The Role of Educational Technology in Third Space Practicum

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Abstract:

There are increasing calls to improve the quality of Teacher Education by creating closer links between universities and schools that will address the theory practice divide. In response, the School of Education at RMIT University, Melbourne, Victoria redesigned its first year program, core courses and practicum to align with the conceptualisation of Third Space. This article draws upon data from a larger research project; however, the focus of this paper is to examine how educational technologies assisted in the development of a Third Space practicum. A post-evaluation survey was completed by pre-service teachers who participated in the redesigned course and practicum. This paper will argue that educational technology played an important role in the Third Space practicum as it fostered collaboration, shared knowledge among stakeholders and created expanded learning opportunities. It also highlighted the importance of relationships in the Third Space experience.

SCIENCE AND TECHNOLOGY PUBLICATIONS

1 INTRODUCTION

"They've had too much emphasis on theory and not enough time in the classroom" Christopher Pyne, Education Minister (The Age, 28 September, 2013).

Teacher Education has long been challenged to conceptualise the connection between universitybased coursework and the teacher practicum and support prospective teachers to develop theories and practical skills for teaching (Grossman et al., 2009). A number of approaches have been implemented to reconceptualise relationships including; establishing professional development schools, teaching courses in schools, having practising teachers teach in universities, and creating assessments that bridge theory and practice. Such approaches support the adoption of 'realistic teacher education' proposed by Korthagen and Kessels (1999) in which theory and practice is interconnected through a reorganised curriculum (Zeichner, 2010). Yet, as noted by numerous researchers, "though scholars of teacher education periodically revise the relationship between theory and practice, teacher education programs struggle to redesign programmatic structures and pedagogy to acknowledge and build on the integrated nature of theory and practice as well as the potentially deep interplay between coursework and field placements" (Grossman et al 2009, p. 276). Darling-Hammond (2006) suggests the need for models of teacher education underpinned with stronger relationships with schools "that press for mutual transformations of teaching and learning to teach" (p. 3).

The notion of forming partnerships between schools and teacher education providers has long been advocated on the grounds that this will enable greater connection between the coursework delivered by providers, and the practice experience at school sites, moving towards a shared responsibility for teacher education. Indeed, it was one of the key recommendations in the Top of the Class Report (2007), and the report by the Victorian Council of Deans of Education (Ure, Gough and Newton, 2009). Newly implemented national accreditation processes for teacher education in Australia, around the provision of the practicum, stipulate that enduring school partnerships should be established in order to help facilitate the provision of practice in schools (AITSL, 2009). While the adoption of partnerships as a condition of teacher education in Australia has been promoted (AITSL, 2009), research has shown that partnerships are difficult to realise. Considerable time and resources need to be outlaid and even when partnerships are formed, there can still be a disconnect between what is taught at the university and what is learned on site in schools. This paper adds to the growing body of research around the theory/practice divide in teacher education. It explores the potential of partnerships and the tensions between universities and schools.

This paper documents how one university

formed partnerships with 14 schools and reconceptualised the practicum experience to align with a Third Space epistemology; where universities and schools share responsibility for course content and delivery. This paper begins by outlining the literature around practicum, teacher education and the tension between the theory practice divide. It progresses to discuss the theory of Third Space and how it has informed the methodology. Results of the survey data about the teaching and learning design features are analysed. The paper concludes by addressing how educational technologies assisted in the development of this Third Space.

2 THEORY PRACTICE DIVIDE IN TEACHER EDUCATION

For well over twenty years, most reports into preservice teacher education in Australia typically refer to the need to improve the quality of initial teacher education programs, with consistent concerns about the lack of connection between theory and practice (Ure et al., 2009). The Top of the Class report from the inquiry into teacher education by the House of Representatives Standing Committee on Education and Vocational Training (2007), argued that at the root of this interconnection was the "current distribution of responsibilities in teacher education" (p.2), whereby theoretical components are typically taught on campus by faculty and the teaching practicum undertaken on site in schools by practising teachers. These concerns are not confined to Australia. In the United States, this concern has been identified as the "central problem that has plagued teacher education" (Zeichner, 2010, p. 89), and Darling-Hammond (2006) describes it as the 'Achilles heel' of teacher education.

The teaching practicum is seen as an essential part of becoming a teacher. It is generally acknowledged as vital for the development of practical skills in teaching and as a foundation of quality teacher education (Ure et al., 2009). Yet, how the practicum should be designed and implemented, and the role that schools play, is a site of contestation between pre-service teachers, teacher mentors, schools, governments and universities. Grove (2008) suggests that a number of issues impact on the practicum, including the expectations of schools, the quality of teacher mentoring and the pre-service teachers' scope to apply learning in the school context. Zeichner (2010), in his often-cited paper, is critical of the way universities approach the

practicum. Drawing on his own extensive experience, he suggests that the teacher practicum is often conceived as an administrative task rather than one around the learning needs of the pre-service teacher. This is a sentiment echoed by Darling-Hammond (2010), who comments that:

Often, the clinical side of teacher education has been fairly haphazard, depending on the idiosyncrasies of loosely selected placements with little guidance about what happens in them and little connection to university work (p. 11).

Zeichner (2010) comments that university staff have few incentives to be involved in the teacher practicum and that often it is outsourced to graduates or retired teachers. Universities, he argues, typically have very little involvement in the details of the practicum, leaving these to be worked out between pre-service teachers and teacher mentors. Zeichner (2010) also suggests that there are issues around the role of the teacher mentor in the practicum; mentors he argues receive very little acknowledgement of their efforts for supervising pre-service teachers and little monetary reward. Another problem with the practicum he suggests is that schools and mentors know very little about what happens at the university and in the coursework, and university educators have little knowledge of what happens in schools.

With strong literature support for greater partnerships, the School of Education at RMIT sought to redesign their first year program to explicitly address Zeichner's (2010) concerns above (explained in more detail in later sections), and to be more aligned with the notion of Third Space.

3 THEORETICAL LENS: THIRD SPACE THEORY

While there is general acknowledgment by policy makers, academics, researchers and practitioners alike, that more could be and should be done to encourage a greater interconnection between theory and practice in teacher education, the reasons for this lack of connection are complex and there is no one solution. Zeichner (2010) suggests that creating a hybrid or Third Space could have possibilities for bridging the boundaries between these two spaces. To Zeichner, Third Space rejects binaries and the notions of practitioner and academic, knowledge/theory and practice, and integrates or weaves them, so that an either/or perspective is transformed into a both/also view. He explores various examples including: bringing teachers into university courses; bringing representations of teacher practice into coursework, including mediated instruction where part of a course is taught on site in schools, or having hybrid educators where a course is taught both at the university and on site; and/or incorporating knowledge from communities (Taylor, Klein, Abrams, 2014). In such spaces responsibility for teacher education could be shared as boundaries between practicing teachers and university academics are blurred and there are more open lines of communication and shared understanding (McDonough, 2014). This paper reports on a pilot program that created such a Third Space in an attempt to achieve this aim.

Third Space theory is essentially used to explore and understand the spaces 'in between' two or more discourses, conceptualisations or binaries (Bhabha, 1994). Soja (1996) explains this through a triad where Firstspace refers to the material spaces, Secondspace encompasses mental spaces (Danaher et al., 2003) and Thirdspace then becomes a space where "everything comes together" (Soja, 1996, p. 56), bringing Firstspace and Secondspace together, but also extending beyond these spaces to intermesh the binaries that characterise the spaces. Third Space theory is used as a methodology in a variety of disciplines and for different purposes. For example, it has been used to illustrate issues from colonisation (Bhabha, 1994) and religion (Khan, 2000), to language and literacy (Gutiérrez et al., 1997). Within educational contexts, Moje, et al. (2004) used Third Space theory to examine the in-between everyday literacies (home, community, peer group) with the literacies used within a schooling context. In their influential paper, they summarised the three main ways that theorists have conceptualised Third Space: as a bridge; navigational space; and a transformative space of cultural, social and epistemological change. The theoretical underpinning of Third Space influenced the way in which we positioned the partnerships between schools and the university, conceptualised the roles of stakeholders in addition to guiding the design features of the course Orientation to Teaching in which the practicum was imbedded. This course has several design features that were specifically used to support the development of a Third Space and addressed previous concerns by Zeichner (2010):

1. Course requirements and expectations were made explicit. Pre-service teachers undertook pre-practicum workshops to orientate them to the course.

- 2. Course content was blended; delivery was online (via an open Google Site) and face-to-face at university and in schools.
- 3. Course content (workshops) was delivered intensively on site in partner schools by school-based tutors.
- 4. Course content written by practising teachers and university staff connected theory with practice, was practical, and gave structured support to learning.
- 5. Course content made use of print media and Web 2.0 technologies including podcasts and social media platforms (e.g. Facebook).
- 6. Pre-service teachers were supported in partner schools by being placed with a 'buddy', in groups and supervised by a Teacher Mentor.

Attention now turns to the specific use of technologies in the course design, namely the use of a Google Site as the online platform and the embedded use of other Web 2.0 technologies. Ensuring that the course content was accessible to all parties - practising teachers in partner schools, the university faculty; and pre-service teachers - was initially a challenge given that schools and universities have their own preferred platforms which with restricted access for authorised users only. After some deliberation and experimentation (firewalls in schools etc.) a Google Site was selected as it would enable open access (all course materials could be shared) and anywhere/anytime access across operating systems. Google Sites became the principal means for practicing teachers and university staff to communicate with one another about course requirements and expectations, to share information about their own practices and specific course materials. The Google Site designed for this course included:

- Checklists to support learning (a self-assessment tool using Google forms that pre-service teachers used to demonstrate they had completed all necessary tasks before attending tutorials)
- Podcasts to support consistency in assessment practices (e.g. assessment advice to ensure a consistent message across all partner schools)
- Online course materials accessible at all times (administration, course guides, assessment criteria sheets)
- Flipped learning activities (tasks specifically designed to engage learners and teach core content prior to attending the class/workshop, including viewing and analysing YouTube videos, viewing podcasts and simulations, and completing audits of practice). The concept of a

flipped-classroom, in its simplest form, involves moving key content and concepts outside the tutorials/lecture time, to allow for more classroom time for "active learning, including application of content in the form of case studies, discussions, or simulation experiences" (See and Conry, 2014, p. 585).

3.1 Methodology

This small-scale pilot study was conducted by the School of Education at RMIT University, one of a number of initial teacher education providers in Victoria, Australia. In the past, our teacher education programs separated the theory and practicum components. Each year, the School organises over 2000 practicum placements in approximately 450 primary schools, 100 secondary schools and 450 early childhood settings. In 2014, the School introduced a new model of practicum into the Bachelor of Education (Primary) program for first and second years. This study focuses on the practicum course *Orientation to Teaching* and the technologies appropriated to design, deliver and support the development of a Third Space practicum in which theory and practice were bridged. This course was delivered in Semester 1, 2014, to first year pre-service teachers on site in a number of primary schools. The cohort of pre-service teachers (270 students), were predominantly preparing to be generalist primary school teachers, although some were specialising in Early Childhood Education and in Disability Studies. The majority are female (86%), range in age from 18 to 39 years of age (mean age of 21), and were Australian-born (89.3%) with English as their language spoken at home (81.3%).

A mixed methods approach was used to examine the value of this alternate course design. A survey instrument was produced to measure pre-service teacher perceptions of the design features of this course, using a four-point scale (a lot, some, a little, not at all) and administered online via Qualtrics. This survey and focus group data was collected from 42 (approximately 15%) pre-service teachers, who had completed the course *Orientation to Teaching*, and who volunteered to participate.

4 TEACHING AND LEARNING DESIGN FEATURES

Survey data was analysed to reveal trends in preservice teachers' perceptions of the design features of the course. All quantitative responses were aggregated across school/tutorial group and examined for consistencies across themes and responses that challenged the dominant theme/s. We also examined the themes based on the research aims of the study. In the first instance, this involved analysing the features rated 'a lot' to reveal which features were considered of most importance and least importance.

Table 1: Pre-service teacher survey results on the design features of the course Orientation to Teaching.

				
Course design feature:	A lot %	Some %	A little %	Not at all %
Teacher Mentor support	90	7	3	0
Practical focus	88	5	7	0
Structured support such as success checklists	85	8	2	5
Connecting ideas from class to real classrooms	81	12	1	y
Clear participant expectations	73	20	7	0
Taught by a School-based Tutor	71	17	10	2
Small group of pre- service teachers at school site	69	19	7	5
Access to materials 'at any time and place'	64	29	7	0
Clear learning expectations	64	25	7	5
Podcasts	63	17	17	3
Placed with a buddy	59	17	7	17
Online materials	52	29	14	5
Pre-placement workshops at university	52	33	10	5
Intensive mode	51	32	15	2
Workshops in schools	50	24	21	5
Connection to a textbook	38	27	33	2

As shown in Table 1, pre-service teachers considered 'Having Teacher Mentor support', as the most desired design feature of the course, with 90% perceiving that it mattered 'a lot'. The design features of 'Having a practical focus' (88%),

'structured support' through success checklists, examples (85%) and connecting ideas between universities and classrooms (81%) also rated highly. This provides evidence that pre-service teachers were able to bridge the theory and practice binary. Features that mattered less to pre-service teachers were 'Connection to a textbook' (38%), despite the textbook being very practice orientated. Explicit reference to educational technologies tended to rate in the mid-range. For example, 'Being able to access materials 'at any time and place (online)' rated at 64%, although interestingly, no pre-service teacher felt it didn't matter at all. Similarly, 'Being able to access podcasts of lectures 'in review' and assessment support' (63%), and 'Having online materials' (53%) also rated in the mid-range.

Of interest, while 'Being able to connect ideas from class to real classrooms' (81%) was rated highly, 'Having workshops in schools' was not, (only 50% of pre-service teachers rated it mattering 'a lot'). This finding is of interest as the workshops on site were designed to be the space where connections between theory and practice were made. This raises the question, if not at the workshops, where did pre-service teachers make these connections that they rated so highly? Was it the real classroom, in discussion with the Teacher Mentor or informally with their peers? This would be an issue worth unpacking in future research. There was also a vast difference in how pre-service teachers valued support. For example, 'Having Teacher Mentor support' was rated highest at 90%, but the support from peers 'Being placed with a buddy' (59%) and being in a peer group ('Being placed with a small group of pre-service at school site') (69%) was not nearly so highly rated.

In the second instance, survey data was analysed to gain a broader perspective of which features were of greatest importance by adding together those features rated as 'a lot' and 'some'. Doing so reveals a somewhat different trend. As shown in Figure 1, 'Having Teacher Mentor support' still rates highly, as well as 'Connecting ideas to real classroom' and 'Being placed with a small group of pre-service teachers in one school site'. The main difference is the role of educational technology. For instance, being able to access materials 'at any time and place' (online) is now the third most important design (93%), see Figure 1. Structured supports such as checklists (all online support) also increased in importance (93%). The role of podcasts and online material were ranked similarly in both tables.

Design Features

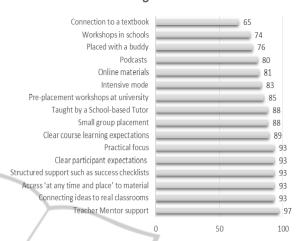


Figure 1: Survey results combining the responses 'a lot' and 'some'.

This quantitative data is supported by the qualitative data that emerged from the open-ended questions posed in the survey. For many of the participants in this pilot program, the online design feature of the course had strong appeal, with many commenting on how this enabled them to access the course content with ease. It was typical for comments, for example one student stated that the online material enabled "quick and easy access to material that I needed". For some pre-service teachers this access allowed for individual learning convenience as shown in this comment, "the online concept of this course was very important to me and a lot of my friends also doing the course. It meant that we had access to the information we needed where and when best suited us." For others it aided their study: "with working and studying at the same time to have resources online made it easier to organise my studying". Some referred specifically to how online access eased assessment pressures: "Being able to access the podcasts of lectures. This made doing the assessment tasks a lot less stressful as I knew I could refer back to the lecture if I thought I had heard some information that would have been helpful."

The use of educational technologies such as a Google Sites meant there was a shared understanding across all schools, tutorial groups at different schools and a central point of reference. As one student noted: "The next most important design feature to me was the clear checklists of exactly what we needed to do on the O2T website. They made life a lot easier during placement".

Having this shared expectation and open communication between the first space of university and the second space of schools, was an important aspect of a Third Space practicum. This was highlighted by a pre-service teacher who said: "having clear participant expectations (students, mentors and tutors) as open communication and set expectation are good guidelines so that you know what is expected from you and you can measure and reflect on your own performance as a teacher". This design feature was also significant for the preservice teachers to succeed within the practicum, as noted:

... having clear participant expectations with clear course learning and structured support [was important]. These all worked together for me as they provided me with the support I needed during uni and placement. Being aware of what was expected of myself allowed me to perform at my best in both settings and the knowledge of the course material, pre-readings and structured support allowed me to come prepared to both uni and placement.

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4.1 Third Space Practicum

The aim of this study was to research the conceptualisation of Third Space theory as a way of improving the theory practice divide. Further, to investigate the role of educational technologies in assisting the development of a Third Space practicum. One of the themes that emerged from the pre-service teachers' comments was the explicit bridge of the theory practice divide. For example, one pre-service teacher commented, "I enjoyed seeing how the theory we were taught was instantly reflected in teaching practices. It allowed me to be critically aware of how other teachers incorporated or rejected the theories and set my own opinions accordingly". This sentiment was also reflected by another pre-service teacher: "I found [being on site] really cemented a lot of things that we've been learning about and it was really eye-opening experience and to see it working in the workshops and to see it in the classroom. This is really, really valuable". A number also commented specifically on the practical nature of the course design as typified in the following comment:

The most important feature to me was the practical focus. I was a bit lost in the course before I went on placement. It was so good to have practical situations to apply theory rather than always working with hypothetical situations. I think it is really important to have placement early on for this reason.

5 CONCLUSIONS

We were drawn to the Third Space construct for practicum as it enabled us to make visible the connections between schools and universities. The notion of a Third Space, as a hybrid space, offers possibilities for teacher education traditionally there have been clear boundaries between the space occupied by theory, often taught on campus, and the space of practicum, taught on site in schools. For a long time, this disconnect has been seen as one of the main areas of concern for the quality of teacher education programs. demonstrated through the comments of pre-service teachers, the Third Space practicum has the potential to bring together the theory and practice in meaningful ways.

Pre-service teachers while on placement inhabit a Third Space; they neither "belong" to the school, nor are they "at" university, thus, they are in-between these two spaces or in a Third Space. However, through the design features within the Third Space practicum, they were able to interweave, university/school, theory/practice, face-to-face/ online and learner/teacher. The quantitative and qualitative data showed that the role of relationships with their Teacher Mentor, buddy and being placed with a small group of pre-service teachers at school site were also highly valued. By creating this Third Space, we believe that there is the potential to expand pre-service teacher knowledge, to give them greater opportunities to examine practice in real settings, to reflect on practice, and possibly provide a transformative space where new learning can occur.

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