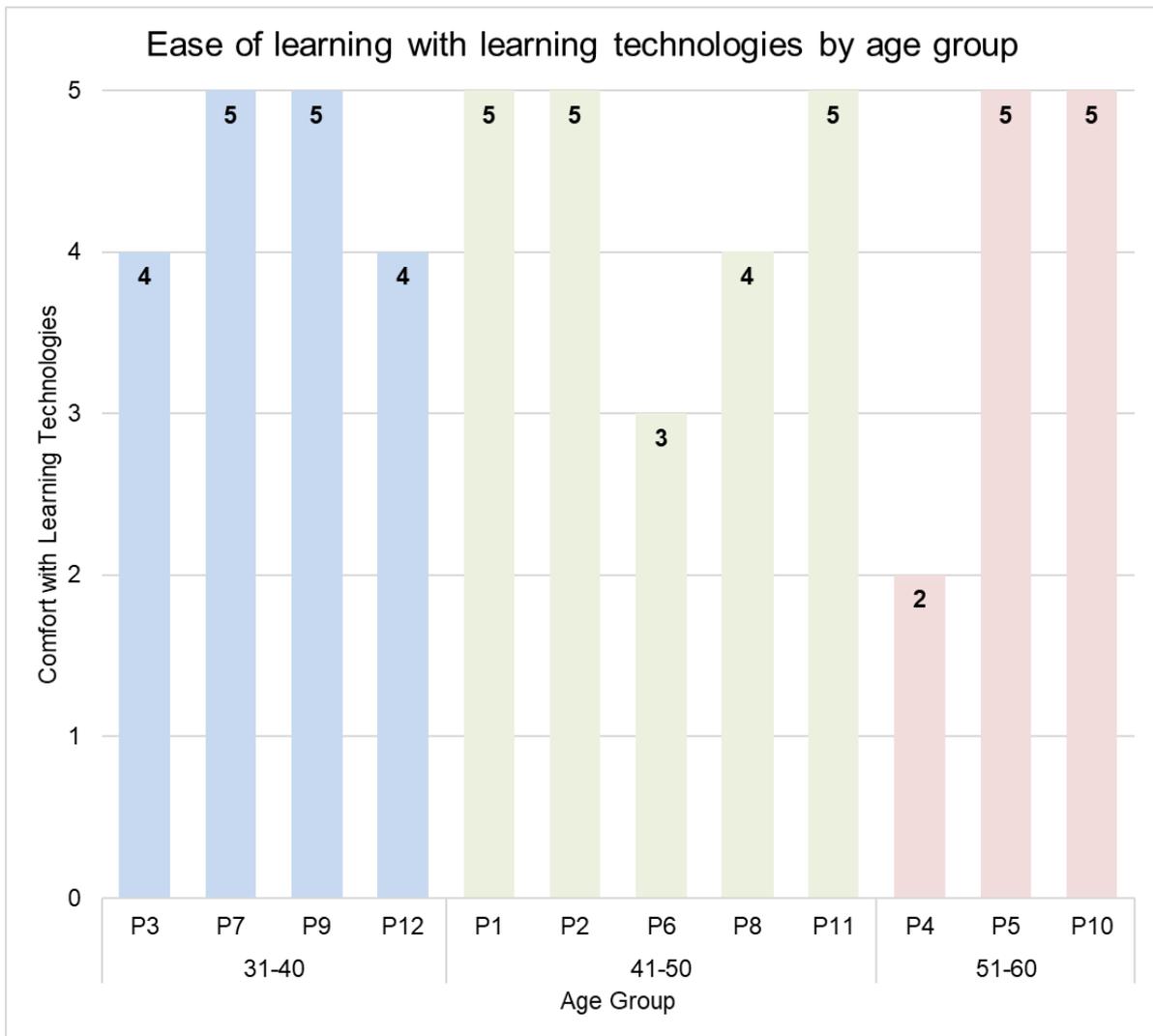


Figure 45: Ease of learning with learning technologies by age group

Ease of learning with technology by gender

Finally, there was little difference between gender with female participants finding it slightly easier to learn with learning technologies (*mean* = 4.6) than their male colleagues (*mean* = 4) with an overall mean of 4.3 (see Figure 46).

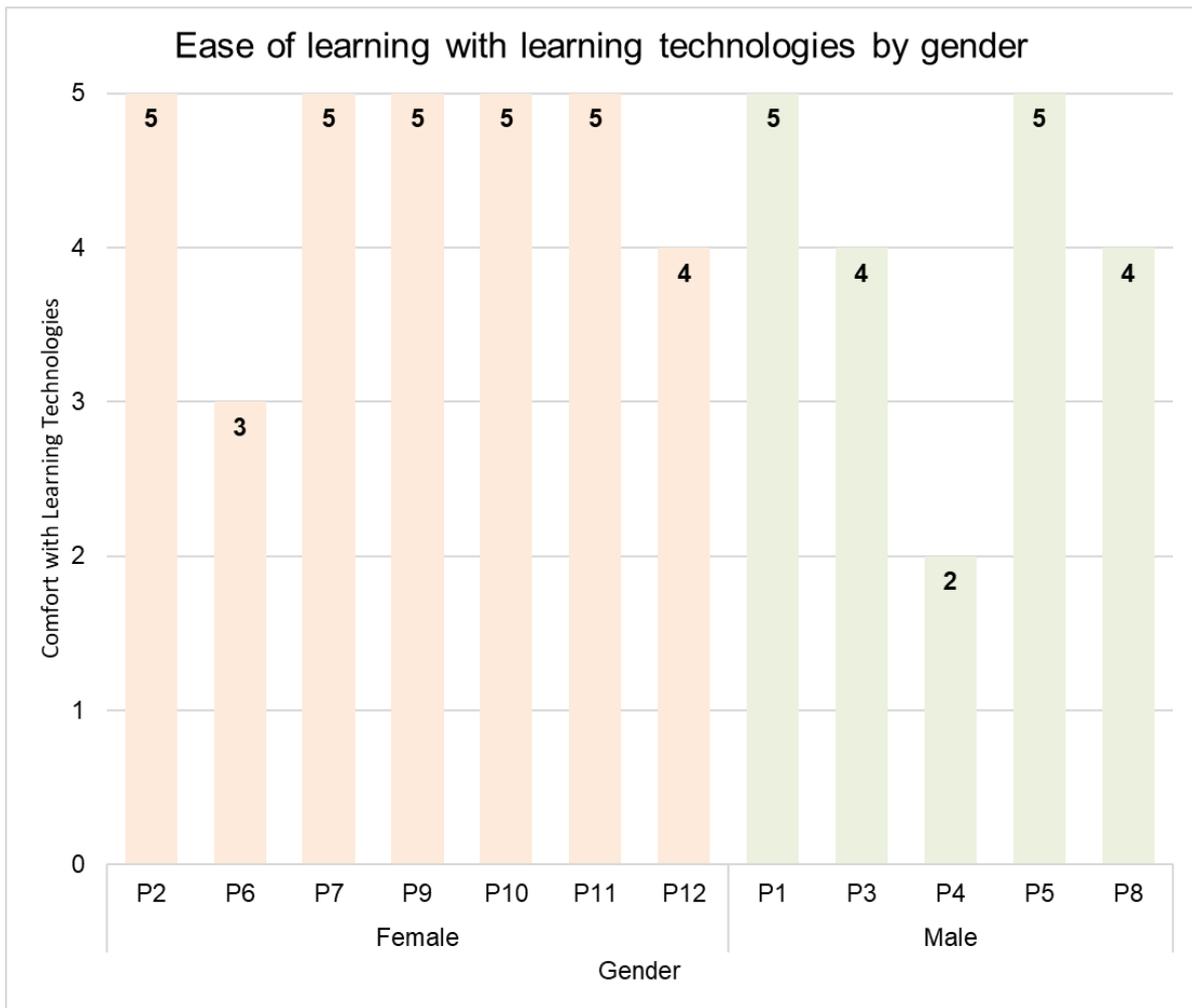


Figure 46: Ease of learning with learning technologies by gender

Summary

Looking across the bivariate analysis, there was no significant variation across categories but the variations within categories reflected the diversity of the participants.

Appendix Ia: Motivation (Participant survey free-text comments)

Participant comments	Theme
To be recognised as a teacher in HE, as this is standard in UK.	Teacher recognition Standard
I wanted a teaching qualification.	Teaching qualification
It is a requirement of my probation in my role as lecturer at Anglia Ruskin University.	Probation requirement
Part of my probation	Probation requirement
Requirement for my job.	Job requirement
To improve my teaching. I teach a service course for research methods and statistics for students of osteopathy. I believe that by using teaching methods that reflect the diversity of the student body and that are focused on the key threshold concepts notable improvement in learning can be achieved.	Improve teaching
I am in my first year of teaching at ARU PARTNER. I regard the PGCE as a requirement for me evidencing my abilities, knowledge and understanding to teach students in Higher Education. My motivation is also centred on developing my understanding of teaching students from international communities, obtaining a recognised qualification and developing the tools that supports students' assessments and learning processes.	Improve teaching by understanding teaching and students better Widening skills and competences
To improve on the quality of my teaching, to gain a qualification and to apply for fellowship of the Higher education academy.	Improve teaching Teaching qualifications FHEA
Learn more about teaching in Higher Education	Improving teaching
Enhancing my learning and teaching skills.	Improving teaching & widening skills and competences

To continue and further my education	Continue education
<p>1) a self-identified need to improve the quality of teaching I deliver i) by gaining more experience planning teaching sessions ii) understanding the theories in modern teaching to inform my practice 2) acknowledging we are working in a more complex skills sharing environment which will require me to teach professionals from a range of environments/specialities (hence this PGCert over others available, with predominant focus on medical teaching)</p>	<p>Improving teaching</p> <p>Widening skills and competences</p>

Appendix Ib: Support (Participant survey free-text comments)

Participant comments	Themes
The Course was paid for by my employer.	Fee payment
They paid for the course.	Fee payment
Financially	Fee payment
They paid for the course	Fee payment
They are aware that I am doing the course and if I asked for time away from teaching, that might be possible to negotiate, but I work in a small team where we all share significant teaching responsibilities and have not asked for additional time to complete the course.	Flexible working time/time arrangement
Additional support and time.	Flexible time / time arrangement
Flexible working hours	Flexible time / time arrangement
Allocation of study leave to engage in teaching activities. Time off for activities directly linked to the course has not been granted.	Flexible time / time arrangement
Utilising the environment in which I can assess my learning and developing my teaching style and practices.	Environment and feedback
My employer supported me by observing my teaching and giving me feedback.	Environment and feedback
Not really.	No
No	No

Appendix 1c: How much is your workplace an essential part of your learning on the PGCert? (Participant survey free-text comments)

Rating	Participant comment	Role	Themes
Very Essential (5)	I am able to apply the concepts I have learnt.	Learning Technologist ARU	Apply to teaching /training practice
Very Essential (5)	It has been essential as the course has involved teaching observations which I could not have done without my workplace.	Lecturer ARU	Teaching observations
Very Essential (5)	My workplace also is aiming to ensure all lecturing staff are qualified to PGCE standards. I am able to develop my learning and translate this into practice when supporting students in their learning. I am able to identify how gaps can best be managed and develop tools to monitor students learning. My workplace also provides opportunities where I am able to discuss and challenge my colleagues in my learning process.	Lecturer ARU Partner	Required standard Apply to teaching practice, reflection and improvement of practice
Very Essential (5)	I am a senior lecturer in ARU so this training is extremely important	Senior Lecturer ARU	Required standard
Very Essential (5)	The opportunity for me to put to practice what I learn from the module and to see the result or outcome on my practice.	Lecturer External Institution	Apply to teaching practice, reflection, and improvement of practice

Rating	Participant comment	Role	Themes
Very Essential (5)	I employ the learning outcomes into my teaching practice and can reflect on them. This has an exceptional impact on enhancing my teaching methods.	Practitioners ARU	Apply to teaching practice, reflection, and improvement of practice
Very Essential (5)	I teach in a Higher Education institution, having just acquired a new validation with XYZ University, all lecturers are required to have a teaching qualification, preferably a post graduate certificate	HE Programme Area Leader External Institution	Required standard/qualification
Essential (4)	It gives me the opportunity to put into place what I have learned, reflect on the outcome and amend as necessary	Lecturer ARU Partner	Apply to teaching practice, reflection and improvement of practice
Somewhat Essential (3)	It is an excellent case-studies generator and an experimental lab.	Study Coach ARU	Reflection and informing practice
Somewhat Essential (3)	Not at all as I complete my course in my own time.	Researcher Development ARU	Not aligned to working practices
Less Essential (2)	Other than the observations it has not played a major part. However, right from the start of the course I began to create new lessons and adapt lessons to implement new knowledge. For the most part, this has been a positive experience and I	Lecturer External Institution	Only observations Apply to teaching practice, reflection and improvement of practice

Rating	Participant comment	Role	Themes
	<p>feel that my teaching has improved.</p>		
<p>Not Essential (1)</p>	<p>Direct provision of teaching in my role as a clinician to more junior anaesthetic trainees, paramedics, midwives, and medical students.</p> <p>As a trainee myself at senior registrar level, much of what I am doing is to prepare me for a role which would have significant teaching elements as a consultant.</p>	<p>Senior Medical Registrar XYZ Hospital</p>	<p>Apply to teaching practice, reflection and improvement of practice</p> <p>Preparing for the role of a consultant who teaches others</p>

Appendix J: Activity Engagement Maps

Participant 1 Activity Engagement Map

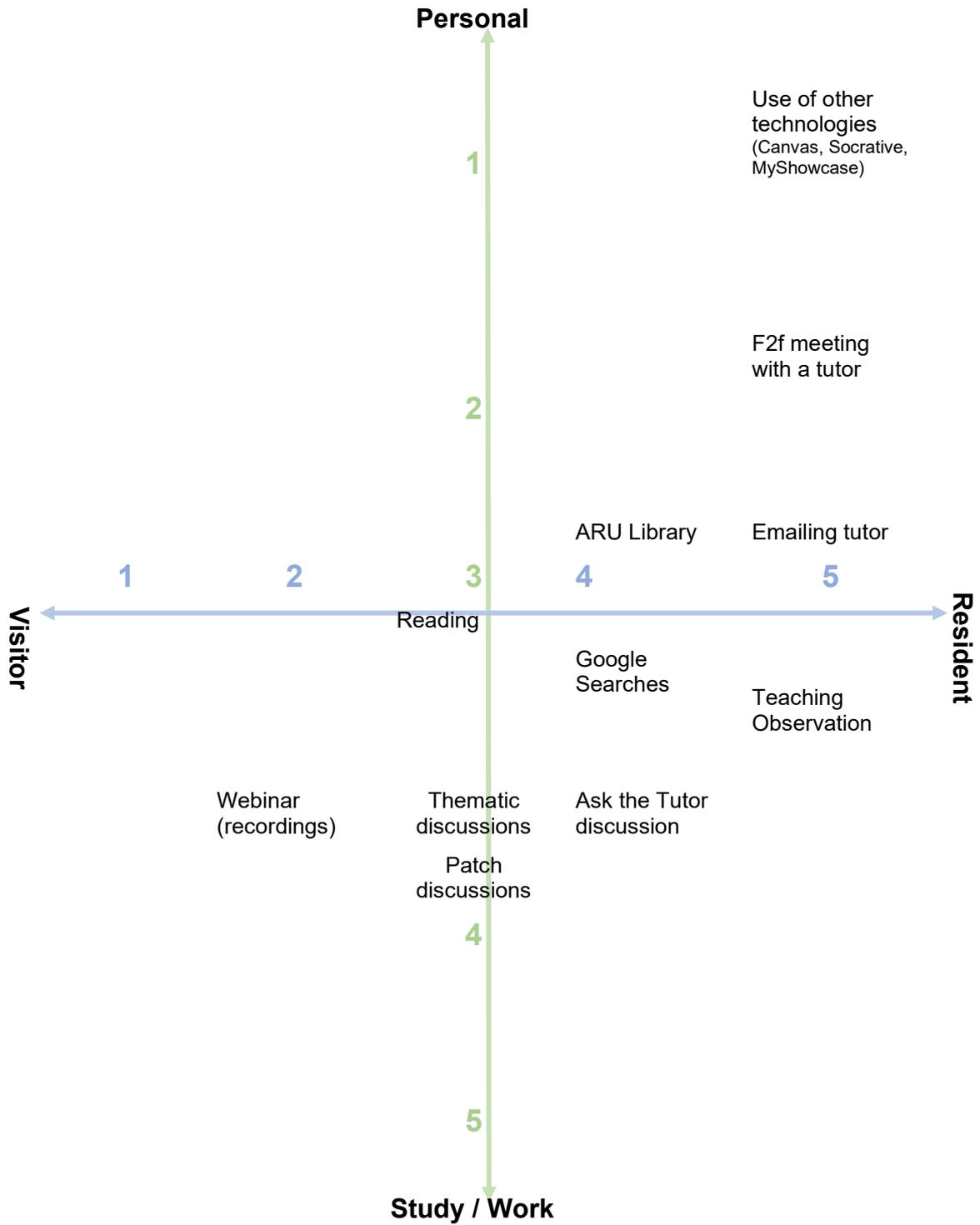


Figure 47: Participant 1 Activity Engagement Map

Participant 2 Activity Engagement Map

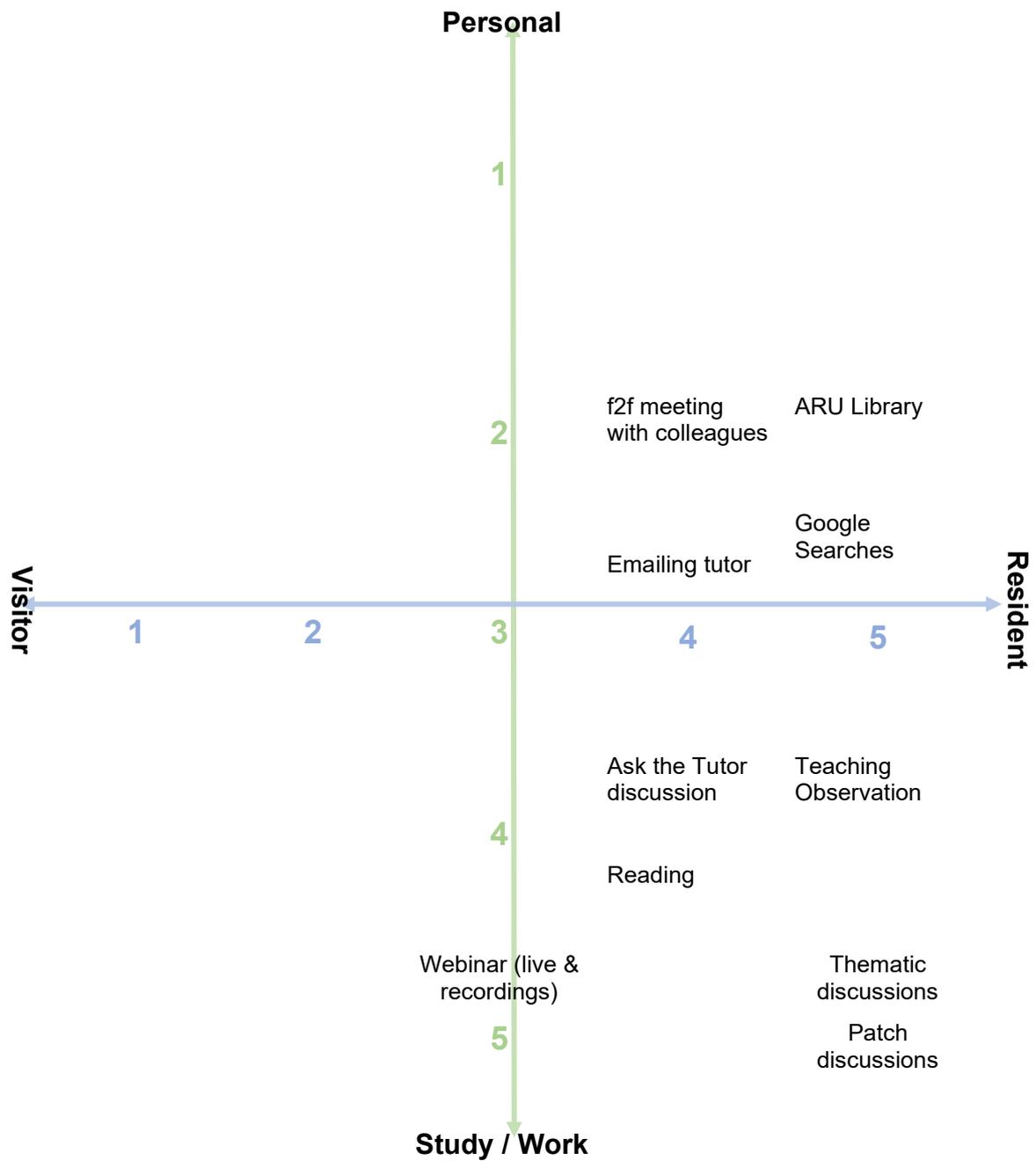


Figure 48: Participant 2 Activity Engagement Map

Participant 3 Activity Engagement Map

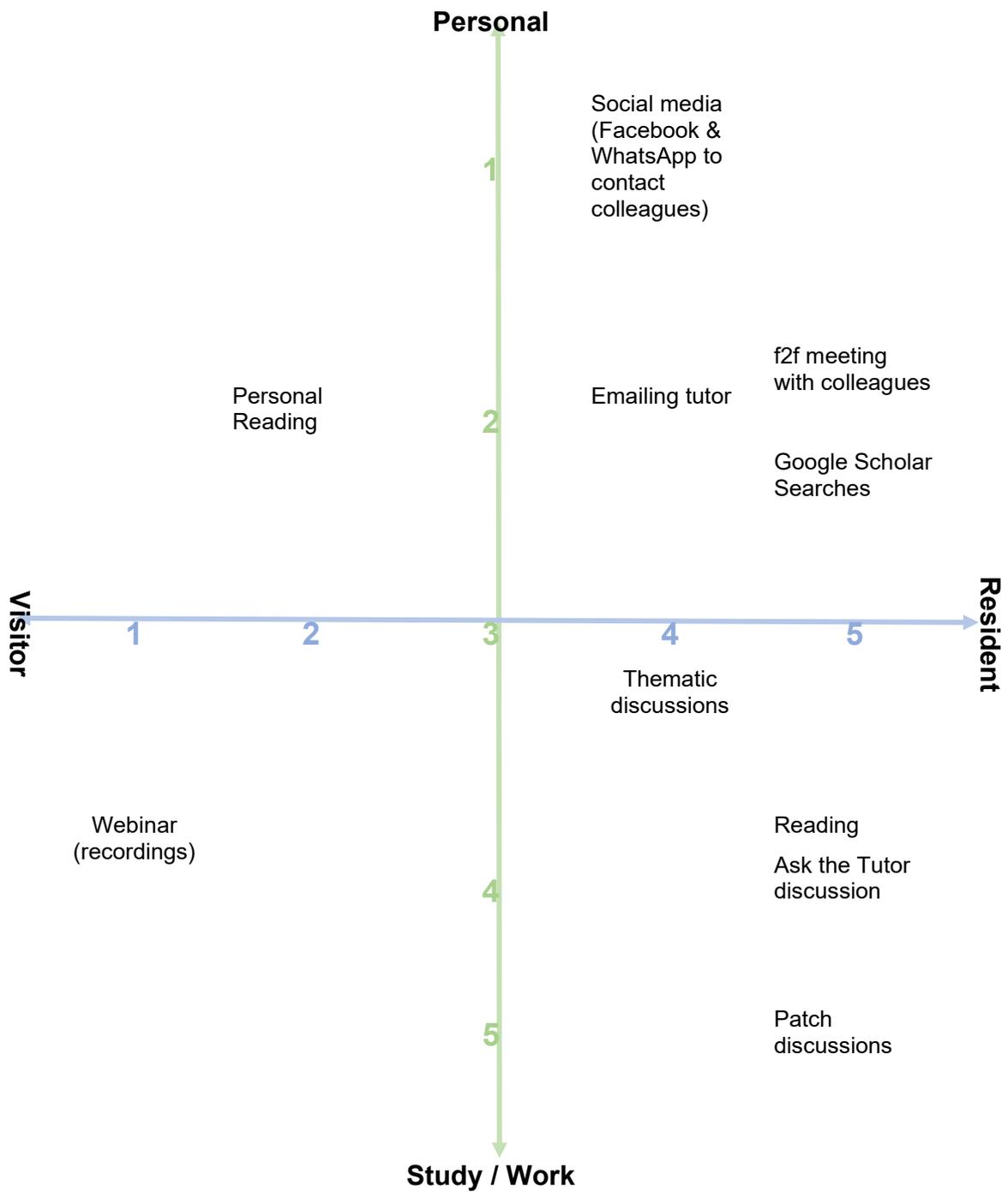


Figure 49: Participant 3 Activity Engagement Map

Participant 4 Activity Engagement Map

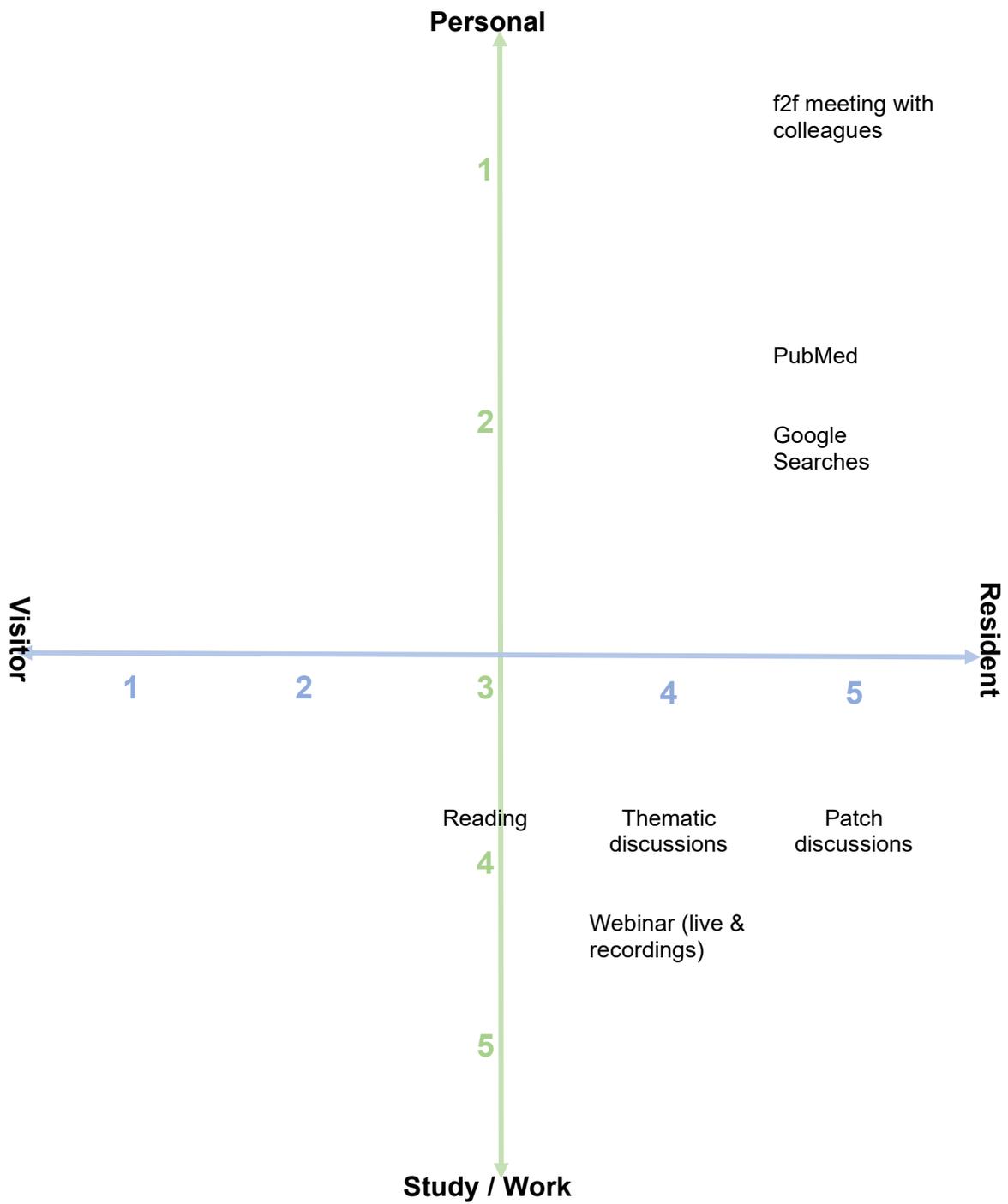


Figure 50: Participant 4 Activity Engagement Map

Participant 5 Activity Engagement Map

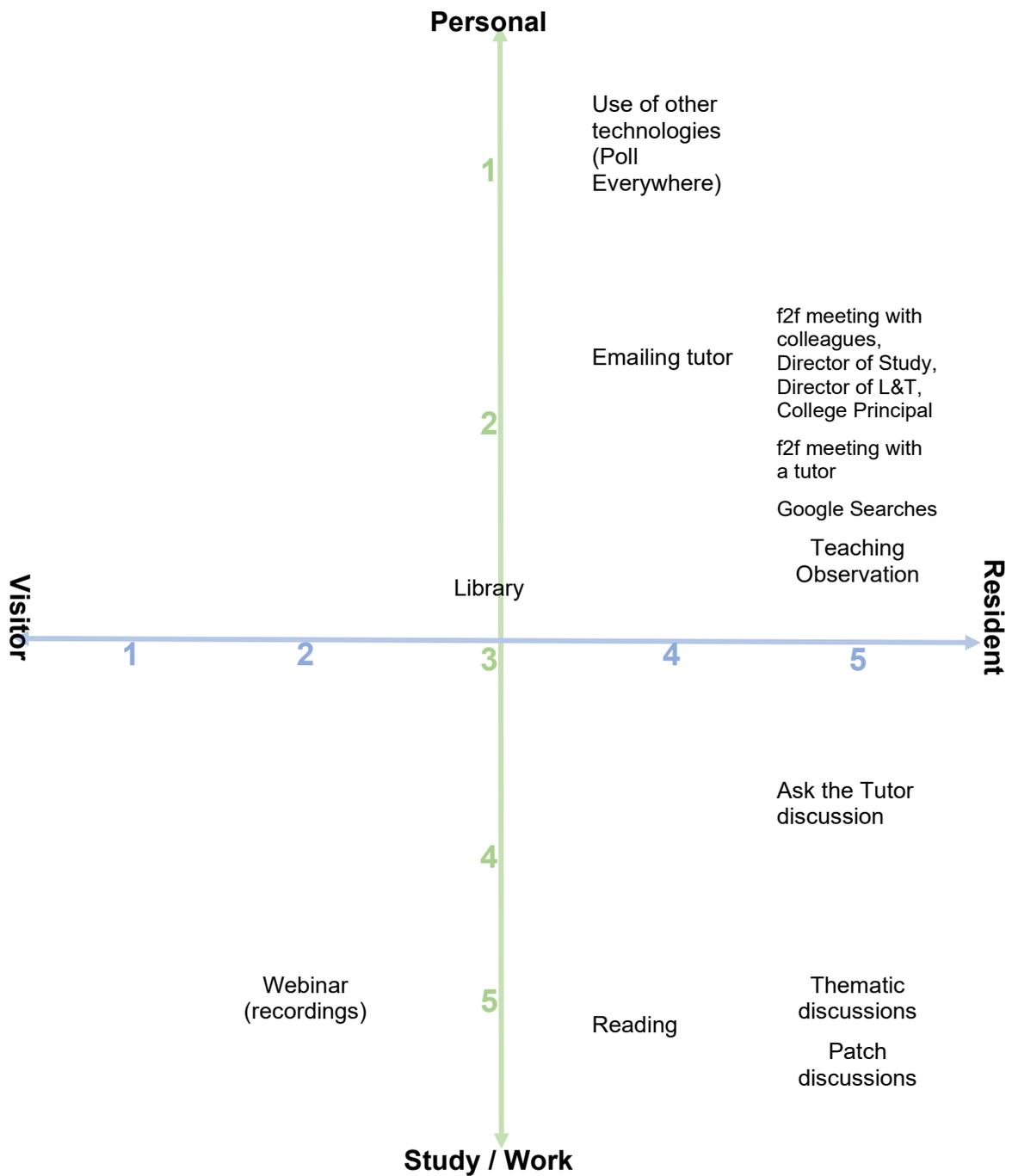


Figure 51: Participant 5 Activity Engagement Map

Participant 6 Activity Engagement Map

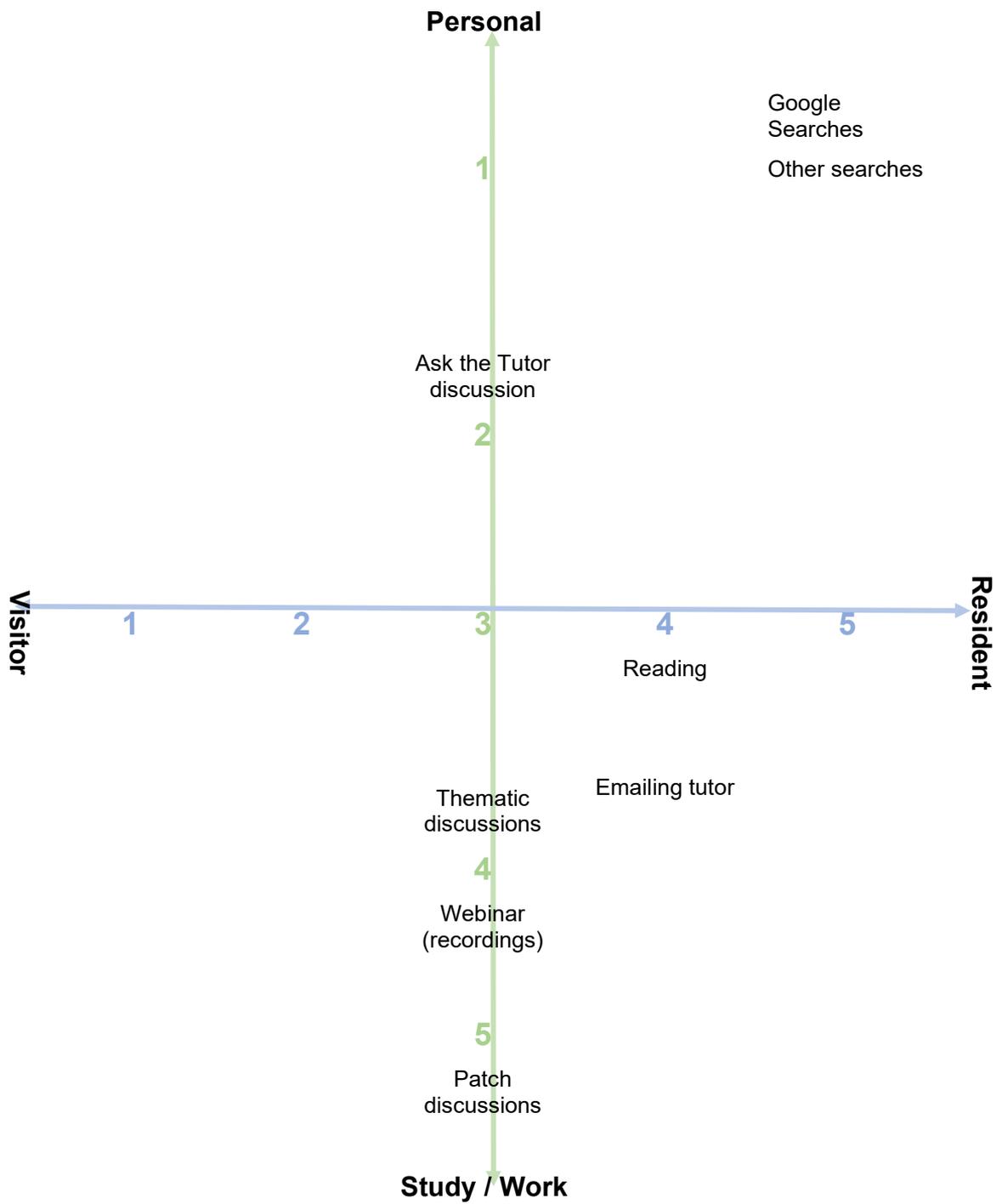


Figure 52: Participant 6 Activity Engagement Map

Participant 7 Activity Engagement Map

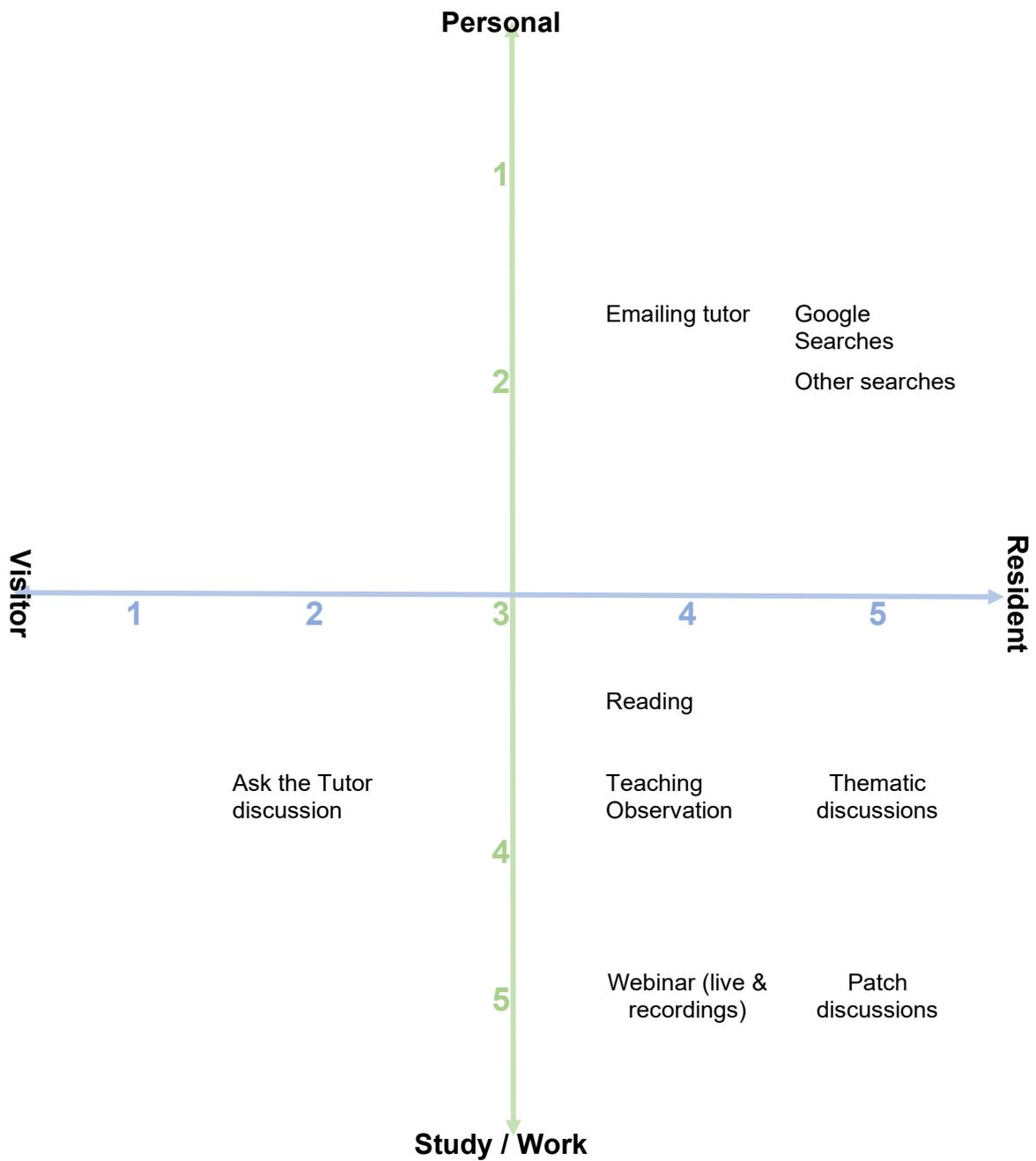


Figure 53: Participant 7 Activity Engagement Map

Participant 8 Activity Engagement Map

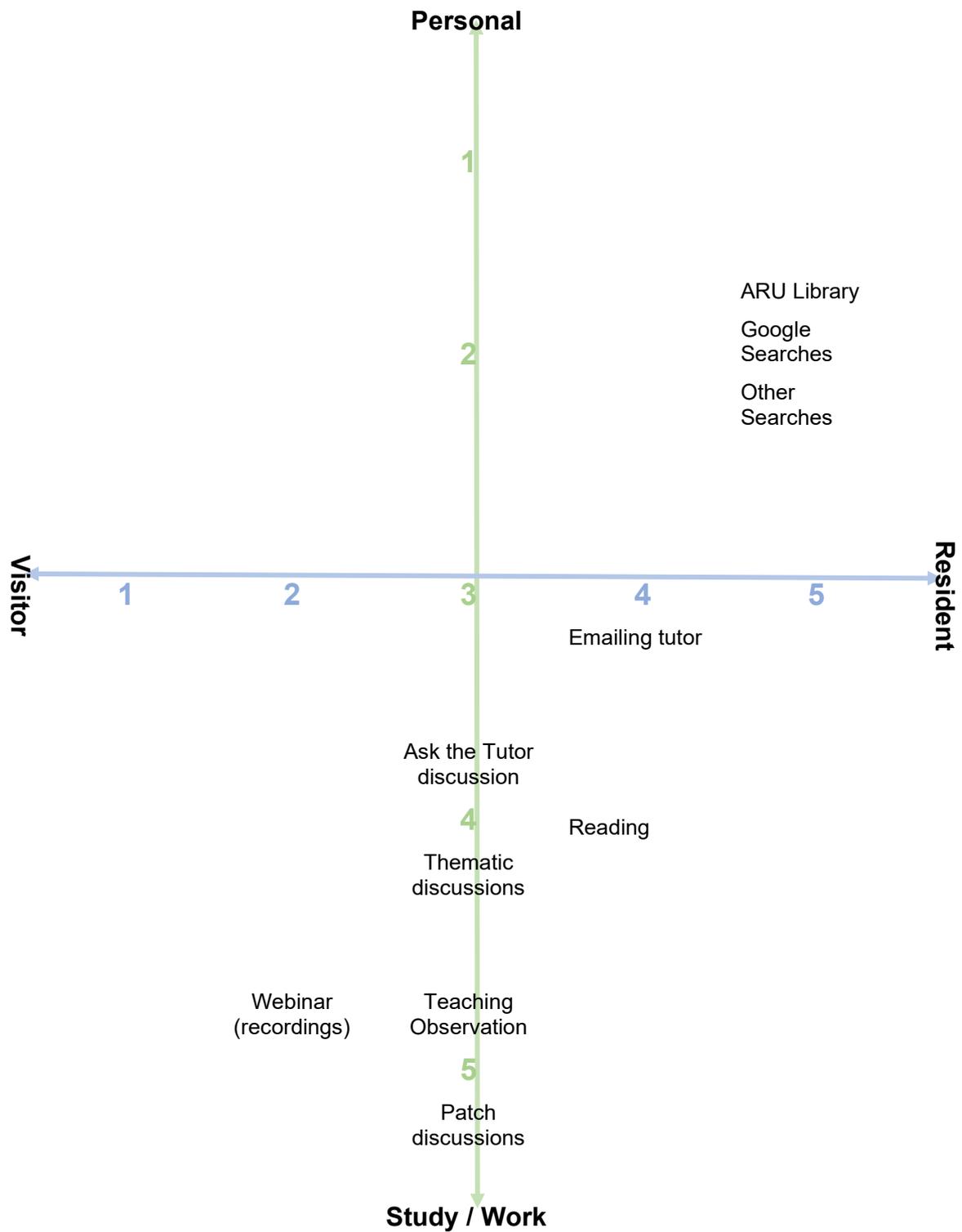


Figure 54: Participant 8 Activity Engagement Map

Participant 9 Activity Engagement Map

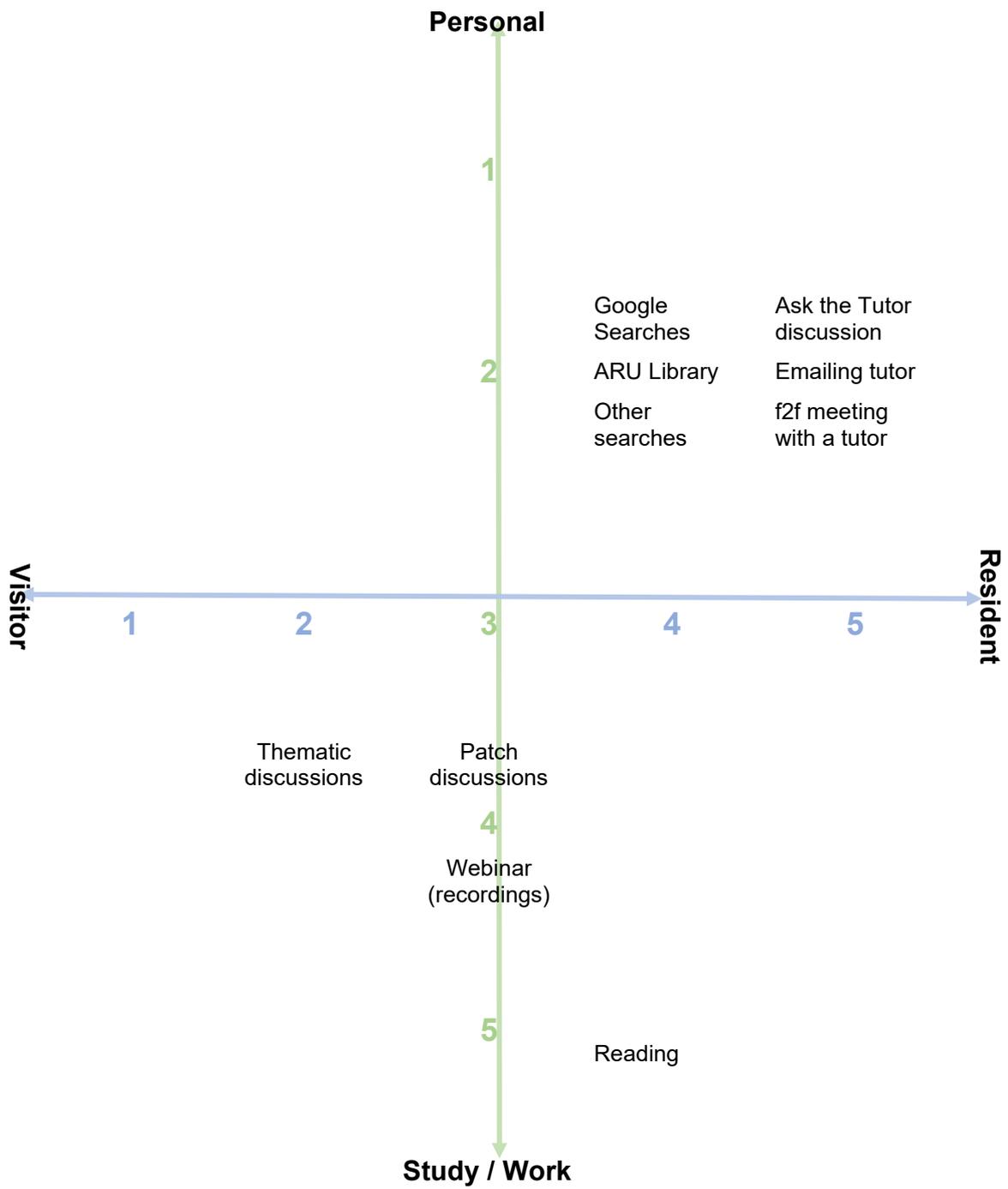


Figure 55: Participant 9 Activity Engagement Map

Participant 10 Activity Engagement Map

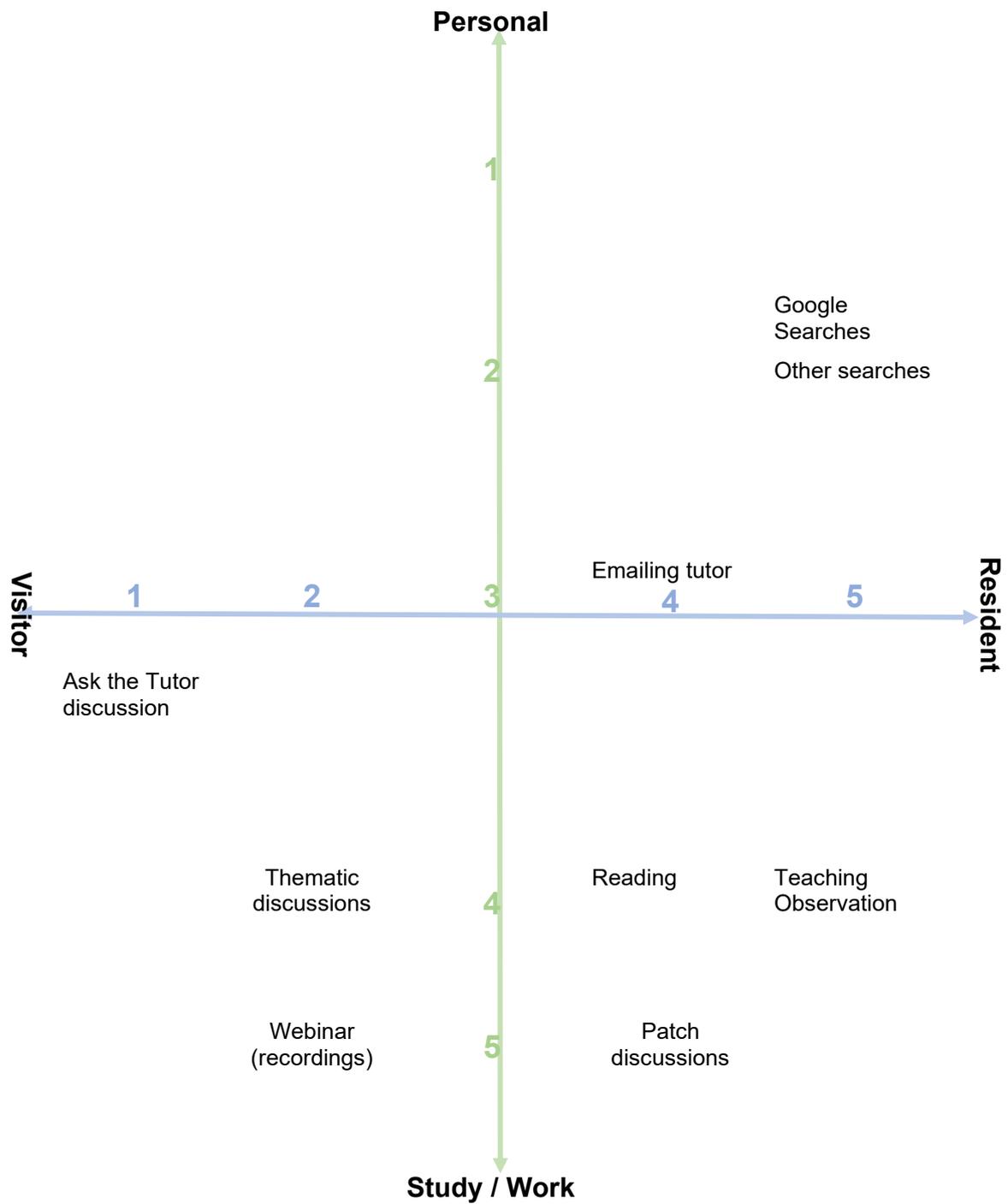


Figure 56: Participant 10 Activity Engagement Map

Participant 11 Activity Engagement Map

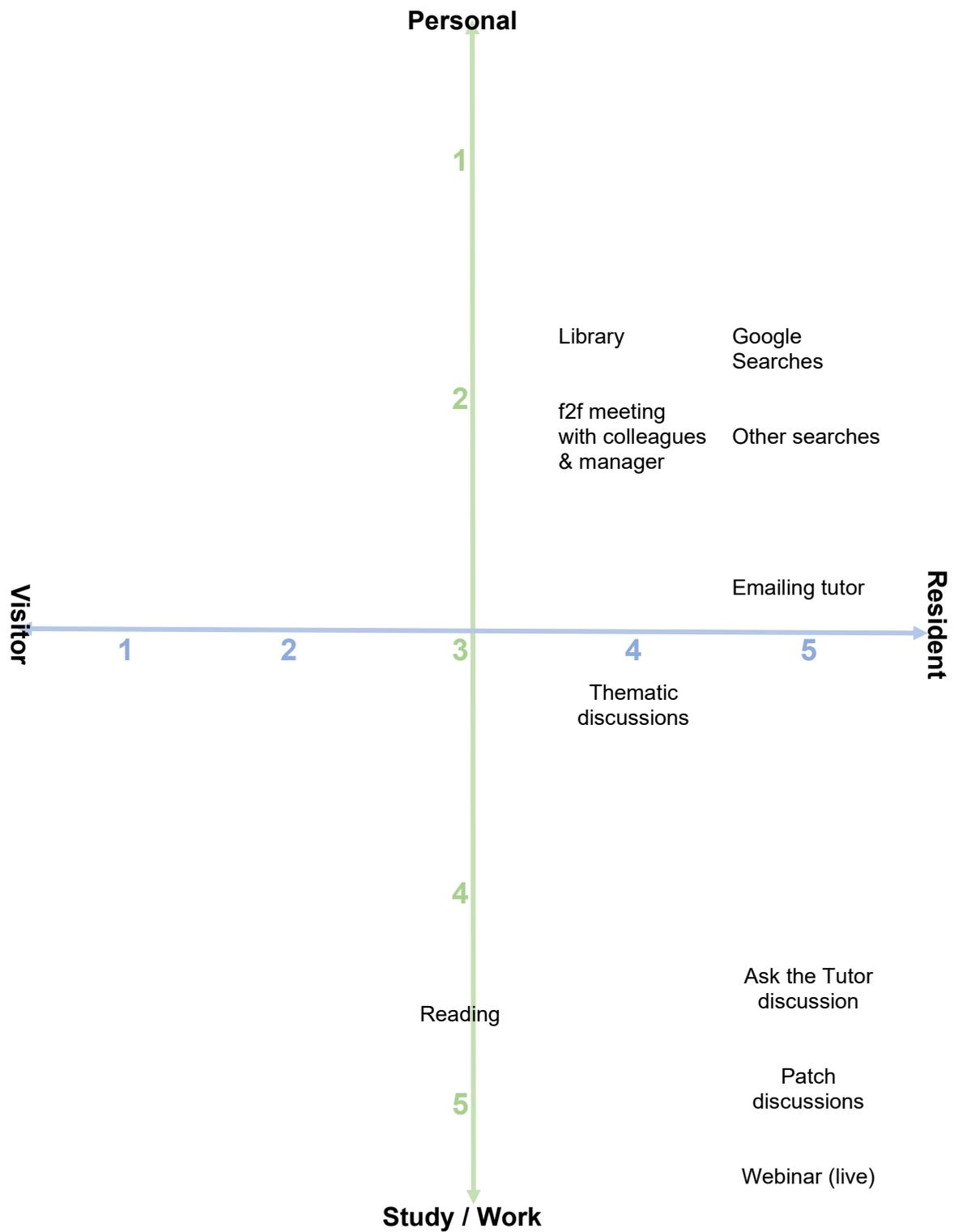


Figure 57: Participant 11 Activity Engagement Map

Participant 12 Activity Engagement Map

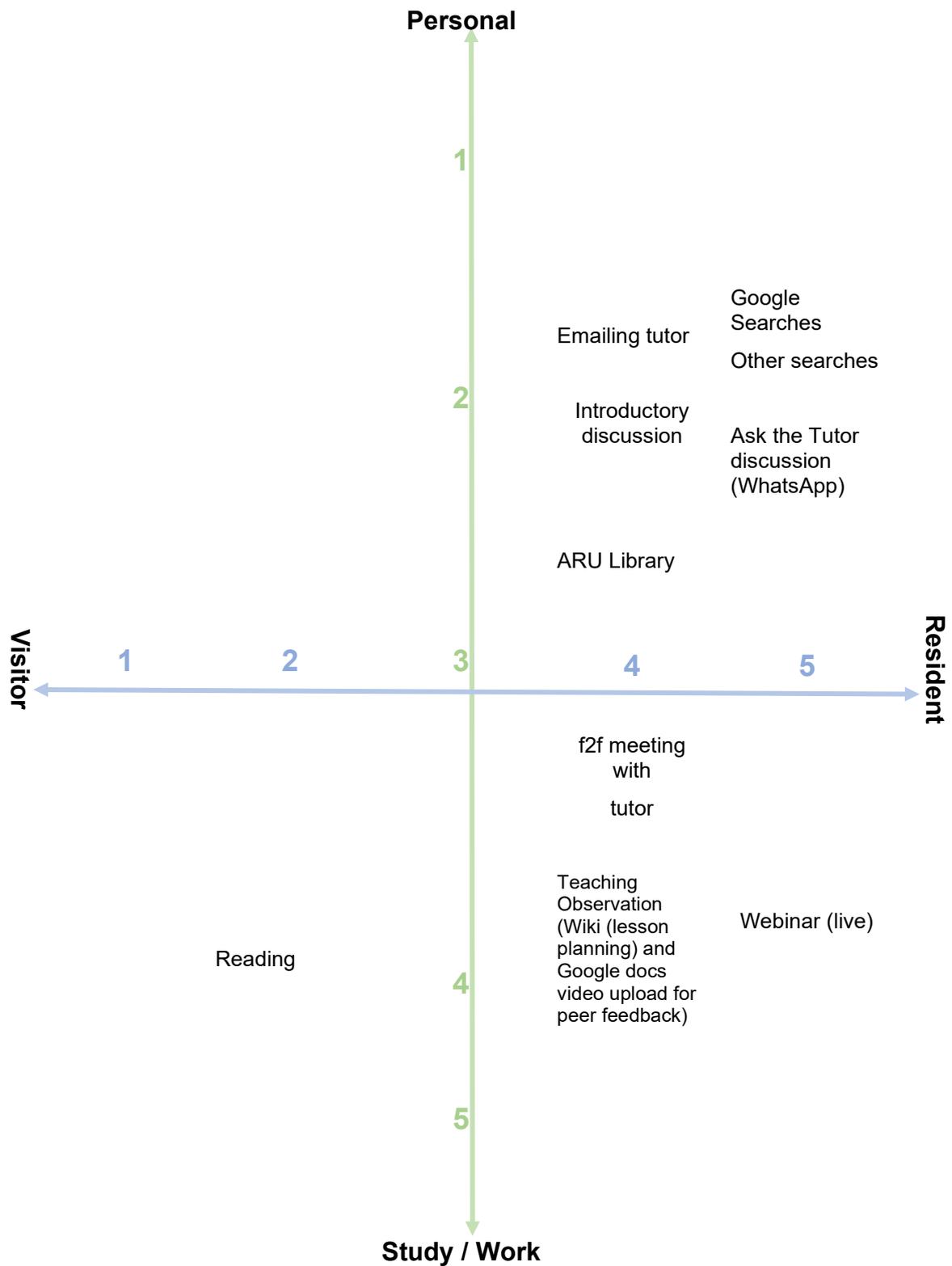


Figure 58: Participant 12 Activity Engagement Map

Appendix K: Short Portraits and Engagement Maps

Participant 4 Short Portrait and Engagement Map

P4 was a lecturer in statistics and research methods, at a University College in London and as such an external participant on the LTHE. P4 belonged to the 51 to 60-years age range and had a PhD.

P4 had little experience with distance learning before undertaking the course and was not comfortable studying at a distance and online. They were on one hand intrinsically motivated because they felt they wanted to know how to teach to be confident in it while on the other hand there was also an expectation that they had that qualification.

P4's-I main motivations were:

There are multiple motivations: One is definitely they would, like saying why haven't you done this yet, you're going to need to do this fairly soon. But also, I know, that I can do it better, I know, I'm not an expert and I want to learn how to do it better, so you know multiple motivations, internal and external

Barriers were being very busy with work and life. This included having teaching at times synchronous sessions took place as well as an accident in the second semester which impeded engagement.

The low engagement score derives from the participant focusing on engaging in asynchronous activities and low or no engagements with tutors (email, Inbox, f2f meetings, Ask the module tutor discussion) and other participants (face-to-face meetings, social media). P4 used their own sources but not ARU's library. Both the library and face-to-face meetings were difficult to access for P4 as external participant.

P4 Activity Engagement Map

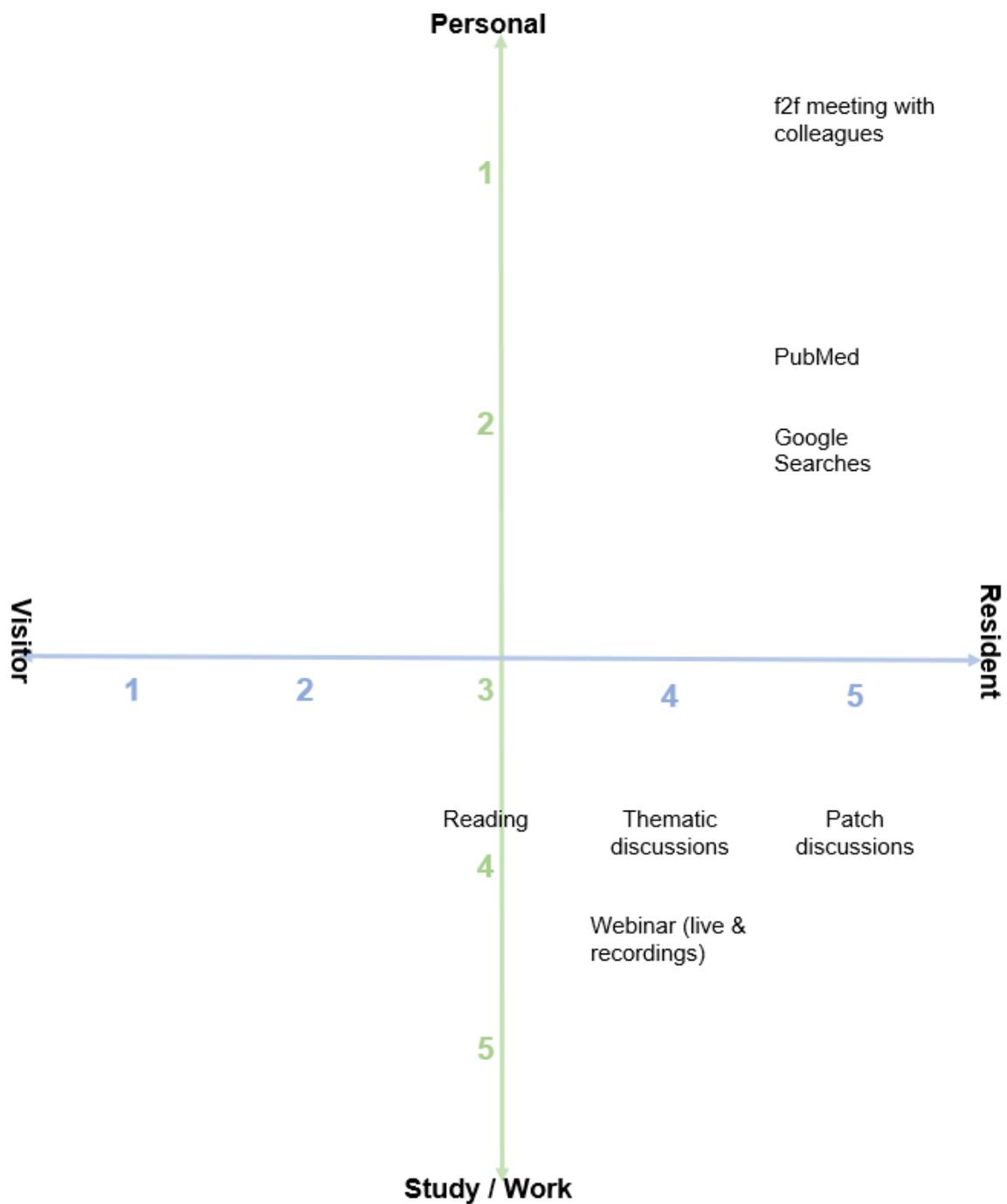


Figure 59: Participant 4 Activity Engagement Map

Participant 5 Short Portrait and Engagement Map

P5 studied on the LTHE and was a lecturer in Computing at an ARU partner institution. P5 belonged to the 51 to 60-year age range and had many years of professional experience working in a learning environment predominantly around

training and developing staff teams. P5 had a lot of experience with distance learning and was very comfortable studying at a distance and learning online.

Their motivation to undertake the PGCert was both extrinsic, the course was a requirement to teach and of being recognized as a university teacher, but also intrinsic to support a career in higher education and enjoying learning. P5 was highly motivated and engaged in the course because they wanted to learn.

I think for me, it's very much about making sure that I am qualified to the level of being able to demonstrate my knowledge in my abilities as well as my teaching style and how I actually teach in a higher education environment (P5-I)

I think the second reason and my motivation is that the environment in which I am working in, the university's ambition really is to ensure that all their lecturing staff are qualified to PGCE standard (P5-I)

P5's main barriers included balancing working and studying with their personal life. They felt it was important to get the backing of their partner and other people in their personal life to be able to achieve the degree.

What could have prevented me from engaging was my partner not understanding the intensity, in which I have to study. [...]. But the fact that we actually spoke about what that meant, meant that I had her buy-in (P5-I)

There were several reasons for P5's high engagement comprising their high motivation including professional incentives, a very structured approach to learning, and agreement to have the time and space to undertake these studies. P5 was also engaged with and was supported in their workplace.

P5 Activity Engagement Map

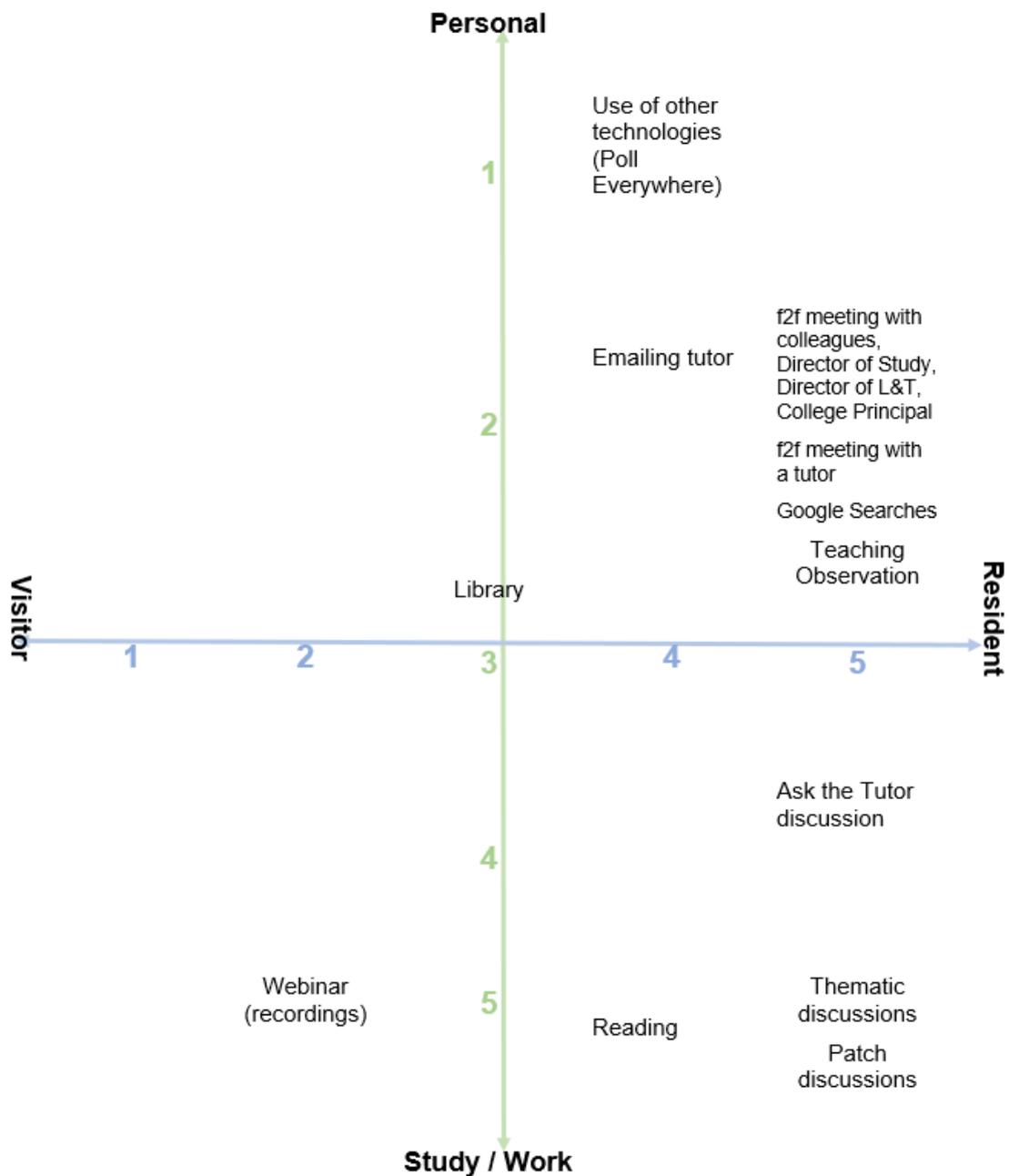


Figure 60: Participant 5 Activity Engagement Map

Participant 12 Short Portrait and Engagement Map

P12 was a participant on the MHCE. P12 belonged to the 30 to 40-year age range and was an experienced medical professional. Their role involved training medical staff junior to them. P12-I commented,

the way our training is set up, I basically have a lot of inputs in terms of training more junior medical students all the way through to the junior doctors' level just below me

P12 had some experience with distance learning before the course and was comfortable studying at a distance and online.

P12's motivation was twofold: To improve their quality of teaching through more experience in planning teaching and understanding pedagogic theories, and to be able to teach professionals from different specialism in a complex environment.

While not a requirement, the teaching qualification was part of her career progression as P12-I noted,

I will need to train and teach individuals, but also recognizing that those individuals are not necessarily going to have had the same training in teaching, I have received because they're not necessarily medical

Engaging with others was a motivating factor, especially in webinars. P12-I commented, "I've realized the more you are around the other people and, I am really glad I was able to be at the webinars, I was learning a little bit from them as well in that way".

There were a few barriers mainly around the design of the course, its navigation and access to modules or units which had timed prerequisites. P12-I mentioned that

in terms of barriers, I think a lot needs to be ironed out in it. You know the interface is quite difficult sometimes, particularly if you can't get into something, you think well, is it my problem'. And then, the fact that it's been quite difficult to kind of get into some of the modules, even when you're up to date with things

Like P5, P12 was highly motivated and had a structured approach to their learning. Different to most participants on the LTHE, P12's participation on the MHCE was not compulsory and it had a direct impact on their career progression.

P12 Activity Engagement Map

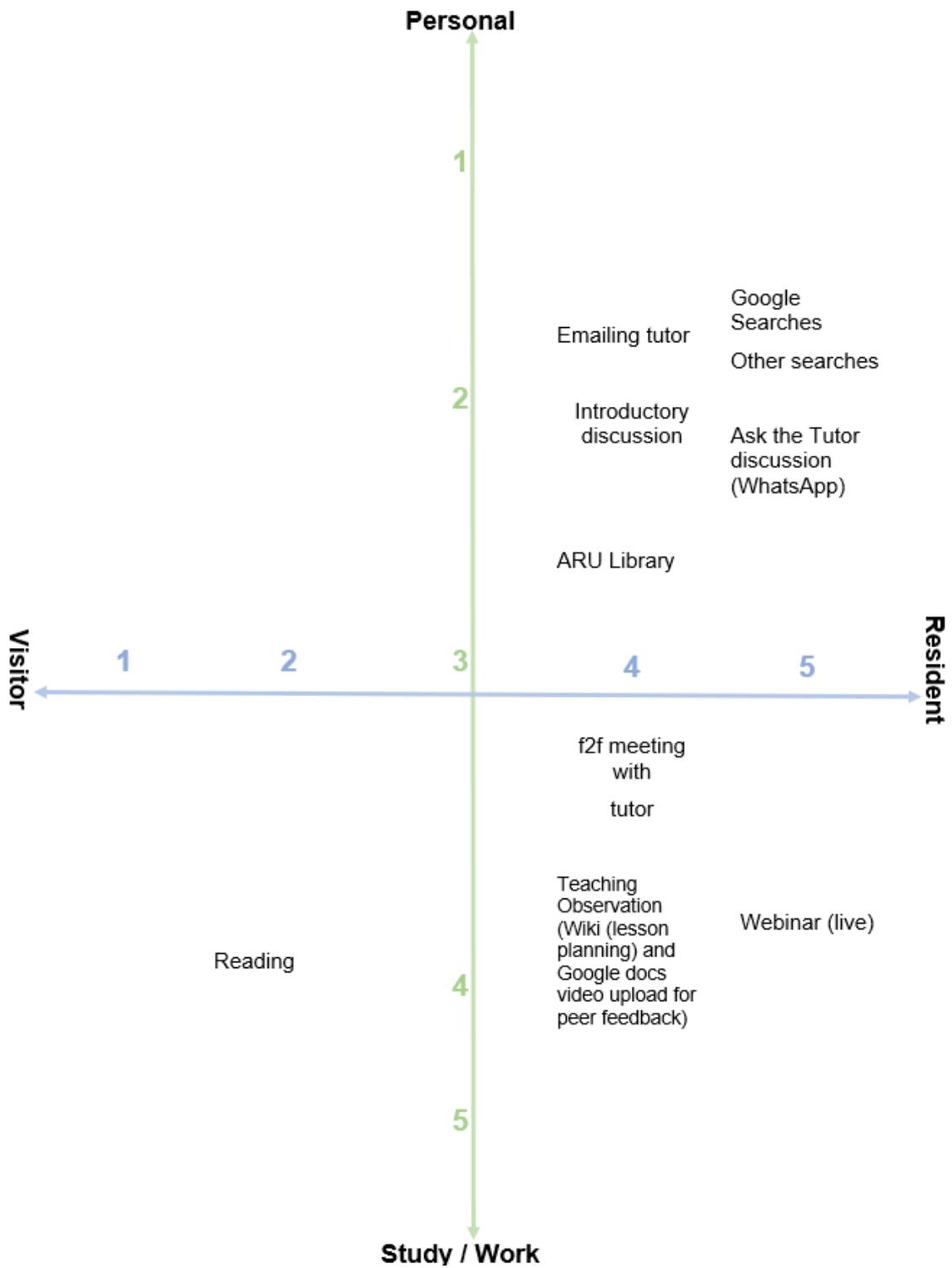


Figure 61: Participant 12 Activity Engagement Map