Redefining Practice: Challenging Academic and Institutional Traditions With Clinical Distance Learning

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Abstract: With the uptake of distance learning (DL), which has actually been marginal for most academics, teaching contexts, traditional power structures and relationships have been transformed, leaving lecturers potentially disenfranchised. Institutional and cultural change is vital, particularly changes concerning academic roles. The advent of DL has caused role ambiguity; however published literature related to academic roles is confusing and lacks clear guidance. For academics involved in post graduate clinical education, information is even more incomplete. Using a framework of communities, this study is a direct response to these concerns. The aim was to systematically and critically evaluate the implementation of clinical DL in an effort to improve practice.

Maintaining a practitioner inquiry methodology, this study investigated the development and delivery of a new DL module. Data collection consisted of documentary analysis of meetings, interviews with staff and students, student evaluations and analytics. Data analysis incorporated both quantitative and qualitative methods to triangulate the research findings.

New competencies for academics emerged, including leadership and management. Barriers to staff progress included: ambiguity in roles, lack of leadership and unpreparedness for responsibilities, time, and workload. Student barriers included: time, fear, relevance of learning, isolation and increased autonomy. Explicit planning, organisational support and working within communities were requisite to create a 'sustaining' technology.

This study contributes to educational practice on two levels. Firstly, by striving for rigour, it demonstrates that practitioner inquiry is a legitimate research approach that is accessible and valuable to teachers. Secondly, it adds to useful and applied knowledge concerning DL practice. Avoiding traditional workload assumptions that are erroneous and inaccurate, this study provides new models of organisational roles and responsibilities. The results challenge the evolutionary nature of academia, suggesting working in communities and new competencies are required whilst traditional roles and culture must be redefined.

Keywords: Distance learning, clinical education, academic staff, competencies, communities

1. Introduction to Problem

Learning technologies and distance approaches to teaching are being increasingly deployed in Higher Education (HE). There is pressure for academics to become more involved in distance learning (DL), although there has been both academic resistance (Ellaway, 2011) and lack of acceptance (Baran et al., 2011). This may be related to the well documented difficulties for academics including: confusion concerning the organizational culture (Briggs, 2005), a dearth of clear guidance (Ryan et al., 2004) and poor organisational support (Curtis, 2001) with DL innovations. Interestingly, in DL research, initially, the focus was on technological, practical and pedagogical aspects, but Casanovas (2010) suggests that we have failed to embed these innovations and change into educational institutions and organisational change is required. One of the major changes necessary concerns roles and competencies of academics (Baran et al., 2011). Academic roles have evolved over time and until recently, there was a relatively clear view of what that role encompassed. However, the advent of DL has led to a lack of clarity around academic identities and confusion over both roles and responsibilities (Wilbur, 2016, Baran et al., 2011). This clarity is essential as it is well documented that role ambiguity leads to job dissatisfaction and decreased performance in academics (Delgaty, 2015, Briggs, 2005). To further obscure the picture for those involved in clinical postgraduate education, the majority of research on DL has focused on undergraduates or children and has not focused on health professionals as learners (Cook, 2009).

1.1 Organisational Change

The majority of research on change in HE has not focused on DL, but on the removal of the two-tiered system and internationalisation (Robertson et al., 2009).While the majority of DL research has focused on student experience and implementation strategies, there is a less detailed understanding of how DL impacts the

Reference this paper as: Delgaty L, "Redefining Practice: Challenging Academic and Institutional Traditions With Clinical Distance Learning" *The Electronic Journal of e-Learning Volume 15 Issue 1 2017*, (pp17-32) available online at www.ejel.org

culture, roles and identities of staff (Hanson, 2009, Conole, 2004). In *Rethinking Pedagogy for the Digital Age*, Beetham and Sharpe agree and warn in the implementation of e-learning technologies '*the problem ... is more about the human and organisational aspects…..than it is about the use of technology*' (Beetham and Sharpe, 2007, p. xvi). The challenge for universities is not about how to use technology, but how to manage the changes *due* to technology.

Unequivocally, with the implementation of DL in HE, given the traditional paradigms that exist, significant modifications of existing models are necessary (Conole, 2002; Nunes & McPherson, 2002) that may threaten the evolutionary model of change within HE. Briggs (2005) warns that clarity concerning DL in HE has actually been insufficiently resilient in the face of change and roles of academics and the environment in which they are expected to work have changed. Finally, Blass and Davis (2003) suggest that the greatest need for change falls on the academic and the academic role must be fundamentally redefined and challenged. It is clear, universities, in general, need to re-examine academic roles related to DL, as the fundamental nature of teaching is changing. When looking specifically at DL and health care education, the findings are similar. Pettersson and Olofsson (2015) suggest that there are organizational conflicts in implementing DL whilst Wilbur (2016) advises there are unresolved challenges at both programme and faculty level when introducing DL into clinical education.

1.2 Role Change

The changing identities of academics involved in DL are supported in the literature (Delgaty, 2015, Pettersson and Olofsson, 2015, Hanson, 2009, Hovenga and Bricknell, 2006, Beaudoin, 1990) and the roles of academics are being threatened (Wilson, 2004) For academics, freedom is being threatened by the drive away from autonomous decisions and academic standards (Peterson, 2001) towards the new pressure of online delivery. However, Wilbur (2016) suggests how these roles are changing and how to actually change them is unclear. Briggs (2005) specifically addressed academic competencies in DL initiatives and warned organisations must define roles and develop frameworks to address the organisational and personal development challenges introduced by DL. A competent online teacher is a new and different role for academics, the competencies required are different and this is an area that is poorly understood. If academics are expected to create effective DL materials for clinicians, how can they plan workloads, create effective learning opportunities and be empowered to argue for resources if they are not prepared for the roles and responsibilities required? Research that informs and shares good practice is one way. Recently, the most cited article in Medical Teacher, a seminal journal in clinical education, was David Cook's: *'The Failure of e-Learning Research to Inform Educational Practice, and What We Can Do About It'*. Cook (2009) suggests we have been asking the wrong questions and to inform practice, we need to consider issues of both the institutional infrastructure and context.

What little, relevant DL literature that has been published suggests communities may be a practical tool to improve relationships and avoid this role crisis (Holley & Oliver, 2000), as an area essential in future research (Baran et al., 2011) and as a topic that would advance scholarship in DL related to in clinical education (Ellaway, 2011). This paper is a direct response to these arguments. Maintaining a practitioner inquiry (PI) methodology, this study focused on developing and delivering a DL module from both a staff and student perspective. Using a framework of communities, the inquiry questions are outlined below and were focused on informing frontline academic and institutional practice

1.2.1 Inquiry questions:

- What are the collaborative staff experiences when developing a DL module?
- What was the role of the academic during the development and delivery of a DL module?
- What obstacles were encountered by staff and students and how were they overcome during the development and delivery of a DL module?

1.3 Context

When reviewing literature on DL, the lack of information regarding context makes it difficult to apply the results to other settings and as a result difficult to inform practice. In three systematic reviews concerning DL in health care professionals (Lam-Antoniades et al., 2009, Khan and Coomarasamy, 2006, Wutoh et al., 2004) context was not specifically addressed and no effort was made to obtain additional information from authors. Cook et al. (2008), in a meta-analysis of DL and health care professionals, suggested that most of the literature

surrounding DL failed to describe key elements of context. For this paper to be useful to others and inform practice, the context must be described in detail.

Newcastle University's (a well-known 'Russell Group' university in Northern England) Master of Clinical Education programme recently delivered its first fully online module entitled 'Utilising Technology in Clinical Education' which contributed to a post graduate Diploma in Clinical Education http://www.ncl.ac.uk/msed/study/postgraduate/clined/index.htm(accessed Dec 2015).

At Newcastle University, DL has not been initiated on an institutional basis; this module was developed by an academic (the author), an administrator and a technician with no DL experience. All of the students (n=8) enrolled were full time practicing clinicians of varying grades and specialties. The module was asynchronous, ran from January to June and consisted of independent activities, moderated discussion forums, wikis, required reading, individual and group tasks. The final assignment consisted of a 2000 word critical analysis, using personal experience and literature, of any technology-enhanced learning initiative.

Feedback from students was overwhelmingly positive concerning the module and there was both a 100 percent pass and completion rate. However, unsurprisingly, the academic team experienced difficulties and challenges similar to the ones outlined earlier in this section, in both development and implementation. Therefore, in an attempt to examine and improve practice, this entire process was investigated and a formal PI was undertaken by the author, as academic lead on this project. The purpose of this inquiry was to systematically and critically evaluate the development and delivery of a DL module and was akin to a self-evaluation. Drawing on traditions of action research (McNiff and Whitehead, 2002) and teacher as researcher (Stenhouse, 1975) ways of improving instruction, increasing staff and student satisfaction, improving planning and improving student achievement were explored. By using a PI approach, theories about work from my own individual experiences of work were generated. This approach allowed me to respond to problems encountered in practice, a cornerstone of PI, and is grounded in theory (Wilson, 2004).

2. Methodology

2.1 Justification of Practitioner Inquiry as a Research Design

As introduced earlier, the introduction of DL into HE in general, and clinical education specifically, has been problematic for academics. Distance learning is a new teaching activity and requires novel approaches to research into both educational and organizational change (Pettersson and Olofsson, 2015). Therefore, as academics and practitioners, we need to be looking at novel and perhaps non-traditional approaches to research design in order to investigate these unique changes. One approach to researching the specific changes involved with the introduction of DL, is to use inquiry to explore the individual transformations of the teaching and learning environment by practitioners themselves (Farren, 2008). Using PI as an approach elevates the status of practitioner knowledge whilst facilitating the sharing, testing and validating of that knowledge (Wilson, 2004). Farren (2008) when specifically addressing DL, suggests that PI has the potential to allow practitioners to reflect systematically on their practice while implementing informed action. Finally, Wilson (2004) argues we need to wean ourselves from narrow research ideologies and suggests that inquiry into individual DL initiatives is the ideal platform to share and suggests it could be the ideal '*practical laboratory for learning*' (p. 83).

2.2 Theoretical Framework

Consistent with a PI approach, a broad assumption made in this research is that I, as a teacher, am key to my own educational change. I constantly theorize practice as part of practice itself. Furthermore, although this is local inquiry into my own practice, I see PI as far more broad educationally including: wider educational change and challenge to both university culture and policy context. McQuiggan (2012) suggests that academic faculty must be the catalyst for change with the introduction of DL. She suggests that academics must conceptualize the implementation as transformative to practice. Therefore, this nontraditional inquiry concerns the transformation of my DL practice with a specific goal of improvement. As a result, traditional paradigms of logical positivism and interpretivism did not help view this research inquiry. It was not about measurability, objectivity and predictability, nor was it about solely understanding and interpreting experiences; both forms of investigation would be necessary and valuable towards the research aim and inquiry. Dewey (1938) suggested that inquiry is an activity that deflated the dichotomy between theoretical and practical

judgements. By choosing PI, the boundaries between theory and practice or knowledge-generation and action were eroded.

The inquiry questions guided the theoretical stance, which was one of Pragmatism, although Pragmatists are not concerned with a particular theoretical position (Cohen et al., 2009). Pragmatists believe research questions are of primary importance; more so than the method or the philosophical worldviews that underlay the method. In Pragmatism, there is a logic of controlled inquiry in which rational thought is interspersed with action. Inquiry, to me, was a directed transformation of an indeterminate situation into a determinately unified one. This transformation requires practical action that must inform theory and the two are interspersed (Dewey, 1938). Fundamentally, practical action must inform theory and theory must be adjusted according to practical outcomes of the action. This correlated exactly to my inquiry and stance: theory and practice were not separate dimensions. Theories and distinctions were necessary to me, but not separate to practice. Theory was something I 'learned' from my direct experience and ultimately returned to inform experience. In this inquiry, theories generated about DL were due to my experience and these theories should ultimately inform future experiences. Cohen *et al.* (2009) proposed that this type of research should include small scale interventions in which teachers could investigate the functioning of the real world with an examination of the effects of individual interventions. This PI is my real life account of the 'structure' behind both developing and delivering DL. By making my inquiry public and sharing my results, the crucial role of teacher as researcher, which is essential yet has largely been ignored (Stenhouse, 1975), is evident. Ideally, this will enable others to learn from and see potential similarities in their situations (Winter, 2002).

2.2.1 Ethical considerations

Practitioner Inquiry can be ethically dangerous (McNiff and Whitehead, 2009) as the boundaries between inquiry and practice are difficult to define; yet demonstrating ethical coherence is essential for rigour. Full institutional ethical application was received prior to beginning the research.

2.3 Methods

There were the four main sources of data (documents, staff and student interviews, student evaluations, and web analytics) encompassing both qualitative and quantitative data, which, again, is coherent with a Pragmatic approach (Cohen et al., 2009).

2.4 Documents

2.4.1 Documentary data collection

Documents are stable and accessible sources of data, provide rich descriptive information and can help ground a study in context (Ary et al., 2010). Documentary analysis may be useful for *'rendering more visible the phenomena under study'* (Cohen et al., 2009, p. 201) and may show how situations and processes have evolved over time. All departmental files were searched beginning in 2008. In total, 35 relevant documents (curricular committee minutes and team meeting's minutes etc.) were found.

2.4.2 Documentary analysis

Qualitative content analysis was used in coding these documents. Graneheim and Lundman (2004) described **qualitative** or **thematic** content analysis as a method of analysing data that is used to interpret meaning from the content of text data. Thematic content analysis is a useful tool in the analysis of educational documents as it may help identify factors stressed, ignored and the influence of both social and political factors

2.5 Interviews

2.5.1 Interview data collection

Two distinct groups of stakeholders were interviewed to explore different perspectives: the staff (n=3) who were involved in the development and the students (n=8) who were involved in the delivery. Semi-structured interviews were used, a common approach in qualitative research, allowing previously unidentified areas of importance to the participants to be explored (Kvale, 1996). Lasting on average an hour, a set of open, predetermined questions were used which were both pre-tested and piloted. The questions were focused loosely on: overall experiences before (staff) and after (staff and students) the module went live, barriers and facilitators related to contributions and participation on the module and other questions emerging naturally from the interview itself.

2.5.2 *Interview analysis*

Again, broadly following Graneheim and Lundman's (2004) model, overarching descriptive labels or themes were developed, while ensuring that all coded material was included. Then, using both the interview questions as a guide and the descriptive labels which emerged as the transcripts were read, the themes were reviewed and defined.

2.6 Evaluations

2.6.1 *Student evaluations data collection*

In e-learning environments, evaluation questionnaires are a valuable method of successfully capturing phenomenon in an objective manner (Hermans et al., 2009), are recognised to be both economical and time-efficient (Cohen *et al*., 2009), and can potentially be generalisable to a wider population (Robson, 2002).
Student evaluation questionnaires were sent out electronically four times, spanning the entire module. These questions included: rating scales and open ended questions concerning strengths and weaknesses of the content, delivery and general experiences of the module. Arguably, although the entire cohort was evaluated, a small sample (n=8) cannot be said to be representative or generalisable. However, a high response rate (mean of 90% with four evaluations) may have increased the generalisability of results (Robson, 2002).

2.6.2 *Student evaluations analysis*

Quantitative data was entered into a Microsoft Excel spread sheet and descriptive statistics performed. Free-text responses were transcribed, the data was read through, codes were assigned and broad themes emerged.

2.7 Web Analytics

2.7.1 *Web analytics data collection*

Web analytics provided the opportunity to explore staff and student behaviour patterns online. They have been used primarily in business to track consumer groups related to marketing efforts, but can be used as a powerful way of extracting actionable knowledge in distance education (Rogers et al., 2010). The data was approached from a positivist viewpoint and was treated as an object that could be captured and measured (Crotty, 1998) and interpreted objectively.

2.7.2 *Web analytics analysis*

Adhering to ethical standards, data was retrieved and online staff and student working profiles were created using simple statistics. All data collected was anonymous and analysed by groups, not individuals.

3. Results

3.1 Introduction

The results are presented beginning with the staff perspectives then student perspectives. The analytics, encompassing both perspectives are presented last, providing an overview of both stakeholders. Wherever possible, the results are displayed in a table view facilitating clear definitions and structure to the results, adding both rigour and robustness to this research by demonstrating transparency (Cohen et al., 2009) and credibility (Kalinowski et al., 2010).

3.2 Staff Perspective

3.2.1 *Course documentation*

Using Nvivo, all module formal documentation (n=35) was coded, refined and grouped into the five themes presented below (Table 1).

Table 1: Themes and codes from documentary analysis

Theme	Definition of theme	Codes making up theme
Responsibilities	Issues of who was doing what and how the module was to be delivered. There were several concurrent meetings when the interface and roles or responsibilities were not clear.	Jobs, Managing, Administrator Tasks, Supervision, Clarity/lack of responsibility, Roles, Leading, Who is doing what?
Vagueness	A certain vagueness, we'll have to 'wait and see' feeling was present. Individuals were frequently unprepared, absent or filling in for someone else and not familiar with the agenda.	Waiting, Too busy, Vague timings, Vague jobs, Imprecise information
Institutional processes	The top-down initiative and formal processes. There was an awareness of the university hierarchy. Involvement with 'the school' appeared to be more of a threat, or a tool for action, as opposed to a developmental process. There was not a clear (formal or informal) power structure.	Accountability, Who is in charge? Ignoring lack of progress, Power, Control, Authority, Influence
Communication	There appeared to be barriers to discussion and conflicts as to the developmental process. Several questions were asked in the meetings and the answers were incomplete.	E-mail, meetings, discussion Clearness/lack of clarity, No pattern of communication, No past habits of communication, 'How' do we communicate?
Temporal issues	Time, progress and deadlines were mentioned repeatedly. However, these appeared to conflict in that: individuals were not aware of them, they were meaningless or alternatively they were structured and necessary.	Time, Deadlines, Speed, Targets, Aims, Sequence, Chronology

3.2.2 Staff interviews

Using Nvivo, the interviews were coded, refined and grouped into the five themes (Table 2).

Table 2: Themes and codes for staff interviews

Theme	Definition of theme	Codes making up theme
Change	This was any clear indication of change that was taking place. It did not matter at what level; there was some movement or attempt to move.	Emergent, Planned or cultural change, Change in tradition, Organisation support of change
Practicalities	This was any technical or pragmatic issue. It was about the day to day work that needed to be done on the module and was tangible.	Time, Delivery 'Getting on-getting the job done'
Influence	This concerned power or position. It was a broad theme that consisted of outside 'influences' that were less tangible but affected the development process.	Leadership, Supervision, Motivation, Vision, Rationale Empowerment, Managing
Group Behaviours	This encompassed anything the team, or those involved peripherally did that affected and/or involved others. It involved specific group behaviours, not general influences.	Teamwork, Group actions Communication, Conflict, Roles, Administrating
Individual	This concerned the expectations, or behaviours of individuals. It included individual characteristics of people.	Accountability, Trust, Individual actions

3.3 Student Perspective

3.3.1 Student interviews

Using Nvivo, student interviews were coded, the results refined and four themes emerged (Table 3).

Table 3: Themes and codes for student interviews

Theme	Definition of theme	Codes making up theme
Other participants	This encompassed anything that students said concerning other students or staff. It could have been when others were contributing, identifying who other group members was, or how they reacted to other students. It was an external factor concerning another member of the group-including the academic.	Contribution of others Others in general, Identification of others, Academic role, Knowledge expert, Moderator, facilitator
Personal attributes or behaviours	This was an individual or personal perspective. It was usually something of an affective nature (motivation, fear, isolation). It was a personal view of what helped or hindered them, internally, in e-learning	Confidence, Motivation, Isolation or working alone, Facilitation or support, Expectations
Value to individuals	This encompassed anything that the student thought was valuable to them or relevant to them as clinicians or teachers. It was focussed on the individual, but at a pedagogical level. It included personal examples of what was helpful and indications of things that were student or learner centred.	Examples or experience Theory/practice balance or relevance, Learner centred or learner needs
Concrete issues	This was a more concrete theme and included comments concerning the layout, structure, timings and evaluation of the module. Technology itself was included in this theme.	Content, Structure, Time, Administration , Planning, Evaluations, Technology, More efficient use of technology in communication

3.3.2 Student evaluations

Using Nvivo, students evaluations were coded, results refined and three themes emerged (**Table 4**).

Table 4: Themes and codes in student evaluation data

Theme	Definition of theme	Codes making up theme
Individual behaviours and processes	This encompassed issues that were complex and personal. It involved personal internal processes and was related to individual behaviours, attributes or interpretations.	Confidence , Identification of others, Accountability, Responsibility, Isolation and working alone, Learner centred/own learning needs, Theory practice balance /relevance, Individual technology use in communication, Other's contributions, Knowledge expertise of academic
Technical or practical issues	This included codes that were functional or technical in nature. They were concrete and tangible and geared towards practical and quantifiable issues.	Time, Reading/accessing resources, Experiences/Examples, Technology itself
Structure and Administration	This theme included anything controlled by external practice. These may have been complex issues, but were processes or issues that were influenced or controlled peripherally and external to the individual students	Facilitation/ Staff Support Administration/structure, Evaluation, Academic roles, Moderator, Facilitator, Setting social rules

3.4 Web Analytics: Staff and Student Perspective

3.4.1 When were staff working online?

Over 75 percent of the recorded academic time was spent outside of 'normal' work hours (**Figure 1**).

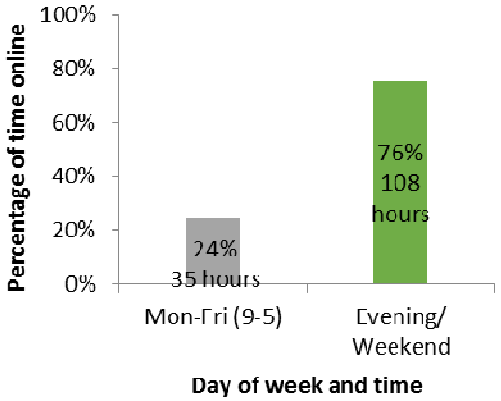

Figure 1: Timing and pattern of staff contributions

3.4.2 When were students working online?

Almost 70 percent of the all contributions from students occurred outside of normal working hours (**Figure 2**).

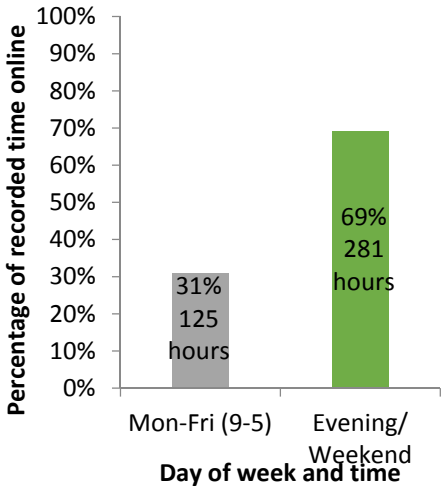

Figure 2: Timing and pattern of student contributions

The students contributed most regularly on Sundays (Figure 3) and the busiest 4 hour period was consistently 2000 hrs. until midnight (Figure 4 and Figure 5). This was contrary to the literature which suggested Monday as the most popular day and the busiest period being noon until 1600 hrs. (Rogers et al., 2010) for online contributions in DL.

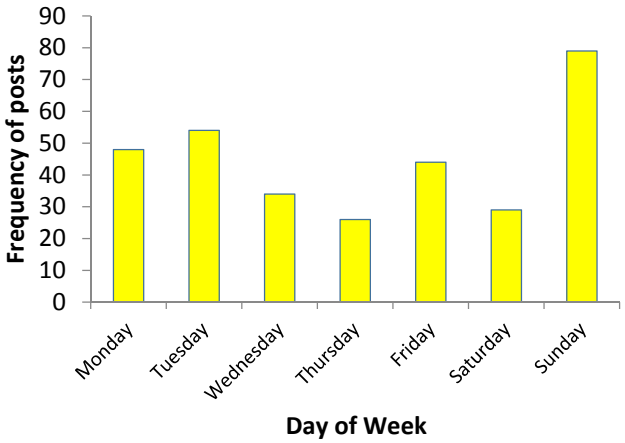

Figure 3: Postings by day of week

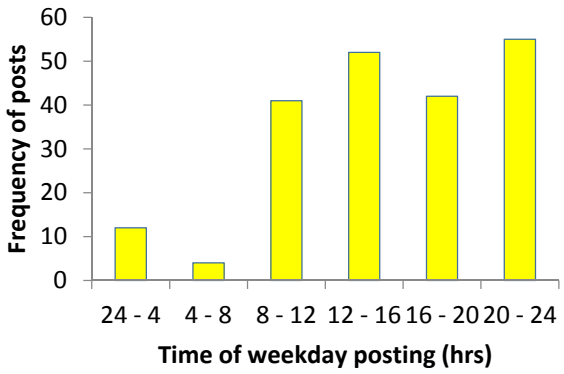

Figure 4: Time of posting on weekdays (M-F)

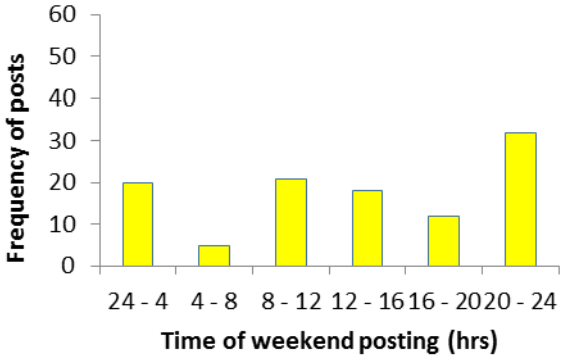

Figure 5: Time of postings on weekends (S-S)

4. Analysis

One of the ways to establish rigour in PI is to demonstrate critical reflection, validity, transparency, theoretical coherence and fulfillment of original inquiry questions (McNiff and Whitehead, 2009). Furthermore, Elliott et al. (1999) suggest to exhibit rigour, data must be situated in context and grounded for readers, using verbatim examples of responses. Therefore, for robustness, the results below are presented in situ, affording the reader

the opportunity to interrogate the raw data, not just read a description (Elliott et al., 1999) in relation to the original inquiry questions.

4.1.1 Inquiry questions:

- What are the collaborative staff experiences when developing a distance learning module?
- What was the role of the academic during the development and delivery of a distance learning module?
- What obstacles were encountered by staff and students and how were they overcome during the development and delivery of a distance learning module?

4.1.2 What are the collaborative staff experiences when developing a distance learning module?

4.1.3 Lack of clarity in development

In analysing the results related to the development (or before the module went 'live'), the most overwhelming initial themes were those of lack of clarity in roles, responsibilities and related changes. This was seen in staff interview comments such as:

> *"I think your [the academic] role became more transitional, it was not clear…it was mutual, dynamic."*

Was the academic responsible for chasing others or solely for writing the academic content? Was it clear to the rest of the team? The rest of the team thought the academic should be chasing others, taking initiative and directing this project as a programme manager. This was evident in the staff interview:

> *"We are here to deliver what you [the academic] need, so if we are not doing that, then it is your [the academic] job, I mean, you [the academic] provide the direction really."*

Alarmingly, with failed or delayed implementation of DL initiatives, there is a tendency in the managerial discourse to blame the individual academic for ill will, indolence, ineptitude or indiscipline (Knight & Trowler, 2002). Interestingly, this was one of the most fundamental questions asked during this module. If this module was not a success, was the academic at fault? It was also an issue for the rest of the team:

> *"If the module was a complete flop, it would be your [the academic] flop. Although, you [the academic] have been asked to do something and it is your [the academic] responsibility, but you are 100% reliant on IT services to do what you [the academic] need to do. So, if you [the academic] are let down, I can't see how you [the academic] could be held personally accountable, but um..I think you [the academic] are…yep it would be your [the academic] flop. It is difficult. I think yeah- this process has opened my eyes, really."*

The documentary analysis of minutes supported this confusion:

> *'***** expressed concern that the team was not all aware this would be going live and made available in January.'*
> *'***** is concerned a decision about where this new module will be hosted has not been made and she asked whose responsibility is this to decide?'*

It slowly became obvious the academic was responsible for the success or failure of this module and would be held accountable.

4.1.4 What was the role of the academic during the development and delivery of a distance learning module?

4.1.5 Development phase

The academic role in the development (or before the module went 'live') phase, did not concern anything related to content or knowledge to the other staff members, but managerial tasks were important.

> *"As module leader maybe it should have been you [the academic] doing the chasing from the start. I understand your [the academic] difficulty in that- because of the hierarchy- because of the different teams, but no one was doing that, and I mean, you [the academic] are the module leader, right?"*

The team was aware they were being asked to do something difficult, out of their comfort zone and had no power or voice to make demands and it was unclear who was leading. The 'team' existed within the rigid structure and hierarchy of the University and it was obvious this positional or traditional power was important and the academic should be leading and administrating:

> *"There needs to be someone influential enough to take things forward. We don't have that positional power. Everyone has a slightly different opinion, but ultimately, you [the academic] are, ah have to, ah deliver the module. It has to be a compromise…. I think you're [the academic] role became more well…. it was not clear cut technical or anything...I think you [the academic] were supposed to be in charge."*

It was clear the rest of the team expected the academic to lead, organise and support the team. Communication expert was highlighted as a required managerial competency. There was generally a feeling of poor communication within the smaller team, and within the University as a whole.

> *"There were certain things that were not communicated well- like things not looking black and white - a lot of the things we asked for, just were, not done but we didn't know why or who was supposed to be doing them. Was it time or was it the fact that with the difference in personalities they thought we were just being picky? We wanted it to be right and they are hoping it just functions the way it is."*

This was also supported in analyzing the team minutes:

> *'**** explained she had sent both storyboards and PPT on to IT and is still waiting for any feedback. She also asked who was coordinating this over summer and who decides if it will go live in time?'*

4.1.6 Development roles (staff perspective)

Three main development roles and associated competencies became apparent for the academic. These roles were all necessary before the module 'went live' to students and included:

Administrator: The academic needs to be supervising the staff team. They require the explicit power to control and manipulate resources. Required competencies include: Resource allocator, resource planner, monitor, and coordinator.

Manager: The academic needs to take control and direction for DL initiatives. They need to assist others and devise teaching materials and methods. Required competencies include: Communicator, expert, organiser, supervisor, supporter and evaluator.

Team Leader: The academic is required to provide guidance and direction to other staff members and the institution. The team leader monitors progress, offers guidance and facilitates achievement of key targets. Required competencies include: Visionary, planner, securer, course developer, curriculum planner, and marketer.

4.1.7 Delivery roles (staff perspective)

The role of the academic while the module was delivered (or after the module went 'live') was very different. Student interviews suggested value in the role of the academic in providing information and being an authority in content.

> *"You [the academic] made it clear what we needed to do…your [the academic] knowledge around the literature was solid, the reading lists were appropriate and the topics we discussed were relevant to us as clinicians."*

A second major aspect concerned the contributions the academic made. The speed and frequency of facilitation as well as the facilitation itself was important:

> *"You [the academic] saw links between our posts that maybe we hadn't picked up on and I found that the most useful thing. We were all talking along one discussion forum, but making our own comments on the topic. You [the academic] guided the discussion."*

This concept was supported by the web analytics. Learner/instructor dialogue has been the focus of research, the findings of which suggest that the speed of academic response to posts in an online environment correlates to perceived learning (Swan, 2002) and satisfaction (Baker, 2004). The greater and faster the instructor interactions are the lower the level of psychological separation there will be (Moore and Anderson, 2007). The students on this module were all full time working post graduate students. The time they had available to work was in the evenings and weekends. Although, unequivocally, student expectations surrounding instructor availability must be managed, we know when the students were working and what the literature suggests. The introduction of DL has changed 'when' students are learning, and as a result, the onus fell to the academic to change 'when' the teaching occurred. Traditional workload expectations did not apply as can be seen by the analytics. The majority of both student and staff work occurred outside of traditional classroom hours.

It was also clear the academic needed to plan and supervise the level of working, contributions and organize the learning processes.

> *"You [the academic], well, you [the academic] were there and I knew it. I knew you [the academic] were reading what I posted, so I wanted to make sure it was good enough, critical enough. You [the academic] picked out the patterns between what we were saying that none of us could have done and I found that was useful. You [the academic] made us analyse things a little more deeply than on the face comparisons."*

4.1.8 Delivery roles (student perspective)

Three main delivery roles and associated competencies became apparent for the academic. These were all necessary after the module 'went live' to students and included:

Facilitator: The academic needs to be leading and coordinating the group. Required competencies include: Enabler, instructor, assessor, collaborator, supporter, and contributor.

Moderator: The academic needs to be ensuing standards, conversations and activities. Required competencies include: Organiser, supervisor, planner and monitor of learning processes.

Knowledge Expert: The academic needs to demonstrate skill, authority and practice in the content or subject. Required competencies include: Subject specialist, acknowledged expert and information shaper.

4.2 Overall Roles and Responsibilities (staff and student perspective)

The coded data and emerging themes from both the team documentation, evaluations and interviews suggest six roles developed with corresponding competencies for the academic whilst developing and delivering this module (**Figure 6**).

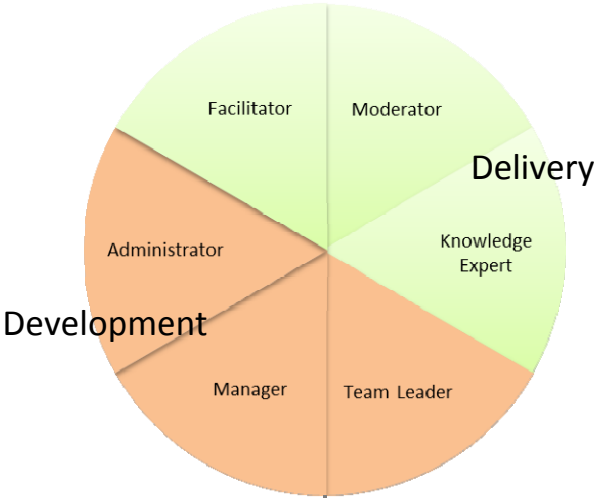

Figure 6: Model of roles developed for academics involved in distance learning

4.2.1 What obstacles were encountered by staff and students and how were they overcome during the development and delivery of a distance learning module?

The faculty team did not think it was possible to progress without working together. In developing the module success only came once communities were formed and the team began to work together. However, the team struggled as there were no established practices or routines and the normal processes of module development were disrupted. There were obvious tensions as the group tried to conform to the traditional institutional procedures and systems that were set out as seen in the interview:

> *"Trying to coordinate something….to do with formal communications and things... I think there is something that doesn't fit with that model. It just didn't work. We had to work around things."*

A community was formed by staff and the team began to work together, to learn together and function as a small group within, but distinctly separate from the larger organisation as it could not flourish within these abstract rules and procedures.

> *"It isn't circumventing, but it is out of necessity that the formal structures and procedures break down…..they didn't work…we had to work together… just us."*

Similarly, in the evaluation, it was clear the students thought learning in this situation was possible only through communities which evolved spontaneously, yet were essential for success.

> *"We all worked together so well. It just happened so smoothly. I can hand on heart say this is one of the few times, I felt as if what I wanted to learn and how I wanted to develop, was part of learning in a group."*

Two different communities formed: the staff in a development team and the students in a delivery team. The academic, a member of both, was clearly responsible for creating environments and taking on roles in which these communities could foster.

4.2.2 Overcoming obstacles: Development community (staff) and community of practice

A community of practice (CoP) describes a group of people who share an interest, craft or profession (Lave and Wenger, 1991). CoPs embrace the sharing of knowledge across organisational boundaries (Allee, 2000). The team experienced the shared objectives of these CoPs, which was not to work towards formal deadlines or goals, but towards the objectives of the community itself:

> *" ... I think in the end it comes down to a small group of individuals working together, getting these things off the ground..."*

A CoP shares common interests, the desire to learn from and contribute to the community. Using shared dialogue, not organisational structure, the team functioned as a community. It was social engagements that allowed learning to occur, not the cognitive processes and conceptual structure (Lave & Wenger, 1991):

> *"I thought this module would be more about the technical side, but it was more about working relationships."*

CoPs cannot exist in the abstract as they revolve around people with common ideas and mutual accountability and therefore require engagement (Wenger and Snyder, 2000). The team's experiences concerned practice, not abstraction and the ideas and actions were reflected in their engagement.

> *"We can go so far……..there has to be involvement form a learning technologist, straddling the technology and learning. I had no knowledge in that area. I am reliant on that information coming to me from you. We needed to work together."*

By illustrating the power of these informal relationships, this sharing and validation of knowledge may be most responsible for performance in an organisational setting (Brown and Duguid, 1991, Lave and Wenger, 1991). In CoPs learning is a relational practice in the workplace that is derived from the social experiences of those involved.

4.2.3 Overcoming obstacles: Delivery community (students) and community of inquiry

Transactional Distance Theory (TDT) provides a broad framework for structuring DL, creating meaningful interactions and facilitating learner autonomy (Moore & Anderson, 2007). Effective DL is not independent, but a collaborative-constructivist learning experience within a community of inquiry requiring structure, dialogue and autonomy (Moore & Anderson, 2007, Dewey, 1938). In the student results, structure was necessary for the community. This corresponded to Moore's element of design and structure:

"The structure made sense. What I mean is, each activity seemed to follow on from the next in a logical order"
Dialogue or interaction, according to Moore (1997) is essential in successful DL. This dialogue was also highlighted consistently by the students.

> *"Other people were being careful and constructive….people were contributing in an intellectual fashion, not a flippant one. I wanted to comment on what others said and I wanted to hear what they thought about my ideas. The actual online discussion definitely contributed to me learning."*

The final element discussed, Moore's (1997) autonomy, encompassed individuals proceeding through instructional processes independently, controlling their learning situation and learning how to learn. These higher order activities also seemed to be important and evident to the students:

> *"You don't realise how interested you would be. You don't realise how much thought it was. It wasn't just reading other people's posts. It was then mulling them over and wanting to write something…and being careful….critical what I wrote…."*

It was also clear that the students were aware of the expectations to develop their autonomy or higher level activities and accepted this:

> *"In the last strand, It was obvious we were left to be more independent which was a bit scary- felt like mother bird leaving us to fly alone after teaching us, but still watching."*

The students and academic were part of a community.

> *"By the end of it, we were almost like an online virtual family, helping each other out, giving advice etc."*

4.3 Summary

Using PI as a method actively allows and encourages teachers to change practice. Stenhouse (1975) suggests, in his 'teacher as researcher' model, a teacher's personal research and development should be inextricably

linked to increasing their understanding of their work and therefore improving their teaching. He argues teachers must critically research and share their own practice. Practitioner inquiry and the evaluation of actual practice is essential to bridge the gap between 'research' and 'teaching practice'. Evaluating this practice and sharing the results contributes to filling this gap.

4.3.1 Rigour

In this research, the assumption was made that both authenticity (subject to external criticism) and accuracy (subject to internal criticism) (Cohen et al., 2009) could be established due to the author's intimate relationship with this data (Seale, 1999). Whilst numbers within cohorts and response rates were reported for the quantitative data, this paper rejects the traditional framework of validity for the qualitative data reported. The assumption that there is an external reality to individual experiences and perceptions was not made in this relation to the qualitative data. Therefore, credibility and transferability, as alternative criteria to judge quality have been employed and the following was done to ensure quality. All documentation analysed were first person documents, adding to credibility of the interpretation (Seale, 1999).Power within both an academic setting (both staff-staff and staff-student) is omnipotent. Recognizing and confronting power differentials between the researcher and the researched is essential (Cornwall and Jewkes, 1995).The participants were aware the researcher was involved in this inquiry with a desire to improve both the development and delivery of DL. The raw data and analysis were reviewed by an experienced social science researcher. No claim was made that this small, non-random, convenience sample is representative of the population as a whole (Patton, 2002). Rather, this purposive sampling was strategic and allowed individuals to be chosen who would be familiar with the module, and thus have rich experiences that were relevant to the research aim (Crotty, 1998). Furthermore, the sampling strategy was not about generalisability, but facilitated the exploration of the aim and with the rich description, ideally will be transferable to other, similar environments. As a reminder, the overall goal of this research was to explore the 'authentic', and in this case collaborative, understanding of peoples' experiences.

5. Conclusions

Martin's (2002) manifestations of cultural organisations, suggest there is a clear hierarchy, job descriptions, behavioural norms, stories and certain rituals with which all members of organisations are familiar. However, the results of this research, which are well supported in the literature suggest that the advent of DL has caused complications and role confusion for academics. Arguably, many of the roles of traditional teaching are easily transferred into an online environment (Gold, 2001). However, new skills (Twomey, 2004), changing responsibilities (Hovenga & Bricknell, 2006) and altogether new roles are at the heart of academic conflict (Pettersson and Olofsson, 2015) with DL. The hierarchy has changed, new norms need to be developed and conventional institutional constructs need to be addressed. Part of improving practice for the academic in this research involved working within communities, regardless of the conventional structures or traditions of the university. Brown and Duguid (1991), suggest that *'conventional descriptions of jobs mask not only the ways people work, but also significant learning and innovation generated in the informal communities-of-practice'* (Brown & Duguid, 1991, p.40). There were two communities that formed: a development community comprising of other staff members, which was informal and concerned professional development within the University and delivery community comprised of students focused on formal learning. The academic was a member of both communities, but with very different roles in each.

In educational environments, if change can be understood, strategies can be developed to manage this change and the evolution or revolution of the change process itself will be successful (Nunes & McPherson, 2002). The 'revolution' of DL as promised has not occurred (Ellaway, 2011) in clinical education. Instead an evolutionary change model developed which has been unsuccessful and has actually disenfranchised lecturers (Holley & Oliver, 2000). Unequivocally, with the implementation of DL in HE, given the traditional paradigms that exist, significant modifications of existing models are necessary (Conole, 2002; Nunes & McPherson, 2002) particularly the need for role clarity (Delgaty, 2015). For academic institutions to remain resilient in this time of rapid change, the roles of academics must be redefined and managed. Whilst this challenges the accepted evolutionary nature of the academic role (Briggs, 2005), individual academics must redefine their roles or they will 'do what they have always done' which won't benefit the institution or the students.

Moore (2007) explained, both the culture and structure of HE will continue to be threatened by the emerging organisational models of DL. He suggested institutions should plan processes and involve teachers in the implementation of new program directions. Schwahn and Spady (1998) agree and proposed that structural

and cultural change has been viewed by many lecturers in higher education as largely beyond their control. By clarifying expectations and addressing change, the disruption in HE due to technological initiatives (Fullan, 1999) can be minimised.

The choice to approach this DL initiative using PI was planned and strategic. I agree with Kelly (1989) who suggests that teachers should be evaluating their own work, analysing it critically, and constantly working towards development and improvement. By purposefully choosing PI, this research was uncompromisingly focused on informing and improving my DL practice. Furthermore, using this research methodology as a basis for publication in a peer reviewed journal contributes to, and represents, educational scholarship at one of the highest academic levels. Only by evaluating individual practice and approaching practitioner problems in this fashion, can PI which often needs legitimisation in the context of HE (Noffke and Somekh, 2009, Huges et al., 1998) become recognised.

Finally, by using a plurality of perspectives, a believable lived experience (Winter, 2002) has developed and useful and practical knowledge has emerged. This practical knowledge includes: the need for role clarity and new competencies in DL. For academics these roles include: administrator, manager, team leader, facilitator, moderator and knowledge expert. Furthermore, the results suggest critical modifications to the organisational culture of HE are essential including encouraging the involvement in communities. Social discourse and negotiation may help academics (Briggs, 2005) who are presently ill-equipped to deal with the shifting workloads and roles DL demands have presented. Collaborative or cooperative communities are necessary to change organisational culture in HE, however, these struggling communities have to flourish and function in a climate of rules, regulations, tradition and structure. Only through informed practice can academics be empowered to plan change, collaborate and avoid DL workload models recognised as unsustainable (Schofield et al., 2003). This study prepares academics to argue for and managers to advocate: clarity in organisational support, new competencies and working within communities. These three are requisite both to redefine roles and to create a sustaining technology that is an improvement on current practices for both staff and students.

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