Structuring the Blended Learning Environment: Pedagogical and Technological Challenges

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ABSTRACT

This paper critically reflects on the challenges and opportunities afforded by a blended course designed to develop knowledge and skills for frontline and mid-level managers in human service organisations, including social work agencies. Drawing on constructivist pedagogy, the authors paint a picture of how course aims, learning objectives and outcomes enabled and advanced participants' ability to better manage workplace teams. They underpin this narrative through the application of Shulman's (1986, 2013) Pedagogical Content Knowledge model to the online context and analyse how students utilised new knowledge and skills in their workplace responsibilities. Insights from Susskind and Susskind's (2015) examination of technological impacts on professional practice are also applied.

This critical reflection is located in an online professional learning community, facilitating the integration of workplace realities and an academic study programme. The experience demonstrates the benefits of a constructive alliance between two educators (an educational designer and an academic course director) with a common vision to create an environment in which the demands of leadership and management of complex human and health service agencies benefit from pedagogical expertise and academic knowledge. The authors suggest that lessons derived from that journey provide useful tools for advancing professional programmes designed for practitioners.

Keywords: Online Pedagogy; Management of Professionals; Communities of Practice; Constructivist Teaching

INTRODUCTION

In 2005, a graduate course designed by Vicki Hurst to develop staff management skills for frontline managers in health and human service organisations was launched by the School of Counselling, Human Services and Social Work at the University of Auckland. The course, *Managing and Developing People in the Human Services* (PROFSUPV 714), is an elective in a professional supervision programme. In 2014/2015 the course was modified via the collaboration of the authors of this article as a result of its changed status from a graduate to post-graduate course, and from 15 to 30 points credit. The course has attracted team leaders, frontline and mid-level managers from a range of professional and organisational backgrounds including allied health professionals, social work leaders, professional supervisors, and frontline managers in the broader human services.

This paper is set out in four sections. This introduction, section 1, provides the *context* of the course and the constructivist teaching philosophy that informed it.

Section 2 reviews the pedagogical models that informed course design: Shulman's (1986, 2013) Pedagogical Content Knowledge (PCK) upon which Technological Pedagogical Content Knowledge (TPACK) (e.g., Koehler, Mishra, & Cain, 2013; Mishra & Koehler, 2006) was based. The notion of "networked learning" (e.g., in the UK context, Goodyear, 2005; Goodyear, Banks, Hodgson, & McConnell, 2004; Goodyear, Salmon, Spector, Steeples, & Tickner, 2001, and in the USA, Bower, 2011; LaMendola, Ballantyne, & Daly, 2009) is explored. Strategies for engaging learners in blended environments are presented in the confluence of "technology-enhanced and blended learning methodologies" captured in Kellsey and Taylor's (2017) "[LearningWheel model of a] virtual community of learning and practice (VCoL&P)" (p. xvi).

Section 3 focuses on student experiences as they engaged with the blended delivery mode. This exercise integrates the challenges posed by the TPACK delivery context while also considering the professional workplace application. The authors critically reflect on the aims of the course and its learning objectives and outcomes in terms of Singh's (2006) notion of a "fusion" between "learning and work" (Singh, 2006, p. 477).

Section 4 offers a summative reflection of the *outcomes*: pedagogical and technological lessons to be learned from the application of the course's learning objectives to the "real life" workplace context. We also integrate the insights afforded by Susskind and Susskind's (2015) exploration of technology's influence on the professions.

To set the scene for subsequent discussion, a brief summary of the constructivist teaching philosophy which informed the initial offering of PROFSUPV 714 follows.

A constructivist teaching philosophy (Mike)

Using blended delivery (Graham, 2006), PROFSUPV 714 consciously employed a constructivist teaching philosophy in both the online asynchronous and the face-to-face (F2F) contexts. Crotty (2003, pp. 8, 9) suggests that constructivism assumes that "meaning" emerges from human interaction with "the realities in our world ... meaning is not discovered, but constructed." Managing human service practitioners in the organisational context fits into this organic lens as characteristic of the person-in-society practice context in which

professional human service workers function (Jarvis, 2009). Constructivist teaching requires the same commitment to students – course participants – as a human service worker's professional relationship with his or her client; a constructivist teacher never treats students simply as recipients of information but enters into the interaction with an intentional focus. The purpose of that intentional approach is to foster motivation by course participants to "engage in an activity because the activity itself [is] interesting and enjoyable" (Reeve, Ryan, Deci, & Jang, 2008, p. 226).

The authors argue that the primary goal of a constructivist tertiary teacher is to create a community of learning leading to a professional community of practice (Moore, 2008; Webster, 2013; Wenger, McDermott, & Snyder, 2002). The teacher becomes a "guide on the side" rather than a "sage on the stage" (King, 1993). By interacting with the literature, the teacher and each other, students create their own unique understanding of human services staff management leading to the development of a professional model of practice underpinned by ethics and theory. How collaboration between the authors contributed to the model is now described.

Collaboration between the authors

Although set in the University of Auckland's business school, Christine Woods' (2011) paper "Reflections on pedagogy: A journey of collaboration" evokes the quality of academic collaboration between the authors of this article. The biological term *symbiosis* expressing this collaboration is defined by the online *Oxford* dictionary as an "interaction between two different organisms living in close physical association, typically to the advantage of both." The authors conceptualise the term as people who create the culture in which they work. Sue's professional background as an e-learning specialist at the University of Glasgow, Stirling University and the UK's Open University before coming to New Zealand in 2006 set the scene for the authors' interaction. She also worked in staff development as well as software design and development.

Mike's professional background includes 20 years as a practitioner and manager in the Community Probation Service in Auckland and 14 months in the West Midlands Probation and Parole Service in England. His experience as a service manager in Community Probation took place during and after major organisational restructuring and has informed his teaching and research. Mike's primary area of research relates to social work leadership. His doctoral thesis developed a New Zealand model of social work organisational leadership of relevance to PROFSUPV 714 (hereafter, 714). As highlighted in this paper, his second research stream investigates online, continuing professional development and virtual communities of practice.

These interests constituted synergies that contributed to an empowering working relationship between the two authors. Underpinning the collaboration was a mutual commitment to student learning and the application of course work to the workplace. Sue's e-learning knowledge and skill base provided a near-perfect mix with Mike's practitioner, research and teaching experiences.

UNDERPINNING PEDAGOGY: THREE RESEARCH STREAMS

Pedagogical Content Knowledge (PCK)

In 1986, Shulman proposed a model of teaching (PCK) described as "the complexities of teacher understanding and transmission of content knowledge [and] the need for a more coherent theoretical framework" (Shulman, 1986, p. 9). Shulman's thinking conceptually underpinned the subsequent development of technology for teaching. Shulman's enduring legacy is evidenced by the reprinting, in 2013, of his initial 1986 paper in *The Journal of Education* (Shulman, 2013) and multiple citations by researchers in online applications (see, e.g., Benton-Borghi, 2015; Koehler et al., 2013; Mishra & Koehler, 2006).

Shulman articulated three "categories of content knowledge" (1986, p. 9) required for effective teaching: "(a) subject matter content knowledge; (b) pedagogical content knowledge; and (c) curricular knowledge". The first category, *content knowledge*, refers to the amount and organisation of knowledge *in itself* in the mind of the teacher. Shulman argues that such knowledge is not limited to the "facts or concepts of a domain" (1986, p. 9) – in this paper, management of staff in human services – but needs the teacher to *understand* the diverse ways in which essential concepts and principles of the discipline are organised and validated. Validity in this paper applies Silverman's (2013, p. 285) notion of the extent to which an accurate description of the knowledge informing the discipline may be determined: that is, to ensure authenticity. Shulman sets out his interpretation of content knowledge in these terms:

Teachers must not only be capable of defining for students the accepted truths in a domain. They must also be able to explain why a particular proposition is deemed warranted, why it is worth knowing, and how it relates to other propositions, both within the discipline and without, both in theory and in practice. (1986, p. 9)

In the domain of staff management, "accepted truths" are defined in this paper as well-established accepted theories informing practice: for example, Herzberg's (2003) classic "two-factor" worker motivation theory. Shulman extends this understanding to include interdisciplinary knowledge thus legitimising the interactions, for example, of social work and staff management in the broader professional fields of participants in 714. We may also apply such understanding to the professional interactions between the authors of this paper.

Shulman's second category, *pedagogical content knowledge*, "goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge *for teaching*" (Shulman, 1986, p. 9). As expressed by Shulman, "the most useful forms" (1986, p. 9) in which ideas are represented harness the power of analogies, illustrations, examples, explanations and demonstrations: "in a word, the ways of representing and formulating the subject that make it comprehensible to others" (Shulman, 1986, p. 9). Shulman also observes that this category addresses misconceptions by learners in their assumptions of course topics since course participants are "unlikely to appear as blank slates" (1986, p. 10).

Shulman's third category represents a logical development of the first two. He conceptualises *curricular knowledge* as "the full range of programs designed for the teaching of particular subjects at a given level [and] the variety of instructional materials available in relation to those programs" (1986, p. 10). Such thinking is practically applied to the delivery of 714

in multiple ways. The combined professional knowledge of the co-authors was applied to the content of the course – readings, lecturer input to online postings by course participants, video or real-time enacted role plays, exercises such as quizzes or multi-choice tests. The synergies of that professional collaboration contributed to the success of the course as measured in positive evaluations and student outcomes.

Shulman extends this category by his expectation that "a professional teacher [is] familiar with the curriculum materials under study by his or her students in *other subjects they are studying at the same time*" (1986, p. 10, emphasis added). Such an expectation carries particular force in university teaching environments given the frequency with which academics deliver their courses in silos, largely unaware of the content of colleagues' courses. Where course evaluations draw attention to repetitive material, teaching and learning committees need to critically explore course content. This exploration is under way at the undergraduate level in the school hosting 714 but needs implementation at the postgraduate applied practice level.

Technological Pedagogical Content Knowledge (TPACK)

By the early years of the new millennium, the increasing influence of information communication technology (ICT) in the educational world demanded the development of theoretical constructs to inform research and teacher preparation (Angeli, Valanides, & Christodoulou, 2016; Benton-Borghi, 2015). Building on Shulman's PCK thinking, a number of educational academic investigators developed a technological application which became known as TPCK, or later as TPACK. These authors included Mishra and Koehler (2006), Koehler et al., (2013) and Benton-Borghi (2013, 2015). In this section of the article, we set out how TPACK researchers applied Shulman's model to identify the nature of knowledge required by teachers for technology integration in their teaching, while addressing the complex, multifaceted and situated nature of teacher knowledge.

Koehler et al. (2013) conceptualise the components of TPACK as a Venn diagram of three intersecting circles. At their point of intersection, Shulman's (1986) pedagogical and content knowledge (PK and CK) produce his PCK model. By adding what Koehler and his colleagues describe as technological knowledge (TK), three further dimensions are added: technological pedagogical knowledge (TPK), technological content knowledge (TCK), and technological pedagogical content knowledge (TPACK) (Figure 1). Technological knowledge simply refers to expertise in operating digital technologies. The interaction between *content knowledge* and *technological knowledge* produces *technological content knowledge* which, on interacting with Shulman's (1986) *pedagogical content knowledge*, produces *technological pedagogical knowledge*. The interaction, in turn, of pedagogical content knowledge, technological content knowledge and technological content knowledge produces *technological pedagogical content knowledge*: TPACK (Angeli et al., 2016, p. 15) (Figure 1).

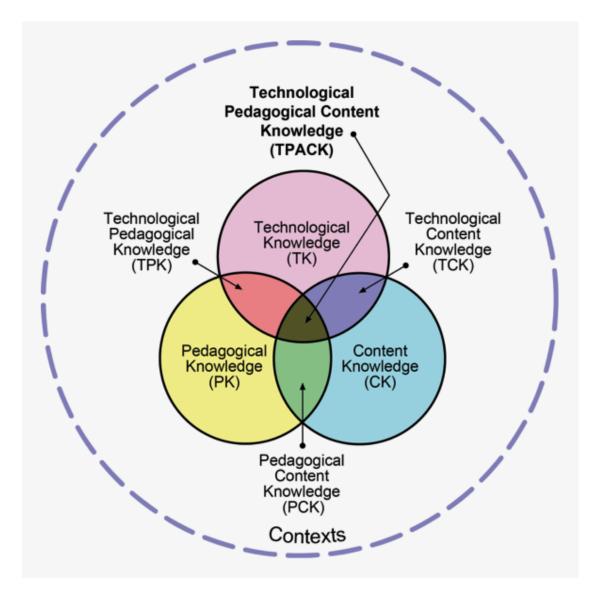


Figure 1. *TPACK framework* Source: http://tpack.org

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Table 1 depicts the application of these terms in Figure 1 to facilitate understanding of their meanings. A description of how the authors of this paper conceptualised their joint contributions in design and delivery of 714 is included.

Table 1. Descriptive Terms and Their Meaning

TERM	MEANING	AUTHORS' JOINT CONTRIBUTIONS IN DESIGN AND DELIVERY OF PROFSUPV 714
Pedagogical content knowledge (PCK)	Refers to the process of teaching based on the content being taught. Shulman's construct (1986) represents the teacher's knowledge of how to teach the specific content.	Mike (primary) Sue (support)
Technological content knowledge (TCK)	Refers to technological content knowledge, and how to use technology to represent and to teach specific content.	Sue (primary) Mike (support)
Technological pedagogical knowledge (TPK)	Refers to technological pedagogical knowledge and the type of technology best used with specific instructional methodology chosen by the teacher.	Sue (initially sole) Mike (contributing as knowledge developed)
Technological pedagogical content knowledge (TPACK)	Refers to the intersection of the different types of knowledge (content, technology, pedagogy) required by teachers to integrate technology to teach. "Each and all of these types of teacher knowledge are influenced by contextual factors, such as culture, socioeconomic status, and school structures" (Harris & Hofer, 2011, p. 213). The TPACK model guides teachers to integrate ICT in teaching and learning (Angeli & Valanides, 2009; Chai, Ling Koh, Tsai, & Lee Wee Tan, 2011) and provides a robust and theoretically grounded framework to represent the interrelationships between the components of technology, pedagogy, and content for teachers.	Sue and Mike (joint contributors)

Source of text: Benton-Borghi, 2015, p. 294.

Networked learning

From its inception, PROFSUPV 714 was conceptualised as a course which blended face-to-face (F2F) block teaching with online activities and resources. Although they do not use the term "blended," Goodyear et al., (2004) usefully describe the learning environment in which 714 is located as "networked learning" (2004, p. 1). Goodyear et al. (2004, p. 1) note that they use "the term *networked learning* to mean a distinctive version of the terms e-learning, Web-based learning and online learning." They define networked learning as:

Learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners; between learners and tutors; between a learning community and its learning resources (2004, p. 1)

The networked learning ideas advanced by Goodyear and his colleagues (2004) are usefully contextualised in Kellsey and Taylor's (2017) "LearningWheel model of digital pedagogy" (Figure 2). The LearningWheel presents four modes of engagement: communication; assessment – both formative and summative; collaboration; and learning content, mediated through three modes of delivery (Kellsey & Taylor, 2017, p. 6). The purpose of the model is to "crucially situate learners firmly at the centre of the learning process" while developing educators as "networked teachers" (Kellsey & Taylor, 2017, pp. 7, 8).

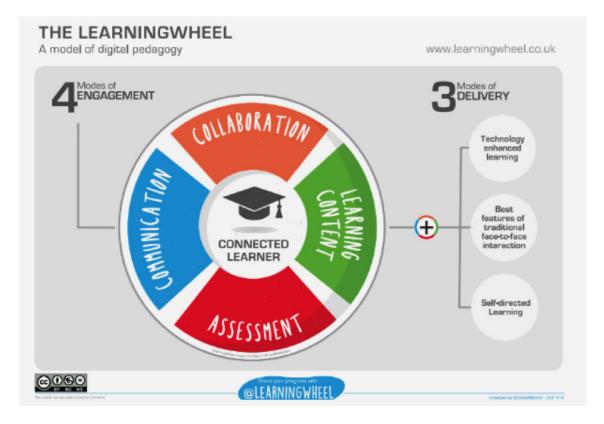


Figure 2. The LearningWheelSource: Kellsey, D., & Taylor, A. M. L. (2017). *The LearningWheel: A model of digital pedagogy* (p. 5). St Albans, England: Critical Publishing. Reproduced by permission of the publisher

The LearningWheel model is, in fact, a coherent representation of the underpinning philosophy and processes applied by the authors of this article for the participants enrolled in PROFSUPV 714. How those processes unfolded – and how lessons were learned from deficits in delivery – is addressed in section 3.

STUDENT EXPERIENCES: ENGAGEMENT IN BLENDED LEARNING AND COURSE OBJECTIVES APPLIED TO WORKPLACE REALITY

Early pedagogical lessons

Although the cohorts of students spanning 2005–2007 developed a genuine online community of practice (Webster, 2013), the lack of online pedagogical subject matter expertise on the part of the first author as course director rapidly became apparent. Two striking instances are recounted. In 2005, following the standard online enrolment procedure, no F2F meetings occurred until three months after online postings began. This proved to be a discombobulating experience for students. The need noted by Jeffrey, Milne, Suddaby, and Higgins (2012, p. 9) for social presence and a sense of belonging were essentially absent. In 2006, the practice of a half-day orientation was introduced and continued in subsequent years.

The second, and arguably more impactful deficit, related to assessment quantity. Students were required to complete no less than eight assessable exercises of three individual postings in each exercise. An enrolment of 15 students produced over 100,000 words in the space of 12 weeks. The capacity of the course director to meaningfully interact with students producing that volume of text as well as grade the exercises was limited by other demands,

exacerbated by a 0.5 FTE appointment. Subsequent research demonstrated the consequences of that limitation in this comment by one participant:

I thought where is [the facilitator], are we doing alright? Are we on target? I definitely had anxieties around that ... I knew [the facilitator] was there but I would have been more reassured had there been a little bit of feedback. Hey troops how are you doing, any difficulties get in touch with me, am busy but I'm still here. (Webster, 2013, p. 18)

This deficit was addressed by reducing assessable exercises from eight to two, thus creating a manageable volume of postings and thus capacity for engagement by the course director. Social presence and a sense of community already noted as critical needs for online learning (Jeffrey et al., 2012) were enabled and addressed.

Blended learning and student experiences

As noted under "Networked learning," the design and delivery of PROFSUPV 714 was predicated on blended learning. Graham suggests (2006, pp. 8–10) that blended learning is chosen *inter alia* for improved pedagogy and greater access and instructional flexibility. Kellsey and Taylor (2017) describe delivery modes for their Learning Wheel model as technology-enhanced learning, the best of F2F interaction, and self-direction (2017, p. 5). The PROFSUPV 714 course reflected these design elements. A participant in an earlier version of the course attests to Graham's "improved pedagogy" and "greater flexibility" and the benefits of Kellsey and Taylor's delivery modes:

[Online learning] was more positive than anticipated. Having met the people in that block course I enjoyed the learning. In a classroom I come up with the first thought that comes in my mind whereas [in online postings] there's time to read, reflect, look at it again, come back with a more informed and reflective response. I actually missed the interactions with the other students when the web CT [ICT platform] closed down. I felt a sense of loss. ("Angela" as cited in Webster, 2013, p. 16)

What, in fact, occurs in 714 is a demonstrable illustration of the "connected learner" noted at the centre of the Learning Wheel model (Figure 2). The reflective learning experience expressed by "Angela" created intellectual stimulation vis-à-vis other students which fed through to a commitment to the community. Connections are also established with the authors as course designer and teacher in the spirit of King's (1993) "guide on the side" philosophy, and more specifically with workplace issues, challenges and benefits. In 714, Kellsey and Taylor's (2017) "connected learner" travels through all four modes of engagement in the LearningWheel: (1) tutor-student and student-student communication; (2) formative assessments provided by diverse online exercises such as automatically graded quizzes, and a summative assessment which includes video role plays in the F2F block course context; (3) collaboration through threaded discussion boards through studenttutor-student interactions, the video role plays as noted, and in the F2F environment critical reflection and analysis of discussion board content and workplace challenges; and (4) *learning content* which includes "structured gateways" (Kellsey & Taylor, 2017, p. 6) to other resources. These resources include current performance management systems thinking applicable to the learner's workplace environment.

Kellsey and Taylor's (2017) "modes of engagement" enjoy parallels with "engagement strategies" reported by Jeffrey et al. (2012). Jeffrey and her colleagues suggest (2012, p. 15) that, for optimal engagement and retention effect, teachers should be "strongly encouraged" to incorporate all 10 engagement strategies rather than "mix and match them." How these strategies were applied to PROFSUPV 714 is illustrated in Figure 3. The motivation engendered is evidenced in this quote from an early participant in 714:

I got intensely interested in some of the dialogue and I became quite excited that I could log on fairly regularly to see if someone had replied to something I had posted. I guess it might be with an unexpected pleasure and intellectual engagement for me around the online content. I didn't expect the online conversations to capture me.

I was totally fascinated. I thought this is fantastic. People willingly shared. I got information that I may not have been able to access in a classroom. It was much more interesting than I imagined, online. ("Jessica" as cited in Webster, 2013, p. 16)

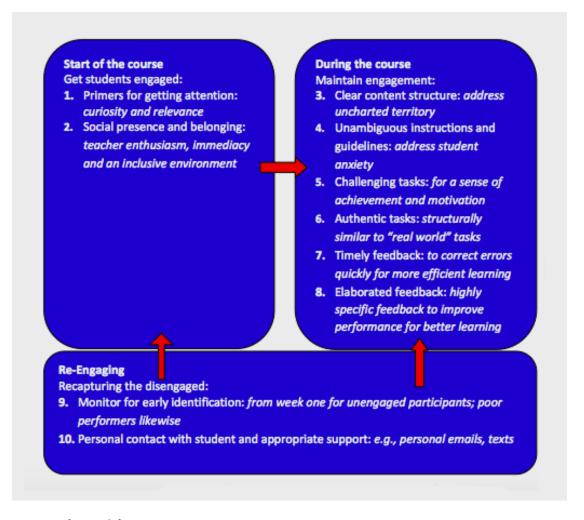


Figure 3. A framework for engagement: 10 strategies Source: Adapted from Jeffrey et al. (2012)

The capacity to engage learners through PROFSUPV 714's design and delivery as described by Graham (2006), Jeffrey et al. (2012) and Kellsey and Taylor (2017) sets the scene for an evaluation of whether and how course learning outcomes (LOs) (Table 2) have been achieved.

Table 2. PROFSUPV 714 Learning Outcomes

Learning outcomes

- 1. At completion of this course, students will be able to:
- 2. Demonstrate knowledge of theoretical approaches and their application to the management of professional staff in health and human services.
- Critically examine the issues and tensions associated with the role of a manager of staff performance.
- 4. Demonstrate a range of skills which enable effective performance management of professional staff in health and human services
- 5. Doing a case study of an actual social justice issue made it more relevant.
- Being able to have a main player visit and discuss the issues involved added more depth to my understanding of the complexity of dealing with vested interests.

A summative statement of these LOs reads: At the completion of the course, students will be able to understand and apply human service-related staff management theory and practice in the organisational context.

The capacity to create connections between the workplace and university coursework indicated in these LOs is integral to PROFSUPV 714. It is conceptualised by Singh (2006) in his notion of "blended learning and work" (2006, p. 474). Singh describes a process which moves from a focus on an academic-led, text-based environment using synchronous communication through to a future state employing a "fusion" between "learning and work" (Singh, 2006, p. 477). The academic-led stage is exemplified in the stereotypical lecture theatre "sage on the stage" (King, 1993) setting noted earlier. Singh describes intermediate stages along this conceptual learning journey as asynchronous virtual classrooms using such approaches as assessments and simulations; "simple blending" employing, for example, real-time personalised learning; and "seamless blending" which connects the workplace to virtual "self-paced learning." PROFSUPV 714 occupied these intermediate stages by virtue of block courses and online exercises between the blocks. Given that enrolments never exceeded 15, personalised learning became feasible as course content was applied to the unique workplace environments of each participant. The final stage of the fusion noted above in which learning is embedded in the workplace (Singh, 2006, p. 477).

Singh's conceptually bold formulation of blended learning embedded in the workplace have been in evidence in PROFSUPV 714. As participants applied performance management theory to their professional roles, the learning they had acquired came alive. A striking example is found in this essay statement from a recent participant in the course:

As a recently appointed Principal to this school, the opportunity to review the existing processes, make observations and question the merit and benefits of the current practice is a gift from this paper [PROFSUPV 714].

The careful alignment of learning from this current study [PROFSUPV 714], my perceptions of the school, its existing culture and the strategic intentions I am seeking to pursue is the opportunity I have. Performance management will allow me to reset, renew and re-invigorate the direction of the school. ("Alan")

Those comments suggest that "Alan's" capacity to critically evaluate course content is not confined to the mechanics of staff management processes. Equally evident, and arguably more pervasive, is his appreciation of how the culture of the school is created or maintained through leadership abilities (see, e.g., House, Javidan, Hanges, & Dorfman, 2002). The connections between PROFSUPV 714 and the workplace as articulated by "Alan" are illustrated in the discussion by Goodyear and Carvalho (2013) of "complex learning environments":

Competence, which is one way of describing the end goal for a learning process, rarely resides in the head of a learner. Rather, a person's competence is usually entangled in, and dependent on, a set of social and physical relationships. A more expansive view of competence includes that person's ability to assemble and hold together the entities needed for the task at hand. (Goodyear & Carvalho, 2013, p. 50)

The subtlety of "Alan's" appreciation of the linkage between leadership, culture and performance management exemplifies the assembly of the entities which demonstrate Goodyear and Carvalho's notion of competence.

A more straightforward application of PROFSUPV 714's content to the workplace is located in the contribution made by "Barbara," a manager in a non-governmental health organisation (NGO). She used 714 content to implement a performance review system:

I knew about how to set up a performance appraisal system and it came to me at the absolute right time at work so for me my involvement [in the course was] the highlight of that whole qualification [graduate diploma in professional supervision]. ("Barbara" as cited in Webster, 2013, p. 15)

Other outcomes became evident in the two-day, on-campus block towards the end of the course. Several aspects illustrate productive outcomes from the online interactions, some of which exemplified the trust which developed between participants, including the course director. Essentially, participants became colleagues who felt able to bring sensitive workplace management issues into the classroom. The student cohort assumed a collaborative identity whereby practice knowledge and wisdom – augmented by course theory and exercises – were brought to bear in unpacking thorny staff management conundrums. The vision of a constructivist tertiary teacher noted earlier in this paper to create a community of learning, and ultimately a professional community of practice unfolded in that process.

Another experience illustrated the move from the giving of information by a lecturer to a collaborative professional engagement. As noted earlier, assessment exercises included a video assignment which required students to provide an exemplar of one of three options: a performance review, a coaching session, or managing a poor performance interview. As a result of a major review of 714 in 2014/2015, the opportunity presented itself for participants to complete their interviews on day two of the on-campus block. Recordings were played back for collegial review immediately after they occurred. In every instance, students were content to submit their work for assessment, although the deadline was, in fact, a month later. Freeing up the last month to focus on an analysis of their workplace performance management systems proved to be a "win-win" outcome in terms of workflow for the course.

These comments by PROFSUPV 714 participants are spread from 2005 through to 2017. They are therefore intended to demonstrate an overarching perspective on the two key objectives expressed in course LOs: (1) *understanding course content* by engaging in research-based strategies as set out by Graham (2006), Jeffrey et al. (2012), and Kellsey and Taylor (2017); and (2) *applying that learning* in the organisational context. Reflections on these objectives are offered in section 4 of this paper.

CONCLUDING REFLECTIONS

This review is best characterised as a reflection by two colleagues with a similar vision: empowering students as practitioners in the demanding world of staff management in human services: state sector and non-governmental alike. The collaboration was organic, not systematic. Joint planning sessions took place as a planned redesign of PROFSUPV 714 progressed, with occasional ad hoc consultations when particular problems emerged. Much of the work was remote, as the draft online course was accessible to both as staff members.

The fruit of the collaboration recounted in this paper has become the basis for future research. Singh's proposal to "fus[e] learning and work" (Singh, 2006, p. 477) noted earlier in this article represents a useful starting point. The authors propose that an exploration of how academia and the workplace can be integrated holds promise as a fertile investigation.

As a base for that investigation, the authors offer their observations on how student experiences demonstrate the insights afforded by Susskind and Susskind (2015) in their evocative examination of *The Future of the Professions: How Technology Will Transform the Work of Human Experts.* Drawing on Susskind and Susskind, Kellsey and Taylor (2017) note that "technologies are reshaping traditional practices and the characteristics of professional groupings" (2017, p. 2). Some remarkable applications emerged in the context of PROFSUPV 714 which illustrate that reshaping.

The authors suggest that key insights emerging from Susskind and Susskind (2015) pertinent to this article are located in their proposal that professional work is handled collaboratively in teams, "sometimes collocated but more often virtually" (2015, p. 106). Susskind and Susskind argue that:

Human experts in the professions are no longer the only source of practical expertise. On various platforms, typically online, people share their past experience and help others to resolve similar problems. (2015, p. 107)

Susskind and Susskind use King (1993) (without citing her) in their statement that professionals such as "blended learning teachers shift from working as a 'sage on the stage' to a 'guide on the side'" (Susskind & Susskind, 2015, p. 122). Two consequences flow out of that change. Tertiary teachers may not possess the technical information skills to set up learning management systems (LMS) (for example, Canvas or Moodle) and are thus dependent on information technology subject matter experts such as graphic designers and systems engineers to disseminate their knowledge. A division of labour occurs. Second, as the Susskinds point out:

Users now contribute and participate directly. Readers can now be writers. Recipients can be participants. Users generate content and make it available to others. (2015, p. 177)

This generation of content is precisely what occurs in threaded discussion boards in PROFSUPV 714. Susskind and Susskind also have in mind recipients of professional work who "sidestep the gatekeepers" (2015, p. 127). The professionals are no longer the sole gatekeepers to knowledge because of the nature of knowledge in today's virtual context. The Susskinds argue that:

Knowledge has four special characteristics. It is non-rival, in that use of it does not diminish what is left for others. It has a tendency towards non-excludability, in that it is difficult to prevent non-payers from using it. It is cumulative, in that its use and reuse in turn give rise to new knowledge. And it is digitizable, in that we can often turn it into machine-processable bits. Practical expertise, one particular type of knowledge, shares these four special characteristics. (2015, p. 193)

The authors consider that the perspectives of Susskind and Susskind carry valid applications to PROFSUPV 714. The knowledge added in the online, threaded discussions possesses all four characteristics identified earlier. More than that, the values inherent in human service work and the management of staff are essentially collective, empowering and non-exclusive. Qualities of transparency and mutual accountability between managers and staff have emerged in Mike's doctoral thesis examining social work leadership, applicable to the wider human service field. In discussing a commitment to "ethical, empowering and competent leadership" for example, an NGO team manager who participated in that leadership research project commented:

I have really transparent conversations. You [are] trying to get team rapport [in order that] people feel a part of something that is going somewhere. So there is a team approach towards somebody [who] drops the ball. It is not just me having to point that out. The other team members will hold each other accountable. I am very transparent to my team. I hold myself accountable for their work and giving them feedback whether positive or negative or a mixture of both. I have a no surprises policy so [employ] transparency [in] annual performance appraisals. ("Deborah", Webster, 2017, p. 133, emphases added)

The processes in that discourse are those we exercised as the PROFSUPV 714 course director and course designer relating to students who are professionals in their own right. Equally, the interactions between students and their supervisees in the video exercises demonstrated mutual accountability. The authors propose that human service professionals are ideally placed to function in that mutual commitment. Those interactions constitute the culture which enables the transparent manager-worker mutual accountability *modus operandi* in performance management systems.

We further propose that this culture of empowerment will also facilitate knowledge sharing and, therefore, knowledge building as described in Susskind and Susskind's definition (2015, p. 193). This willingness to share knowledge in a community such as PROFSUPV 714 is likely to create new insights which will advance Singh's (2006) notion that learning and work can be fused. It is, in fact, a positive rendition of the aphorism "knowledge is power": willingness to share knowledge is to balance the power dimension between managers and workers. As a summative statement for this paper, we propose that PROFSUPV 714 offers an illustration of how the acquisition and sharing of knowledge expressed in Kellsey and Taylor's "[LearningWheel model of a] virtual community of learning and practice (VCoL&P)" (2017, p. xvi) can be realised. That acquisition of knowledge is translated to practice wisdom.

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