Transforming spaces and identities: the contributions of professional staff to learning spaces in higher education

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Staff are a university's key resource. Typically, research has concentrated on the contribution of academic staff, and has largely overlooked the crucial role of professional staff. However, recently there has been an increase in research by professional staff, about professional staff. In Australia, professional staff comprise more than half the higher education workforce, and a more rigorous understanding is needed of the contribution that professional staff make towards the strategic goals of their institutions. This paper explores the work of professional staff, focusing on the contributions that this group of staff makes to the design, development and maintenance of learning spaces, both physical and virtual. This research is part of ongoing doctoral research into the work of professional staff at one Australian university. Following a preliminary framing study, a case study was undertaken using semi-structured interviews with a range of professional staff. Emerging from these interviews is a conceptualisation of the work of professional staff in relation to student outcomes, from the perspective of professional staff themselves. This research is illuminating the working lives of professional staff, the changing and increasing complexity of their roles, and the contributions professional staff make to their institution's student outcomes.

Keywords: professional staff; higher education; student outcomes; learning spaces

Introduction

While a substantial amount of research has been undertaken into the changing nature of universities, academic work and academic identities (for example: Adams, 1998; Anderson, et al., 2002; Macfarlane, 2010; Marginson & Considine, 2000), until recently there has been little research into the work, and the changing roles, of professional staff in Australian universities. This lack of research by academic staff concerning the work of professional staff is not surprising, since 'academics. . . . focus on the areas that concern them the most' (Pitman, 2000, p. 166). Indeed, one of the pre-eminent writers on Australian (and global) higher education, Simon Marginson, has been relatively silent on the topic of professional staff and their issues. One notable exception was his inaugural professorial lecture as Chair of Higher Education at the University of Melbourne, in which he acknowledged that international education is supported by 'thousands of general [professional] staff' (Marginson, 2007, p. 7). In contrast, in the last decade there has been growing discourse by professional staff themselves about their professional practices and their identities (for example: Conway, 2000a; Graham, 2009; Szekeres, 2006, 2011; Whitchurch, 2010). Nevertheless, there remains little research into the contributions that professional staff make to the core business of learning and teaching.

During the first decade of the 21st century, learning in higher education institutions (HEIs) has changed considerably. During this period, there has been a growing body of knowledge that has focused on effective learning spaces in HEIs (Oliver & Nikoletatos, 2009; Radcliffe, 2009). At the same time, changes in technology have resulted in changes in learning environments *and* changes in student expectations of their learning environments (Dahlstrom, et al., 2011; Joint Information Systems

Committee [JISC], 2006). As part of ongoing doctoral research, this paper focuses on the contributions that professional staff at one Australian university (the University of Technology, Sydney) make to the design, development and maintenance of physical and virtual learning spaces. Set in the context of practitioner literature on the 'invisibility' of professional staff (Allen-Collinson, 2006; Szekeres, 2004) and the new professional identities described by Whitchurch (2007, 2008b, 2009) this research reveals implications for universities of the blurring of traditional roles between professional and academic staff.

The University of Technology, Sydney

This research employs a case study approach that focuses on the University of Technology, Sydney (UTS), a large modern Australian university. The characteristics of provenance, location, size and diversity make UTS representative of Australian universities. UTS was originally established as a university from an earlier institute of technology in 1988 and in 1990 was merged with a number of institutions of further education to form the current UTS (University of Technology Sydney, 2011), in a similar manner to the establishment of about half Australia's universities (Marginson & Considine, 2000). UTS is sited in a state capital city (Sydney), as are most universities in Australia, and it is located in NSW (NSW has more universities than any other state of Australia). With 34,600 students in 2010, UTS is a medium-to-large Australian university, and its total income in 2007 of $426 million is close to the Australian average of $443 million (Department of Education, Employment & Workplace Relations [DEEWR], 2007). The international student population of 26.3 per cent places UTS near the overall Australian figure for international students of 28.1 per cent (DEEWR, 2010). This representative nature makes UTS a suitable case for this study.

The changing roles of professional staff

Professional staff and their significance

There is a wide range of labels used in Australian universities for staff that the federal government describes as non-academic or other: non-academic staff, general staff, administrative staff, support staff and professional staff, to name a few. In 2011, the Association for Tertiary Education Management (ATEM) (Association for Tertiary Education Management, 2011) formally adopted the title of 'Professional Staff' as the preferred nomenclature in Australia and, accordingly, this term has been used throughout this study.

As well as being a major cost in higher education, accounting for more than half the operating expenses for Australian universities (DEEWR, 2007), staff are a key resource (Hoare, et al., 1995). In particular, professional staff hold much of the systemic knowledge, the intellectual capital, required to ensure the functioning of the university. Moreover, since 1992, professional staff have comprised more than half the total staff population of Australian universities (aggregated data over various years from DEEWR, 2012). Despite this prevalence, the contributions these staff make remain unrecognised and under researched (Dobson & Conway, 2001; Sebalj & Holbrook, 2009; Szekeres, 2004).

Professionalisation, relationships and identities

Increasingly, over the last 20 years, professionals have worked within large organisations, rather than operating as self-employed practitioners (Evetts, 2010). For university administration, professionalisation is part of more general changes in universities (Blümel, 2008; Gornitzka & Larsen, 2004). A comparison of two different frameworks for conceptualising the professionalisation of university administrators is shown in Table 1 (Blümel, 2008; Gornitzka & Larsen, 2004). Using Blümel's framework, Szekeres (2011) argues that some progress has been made towards the professionalisation of professional staff in Australian universities. For anyone working in the higher

education sector in Australia, it is evident that professional staff and their work have changed significantly over the last two decades. Nevertheless, there remains ambiguity concerning the identity and work of this group of staff (Conway, 2000b; Szekeres, 2004; Whitchurch, 2009).

Table 1. *Frameworks for the professionalisation of university professional staff.*

Gornitzka and Larsen (2004)	Blümel (2008)
The emergence of a common cognitive basis	The development of a specialised body of practical and problem-solving knowledge that becomes systematised
An increase in requirements for formal qualifications required to hold university administrative positions	The establishment of an academic program of study, qualification and training
The growth and formalisation of networks between university administrative staff	A professional association or occupational network, which regulates entrance into the profession, provides a basis for knowledge exchange and licensing of qualifications
An increase in formal status of university administrative positions	Increased status and autonomy in decision-making

The profound changes in Australian universities over the last 20 years have impacted on the roles and relationships of academic and professional staff (Dobson & Conway, 2001; Macfarlane, 2011; McInnis, 1998; McMaster, 2002; Szekeres, 2006, 2011). Similar to changes in the UK (Whitchurch, 2008b, 2009), there has been a blurring of the boundaries between professional and academic roles in Australia (Pickersgill, et al., 1998); nevertheless, tensions remain. Macfarlane (2011) laments the fragmentation of the academic role and the rise of the para-academic – staff who specialise in one aspect of academic practice — including the up-skilling of professional staff and the deskilling of academics. And while Szekeres (2011) suggests that professional staff have moved into senior management positions that were previously the preserve of senior academics, relationships between professional staff and academics at more junior levels are still often contentious.

Changing context of student outcomes

Student outcomes, accountability and funding

Despite the now ubiquitous use of the term *student outcomes* in higher education, this term has different meanings for different people with different purposes (Ewell, 1983; Ng, et al., 1993; Terenzini, 1989). In a review of 146 international studies, Prebble et al. (2004) derived 13 propositions for behaviours of student support that were found to enhance student outcomes in terms of 'retention, persistence and achievement' (p. ix). This focus on outcomes that relate to retention and graduation is appropriate for administrators, since these outcomes link to explicit outputs over which institutions and managers have control (Ewell, 1983). Yet the study by Prebble et al. focused on the contribution to student outcomes by institutions and academic staff rather than professional staff.

In addition, over the last two decades there has been growing discourse and concern about accountability in higher education both in Australia and overseas (for example Adams, 1998; Daigle & Cuocco, 2002; Hoecht, 2006; Lock & Lorenz, 2007; Stensaker & Harvey, 2010). There have been consequent calls for effectiveness and efficiency in higher education and the associated need for measurement. In this market-driven environment, outcomes such as the retention, persistence and

achievement of students, which have direct impacts on funding and public perception, are of increasing importance.

Massification of higher education

The massification of the Australian higher education system is characterised by a move from semi-elite to semi-mass education and has manifested in large increases in both the numbers and diversity of students enrolled in Australian universities over the last 25 years. While a number of detailed studies of staff and student numbers have been completed (Dobson, 2006, 2010), Figure 1 illustrates the relatively large increase in student numbers compared to staff numbers (aggregated data from DEEWR, 2012). In addition, there have been significant changes in student demographics. For example, the proportion of international students in Australian higher education has grown from 5.5 per cent of the total student population in 1991 to 28 per cent in 2010 (aggregated data from DEEWR, 2012), and professional programs, such as nursing, teaching and new design-based professions, have entered the university sector bringing with them different student and employer expectations. More recently, similarly to the UK, there has been a call for widening participation in Australian universities, with ambitious participation targets for a wide range of disadvantaged groups. Engaging successfully with these groups has and will continue to have a direct and significant impact on the facilities and services provided by professional staff.

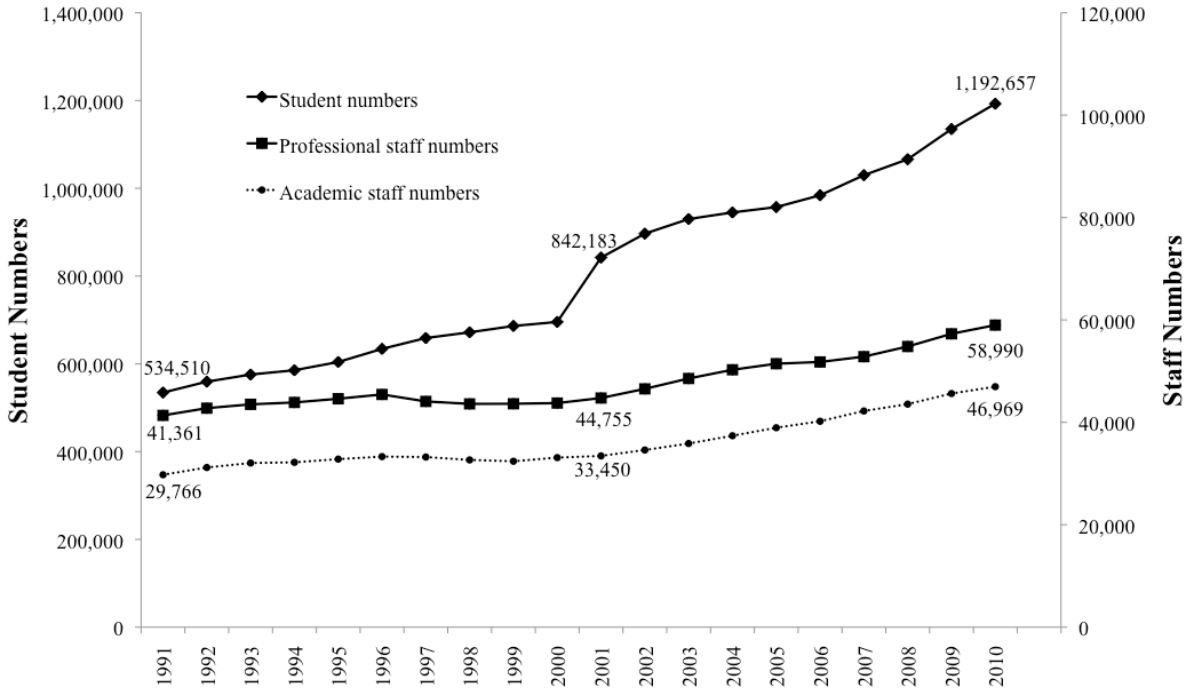

Figure 1. *Student and Staff Numbers in Australian Universities 1991 to 2010*

Note: The methodology for counting students changed from 2001(Dobson, 2006), resulting in the step increase shown between 2000 and 2001. A comparative figure for 2001 would be approximately 15 per cent lower.

Learning spaces

Historically, little attention has been paid to researching learning spaces in higher education, the assumption being that learning would occur independently of the space in which it was taking place

(Temple, 2008). However, over the last decade there has been a growing body of literature concerning new approaches to learning spaces in higher education institutions, and a number of different factors are now driving changes to the practice of learning space design in higher education institutions (Radcliffe, 2009). Some of these factors include changes to technology, social patterns and funding arrangements, as well as generational changes and a change in focus towards a more learner-centred pedagogy (Radcliffe, 2009). Moreover, the changes in technology and the expectations of the new generation of students means that learning spaces can no longer be thought of as just physical spaces – learning spaces now also include the virtual. Increasingly, a fusion of technology, space and pedagogy is informing the design of learning spaces and resulting in the design of good learning spaces that support the mission of higher education institutions of enabling student learning (Oblinger, 2005; Radcliffe, 2009).

In 2006, the Carrick Institute for Teaching and Learning in Higher Education (and later known as the Australian Learning and Teaching Council) provided funding for a national project into the future of learning spaces called *Next Generation Learning Spaces*. This project investigated the pedagogy-space-technology nexus and developed a system, the Pedagogy-Space-Technology (PST) framework, which provides guidance to higher education institutions in creating new learning spaces that facilitate student engagement and improve learning outcomes (Radcliffe, et al., 2008). Further interest in the changing design of learning spaces is evidenced by the inaugural Australian conference on *New Generation Learning Spaces*, held in 2012, and the Federal Government funding of more than $4 billion since 2008, provided for teaching and research infrastructure in the higher education and vocational education and training sectors (Carr, 2011).

Responsibility for learning spaces, their design and approval, rests with different authorities in different HEIs (Oblinger, 2005). This may be based on financial delegations, with the peak governing body, often known as the University Council in Australia, making decisions on the most costly expenditure items. Large infrastructure projects, therefore, fall under the remit of the University Council; however, smaller learning space projects may be signed off by deans or faculty managers. Whoever the client – that is, the approver of funding – there is likely to be a committee of stakeholders (academic staff, professional staff and students), along with a team of providers (architects, engineers and project managers), who are involved in the design and approval of learning spaces. Consequently, there is a diverse range of people who contribute to learning spaces, including a significant number of professional staff. These staff may be considered to contribute directly or indirectly to student learning and the achievement of desired student outcomes.

Methodology

Case study research

The reality of workplaces, perhaps particularly in higher education, is highly complex. Indeed, there is a substantial body of literature on the impact of increasingly complex environments on academic identities (for example: Billot, 2010; Clegg, 2008; Henkel, 2000; Winter, 2009). Since case studies are particularly useful for studying complexity (Bassey, 1999), particularly when 'a *how* or *why* question is being asked about a contemporary set of events, over which the investigator has little or no control' (Yin, 2009, p. 13), a case study was considered appropriate for this work.

This study focuses on a single Australian university. In common with many other studies, a single site was chosen for both logistical (Daymon & Holloway, 2002) and representative reasons (Yin, 2009). This research is part of a professional doctorate that has three main audiences: the academe, the profession and the workplace (Lee, et al., 2000). As such, it is appropriate to locate the research within the context of one workplace, thereby constituting an intrinsic case study (Stake, 1995). While UTS may be representative of Australian universities, as described earlier, it is not intended to generalise from

these findings. Rather, this case study is descriptive (Yin, 2009), as it identifies and describes behaviours exhibited by professional staff that contribute to student outcomes. Being both descriptive and intrinsic, this study may provide insights into situations in other institutions.

Having decided to use case study methodology, appropriate methods of data collection were reviewed. Whereas Yin (2009) describes six methods of data collection, many proponents of case study prefer to use interviews to develop an in-depth description. Accordingly, semi-structured interviews using the framework developed by Patton (2002) were used for this study.

Interviewee selection

Building on an earlier study (Graham, 2010), it was recognised that there would be value in interviewing *expert* professional staff, and purposive sampling was used for the case study. A mind-map was developed showing work units in which staff would have interactions with a hypothetical cohort of students. Contact was made with the managers of these work units for recommendations of staff who had at least three years' experience in higher education. In addition, snowball sampling was used as suitable opportunities arose. Theoretical saturation – the point at which no new themes are observed – may occur after twelve interviews for a relatively homogeneous purposive sample (Guest, et al., 2006). In line with this finding, this study used 14 interviews.

Of the 14 participants 64 per cent were women, which corresponds to the overall UTS proportion of women in professional staff roles. The length of experience in higher education ranged from 3 years to 24 years, with an average of 10 years, while the length of service at UTS across different age groups reflected the pattern for the total UTS professional staff population. Participants were drawn from 12 different work units, and while half the participants had worked *only* at UTS, the other half had worked at one other higher education institution (HEI). Participants worked in positions ranging from Higher Education Worker (HEW) Level 5 to above Level 10, with the median being Level 7. In Australia, HEW levels refer to the classification structure for professional staff ranging from HEW 1, which is the lowest level and is rarely used, to HEW10+, which includes directors and managers. Six of the 14 participants had completed a postgraduate coursework program, four at Master's degree level, and four staff were currently studying.

Data collection and analysis

The interview guide was a semi-structured guide based on Patton's framework for designing interview questions (Patton, 2002). This allowed participants to guide the direction of the interview, and to describe their experiences across five domains. Prior to interviewing, relevant demographic information was collected using a one-page information sheet. The interviews were conducted over a seventeen-month period between April 2010 and September 2011.

Analysis of the data was informed by earlier findings (Graham, 2010) and used structural coding based on the 13 *Prebble Propositions* (Prebble, et al., 2004) as a first cycle coding method (Saldaña, 2009) to elicit descriptions of the work of professional staff in relation to student outcomes. In addition to other first cycle coding methods, including descriptive and process coding, second cycle coding was used, allowing recognition of patterns and the focusing of codes (Saldaña, 2009), thereby identifying and describing gaps in the *Prebble Propositions*.

Key findings

As mentioned in the introduction, the findings of this paper focus on the contributions professional staff make to student outcomes through the development of physical and virtual learning spaces. In addition, a motif of changing professional identities runs throughout the interviews.

Learning spaces and the contributions to student outcomes

Learning is part of the core business of universities, whether that is formal learning, like lectures and tutorials, or informal learning, such as fortuitous exchanges between members of the academic community. As such, space – virtual and physical – plays an important part in providing the environment in which learning can take place, and can either facilitate or hinder learning (Oblinger, 2006). Moreover, Moore et al. (2007, para. 15) argue that creating effective learning spaces needs to be actively pursued in order that students 'become actively engaged, independent, lifelong learners inside and outside of formal learning spaces'.

Half the case study participants described behaviours that related to learning spaces, predominantly virtual learning spaces. Using the *Prebble Propositions* framework, the contributions of professional staff to student outcomes in the dimension of learning spaces were found to be most significant in relation to providing 'a comprehensive range of services and facilities' (Prebble, et al., 2004, pp.71-74).

Participants described the physical spaces that contribute to the services and facilities for students:

> My role is to ensure maximum benefits for the University, for the students that are essentially our clients base and the greater community, is to ensure the quality of the facilities I deliver are high, within reasonable cost, and delivered in a timely manner. (Participant 12)

> That's why with the Library of the Future we're actually putting a lot of our collection that's not used very often underground, there is a whole new retrieval system being built, and we're hoping to turn the space instead upstairs into a more of a social and collaborative learning area. (Participant 10)

With the increasing reliance on technology to facilitate learning, in many instances physical and virtual learning spaces were linked together:

> Most of them [computer labs] are open 24 hours. It's about half of those labs [that are supported by the IT department] because faculties also supply their own labs to their own students, and their desktop support staff handle those. Also the IT Department handles desktop support for some of the departments and faculties, so you can get rotated through those jobs on a three or six monthly basis as well. (Participant 4)

> The things that get asked for [by students] is more space, more computers, quieter areas to work in. (Participant 10)

> From that very physical, very concrete model [of a library] to one of a very digital and more fluid social model is what I have seen [change]. (Participant 10)

> [The QR code is] a barcode, you'll see them around the library, that connects the physical space to the digital content. (Participant 11)

And, increasingly, professional staff are providing virtual learning spaces that contribute to the wide range of services and facilities offered to students:

> Another one I'm working on is the mobile services project. That's looking at what we can already do to support people using their mobile devices to access library services and also looking at how we can

> extend those sort of things . . . So, working with them [the IT department] to think about what we would prefer, how our mobile site would work for the best use for users. (Participant 11)
>
> Just stuff like UTSOnline [the learning management system], the support base on that is fantastic. (Participant 9)

Proposition 12 linked learning spaces and the contributions by professional staff to diverse learning preferences. Some comments related to the support of formal learning using virtual learning spaces, such as services provided for students with disabilities or alternative ways of accessing lecture material:

> With the assistive technology that helps people read . . . if they tried to do all the reading just in hard copy that you get given, it's impossible for them to get that amount of reading done each week, but if they have the technology that a computer reads it out to them so they can just listen to it, then they can get through all their readings and then . . . some people went from passes to distinctions . . . just because they could get through the content. (Participant 8)
>
> [Students] might have to use UTSOnline to get their lectures, which is probably about 75 - 80 per cent of the time, at least. (Participant 4)

However, many of the observations referred to informal learning spaces, both physical and virtual, as ways of meeting a diverse range of learning preferences:

> Yes we have also started a Facebook site, where we post all the readings. A lot of the students have said 'we would love to come but don't have the time so can you offer an online alternative'. (Participant 10)
>
> Learning extends well beyond that and some of the best opportunities, in fact, lie outside of those formal spaces. It acknowledges that students should have increased access to that information in the greater student environment. Hence provision of wireless access ports throughout ever increasing spaces of the University. It has also been realised that simple provision of power points in breakout spaces, in public spaces, serve as a magnet to students. Simple opportunity to be able to charge up laptops and continue to study, prepare reports and so on and so forth. (Participant 12)
>
> I guess I realised the importance of breakout spaces at a fairly early stage at UTS . . . One of my earlier projects was providing formal furniture within public spaces of Building 1 and Building 2. That demonstrated to the University how important those facilities were simply by the way the students were drawn to them and how heavily they were utilised. (Participant 12)

As noted earlier, student expectations of their learning environments have changed significantly in the last 20 years, particularly over the last decade, and learning spaces designed and built in 1960s are unlikely to suit the learning needs of students of the 21st century. This was articulated explicitly by one participant in relation to his own studies as a mature aged student:

> The costs that students face for higher education is now considerable, hence correlation is quite clear. Most students, I do not believe, are prepared to outlay those considerable costs and find themselves in a less than fortunate environment. My further studies involved suffering conditions . . . [in] spaces created in the late '60s, early '70s. Clearly UTS had to move on from there to attract and to retain students. (Participant 12)

These extracts suggest that professional staff are actively engaging with new forms of learning spaces, recognising the learning needs of students, and the links to student outcomes.

Changing identities

Professional identity may be defined as professional self-concept based on the attributes, beliefs, values, motives, and experiences of working lives (Ibarra, 1999; Schein, 1978). As such, changes in work roles are accompanied by changes in professional identity, since new roles require new skills, behaviors, attitudes, and patterns of interactions (Ibarra, 1999). With the changing context of higher education, professional staff are increasingly working in changing environments in which they need to take on new responsibilities and increasingly complex work. In the UK, Whitchurch has contributed significantly to the discourse on the changing identities of professional staff (for example: 2006, 2007, 2008a, 2008c, 2010), and in Australia there is also a growing body of literature on this topic (Berman & Pitman, 2010; Dobson, 2000; Small, 2008; Szekeres, 2011).

Consistent with theories of professional identities and previous research, the findings of this study indicate that, over the last decade, there have been changes to the work of professional staff. These changes have increased the complexity of this work and have resulted in new skills, behaviours, attitudes and patterns of interactions being required. Nevertheless, rather than being threatened by these changes participants spoke about changes in their roles or working environment keeping them engaged with, and enjoying, their work. For example:

> I find it interesting as well, to learn something new, which is probably why I've stayed here for so long. Things do change and constantly, which is good so you're not totally bored. (Participant 9)

> So there's been a lot of change since I started. If it wasn't for those factors I might have moved on because I might have got a bit bored. (Participant 8)

For many participants, changes in technology have driven wider change, not only in the way that work is completed, but also in the interactions that professional staff have with students and other staff, both professional and academic. For some professional staff, changes in technology mean that they actively instruct students in how to use new technology, either formally or informally. These technology-induced changes have increased the complexity of the work being undertaken by professional staff:

> The job continually changes because we rely so much on technology and it changes so quickly. I am always learning new skills and finding ways to use that in the interactions with students so I find that very exciting, I really enjoy that part of my work. (Participant 10)

> Technology changes for students, and so then we've had to do a lot of groundwork and working with other areas of the uni to make sure materials are accessible for students [with disabilities] . . . That would probably be one of the main changes that's been evolving since when I first started. It's quite a big service and system now, rather than us just running around trying to do things in a non-systematic way. We have also had a lot of student growth over that time, so all of our services have had to develop to cater for larger numbers of students [with disabilities], so just setting up those kind of processes and things has been interesting. (Participant 8)

> We teach them [students] things like how do you find books using the catalogue, how can you use the database to find research articles, how to use things like EndNote to keep track of your referencing for research purposes or other things as well. We're also expanding into other things like Google Skills: so we're teaching students how to use Google Scholar, how to use RSS feeds to keep on top of things when things change so quickly in the information era. (Participant 11)

> Oh, we get usage questions as well. Again, [we're] not supposed to answer usage quotations like, 'how do you use Word?' or 'how do you use Photoshop?'. 'How do I embed a picture in a Word file?' or 'it's too big, how do I make it smaller?' and stuff like that. Again, we'll answer all those as well, just because it seems slack not to. (Participant 4)

In addition to the changes in technology, the complexity of the technology adds to the complexity of the work of professional staff. For many staff, the range and complexity of software and hardware that is used or supported is substantial. At times, technology is rolled out without staff being provided adequate training or support, which adds to the workload as they teach themselves how to use the new technology.

> I've worked in companies, . . . and they'll have Word, and they'll have a couple of accounting packages, and email and that's it. Four or five programs . . . Whereas, the computers here - we've got a couple of packages for every faculty. A couple of accounting packages, a couple of marketing packages, several engineering and maths and science packages. So there's like 40 pieces of software installed, fairly heavy duty-pieces of software, and you never get that really, in any other institution. (Participant 4)

> They [IT department] send all the software updates down and update the computers. But then because we have, on 2 computers in the special needs room, we have assistive technologies that are not part of the ITD roll out, we have to update just those 2 computers with a certain package of software. But there's always issues because a certain software doesn't work if you do one before the other . . . that takes time with testing and getting them to come back and do it again at another time. Because when you log off everything is lost to the network, each time we have to have a particular folder within that computer . . . Now additionally, trying to import a voice profile from another machine that someone is using at home onto this computer is difficult as well because of different versions of software, and we're trying to resolve that issue at the moment . . . I've got to get back to the student and reassure her, and just try and manage all of that. (Participant 11)

> We help people fix wireless problems, which can take a couple of hours each time, sometimes. We're not supposed to, when the wireless network was rolled out, about three or four years ago, we weren't given any extra staff to handle that, or even much training, or any, really, any training. (Participant 4)

Most participants commented on the need for experience and knowledge to be effective in their roles. This experience and knowledge enables professional staff to provide more comprehensive support to students, which resolves not just the presenting problem but the underlying issue or resultant issues.

> It probably takes about a year or 18 months to become pretty good at doing tech support here. Most jobs it takes two or three months, but because this is such a massive institution with lots of areas [it takes longer here]. (Participant 4)

> But, yeah, to retain staff that have been here a while, that know about the whole university, we can provide a more in depth support, for people, for students. Not just fix the technical problem, but also, for example . . . their email's not working and they couldn't send an email to a lecturer to tell them that they couldn't hand in their assignment, and they need an extension . . . We fix the problem and they're like, 'oh but it's too late now' . . . [I'll reply] 'this is my name, I work here. Get the lecturer to call me to confirm that your story's true' . . . Whereas, someone who's only been here six months can fix the email problem, but might not know what the ramifications are, or what to do to make things okay. (Participant 4)

> So it's just really having that prior kind of knowledge of being within the same university, but also the university sector . . . You kind of have a bit of an insight into how other areas of the university work. So if someone is talking to you about, you know, they were playing touch footy and they've hurt their arm and it is just about to be exams, I know to say to them, 'look, you need to talk to special needs about maybe getting a scribe for your exam'. (Participant 5)

> See, sometimes students come to the counter and they say they want to withdraw from their course but when you talk to them they're having some difficulty. Really what they need is a leave of absence . . .

> they might mix up the terminology. So it's really important to have the conversation, to make sure that you've got a handle on what they really want and I think that's, again, an area that I'd like to focus on with training. (Participant 7)

The participants in this study clearly recognised the diverse and comprehensive support that experienced and knowledgeable professional staff can provide to students. Participants also highlighted the importance of professional development in enabling professional staff to deliver outstanding service.

> I feel that a large part of my role is ensuring that we deliver the best service to students but I don't personally do that. But I ensure that the team does that. So that's why I'm so focused on training. (Participant 7)

> Again, the uni runs a lot of in-house training and I was able to - lucky enough - to go and do those workshops and then get skilled to produce material in-house . . . I was the first person to develop the student services website for UTS. (Participant 5)

> There are people here studying in different fields . . . So, it's so incredible that they can draw on that experience and apply that to the job. It's really good for all of us to benefit from it, and the students as well. (Participant 10)

And finally, the two staff with the longest tenure (17 and 24 years) described the extent to which their roles had changed.

> It was a combination of relief receptionist and . . . and entering data . . . [I also] just started using the old SE/30 Macs and a lot of people weren't familiar with using them so then I sort of found niches where I could support people to learn applications or support people with networking. I kind of evolved into lots of different things but I was sort of then doing a bit of database design because I picked up those skills and that sort of stuff and evolved into a role where I was working exclusively with special needs students. It wasn't a role that existed when I started but then I kind of evolved into it. So I kind of became the special needs admin assistant. Then that job in itself also evolved. So I was sort of looking after the note takers, the interpreters and developed a database to manage them in terms of looking at what students need and what sort of support and then matching and booking people for the timetables and that sort of stuff. And also payment and that kind of thing. I mean, the manager still approved payment but I still managed time sheets and things and stuff. (Participant 5, 17 years tenure)

> Moving on from an architectural draftsman . . . the role evolved more to architectural services - full in-house development of a brief, concept designs, justification of the project through detailed design, full documentation, all in-house, and administering a contract. The workload since then has escalated considerably. Whilst full in-house services were maintained for an extended period of time, the transition was one to move for external consultancies to take the briefing, the design, the documentation and the position evolved more into design management of external consultancies, and clients, and construction management. It then further moved on to the University believing that in-house architectural services were less valuable to us than project management services and the reality was that we were, in fact, project managing more so than design managing or construction managing. The progress after that was simply acquiring additional skills and abilities and moving further up the rank, being allocated more interesting projects, albeit the projects have always been quite interesting throughout the course of my stay at UTS. (Participant 12, 24 years tenure)

It can be seen from these extracts that far from being unwilling recipients of changes foisted upon them, professional staff welcome change as it adds diversity to their work and increases their job satisfaction. These professional staff understand that the university is a complex institution, and they rely on their knowledge and experience, and that of others, to successfully fulfill not just their roles, but the broader needs of the students. In doing so, the extent of their roles is changing significantly.

Implications and Conclusion

Universities are complex institutions and the work undertaken by their staff is likewise complex. In the rapidly changing environment of higher education in the 21st century, this complexity is reflected in the changing roles and identities of professional staff. The participants in this case study clearly articulated a strong understanding of the purpose and value of their work, beyond the traditional remit of such staff. As observed by Bassnett (2005), professional staff 'are having to take on all kinds of tasks that would once have been done by academics' (p. 98). Yet, at the same time, there has been significant discourse on the *divide* between academic and professional staff (for example: Allen-Collinson, 2007; Dobson, 2000; Dobson & Conway, 2003; Gill, 2009; McNay, 2005).

As global conditions continue to transform, universities will face continuing and accelerating rates of change and, increasingly, higher education institutions will need to operate in a competitive, market-driven environment. In such an environment, universities will have to nurture and use the potential of all their staff in order to be able to deliver quality education and research. Academic and professional staff will all need to work together collaboratively and co-operatively (Bassnett, 2005). Szekeres (2011) observes that it is not clear how this environment of respect and co-operation can be achieved, and speculates that 'it may happen over time as universities shift into a new space where professional staff become increasingly more credentialed and more professional' (p. 689). Further research is needed to continue to explore how professional staff contribute to the core business of universities in order to improve our understanding of how universities can shift into this new space. The professional staff in this study demonstrated that they are part of the vanguard of this shift.

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