Australian Journal of Teacher Education

Volume 38 | Issue 4 Article 7

4-2013

How School and University Supervising Staff Perceive the Pre-Service Teacher Education Practicum: A Comparative Study

Jeanne M. Allen University of Tasmania

Angelina Ambrosetti Central Queensland University

David Turner Bald Hills State School

Follow this and additional works at: https://ro.ecu.edu.au/ajte



Part of the Higher Education and Teaching Commons

Recommended Citation

Allen, J. M., Ambrosetti, A., & Turner, D. (2013). How School and University Supervising Staff Perceive the Pre-Service Teacher Education Practicum: A Comparative Study. Australian Journal of Teacher Education, 38(4). https://doi.org/10.14221/ajte.2013v38n4.9

This Journal Article is posted at Research Online. https://ro.ecu.edu.au/ajte/vol38/iss4/7

How School and University Supervising Staff Perceive the Pre-Service Teacher Education Practicum: A Comparative Study

Jeanne M. Allen
University of Tasmania
Angelina Ambrosetti
Central Queensland University
David Turner
Bald Hills State School

Abstract: This paper reports on research conducted in two Australian universities to evaluate factors that are perceived to significantly impact on the professional experiences of pre-service teachers during practicum. Contextualised within teacher education programs in an urban university in Tasmania and a regional university in Queensland, the particular focus of this paper is the beliefs and experiences of school and university supervising staff members regarding the efficacy of the practicum in enabling students to integrate into practice the knowledge and skills they have acquired in their university coursework. Findings generated from the comparative analysis of both mixed methods studies revealed some differences but predominantly a number of similarities between the perceptions of the two samples of school practitioners and university staff members towards practicum. Three key findings are presented and discussed in this paper.

Use of Terms

"Colleague teacher" is the school teacher who supervises the pre-service teacher during practicum.

"Lead teacher" refers to the (usually senior) school teacher in the Queensland program who has oversight of the group of pre-service teachers doing practicum in his/her school and acts as their mentor.

"Portal tasks" are the assessable tasks pre-service teachers in the Queensland program must undertake in their practicum school.

"Practicum" refers to the pre-service teacher's professional or field experience.

"Teaching School Model" (TSM) is the term used in the Queensland program to refer to the field experience component of the program.

"University coordinator" refers to the academic staff member responsible for liaising with the school and for monitoring the progress of the pre-service teacher/s in that school during practicum.

Introduction

The merit and indeed relevance of university pre-service teacher education programs have long been contested. Particularly in current times with many western governments and commentators demanding higher levels of accountability in teacher performance, questions

are increasingly being raised about how well teachers are prepared (Cochran-Smith, 2005; Neville, Sherman, & Cohen, 2005). In Australia, the context of this study, a range of recent reports and policy responses (Churchill, 2007; Eyres, 2005; House of Representatives Standing Committee on Education and Vocational Training, 2007; Masters, 2009) provides evidence of the issues associated with the gap between theory and practice in pre-service teacher education. According to Levine (2006), a widely held concern is that we run the risk of preparing teachers who know much about theory and nothing about practice. Others suggest that separating theory from practice creates a false dichotomy and that teaching is a profession in which theory is embedded in and inseparable from practice (Lenz Taguchi, 2007; Schön, 2003). Nevertheless, "theory," "practice" and the so-called "theory-practice gap" are commonly used and widely understood terms in the context of teacher education and in the literature (Kessels & Korthagen, 1996; Zeichner, 2010). For the purposes of this and a previous paper (see Allen & Wright, in press), we therefore follow Zeichner (2010) in using the term "theory" to represent the broad range of concepts and skills associated with the declarative and procedural knowledge taught to student teachers on campus; and the term "practice" to refer to the classroom pedagogy and activities of the teacher. This is not to suggest that we view all campus work as theoretical or all classroom activities as representing practice only. Rather, we acknowledge that the theory-practice binary is complex and that theories and beliefs about how theoretical knowledge is applied in practice are diverse and often conflicting (Connelly & Clandinin, 1995).

In highlighting concerns about disconnections between theory and practice, the teacher education literature demonstrates how the practicum can be especially problematic in this regard (Allen, 2011; Allsopp, De Marie, Alvarez-McHatton, & Doone, 2006; Bloomfield, Taylor & Maxwell, 2004; Cochran-Smith, 2009; Darling-Hammond, 2005, 2010; Korthagen, 2007; Vick, 2006). Many argue that one of the major reasons for the perpetuation of the theory-practice gap in the practicum is the continuing separation of teacher education responsibilities between universities and schools (Dean, Lauer, & Urquhart, 2005; Korthagen, Loughran & Russell, 2006; Valencia, Martin, Place, & Grossman, 2009; Zeichner, 2010). The OECD's (2005, p. 30) call for "stronger partnerships between schools and teacher education institutions" echoes others in promoting the need for reform. Indeed, the forging and fostering of school-university partnerships has been identified as one of the critical components in creating more powerful and more effective teacher education programs (Darling-Hammond, 2006; Louden & Rohl, 2006). Partnership arrangements that meet certain criteria, including a genuine engagement in the learning process, have been shown to deliver the most positive results to pre-service teachers (Allsopp et al., 2006; Cochran-Smith, 2009; Darling Hammond, 2010).

In her study of seven highly successful and long-standing United States teacher education programs, Darling-Hammond (2006) argued that programs including well-constructed, collaborative and effectively-coordinated field experiences contribute significantly to equipping trainee teachers with requisite knowledge and skills to serve diverse learners well and to learn continuously from their practice (Darling-Hammond, 2006). Central to the success of such programs are: *coherence*, based on a common, clear vision of good teaching grounded in an understanding of learning; *a strong core curriculum*, taught in the context of practice; *extensive*, *connected clinical experiences* that support the ideas and practices presented in coursework; *an inquiry approach* that connects theory and practice; *school-university partnerships* that develop common knowledge and shared beliefs among school- and university-based faculty; and *assessment based on professional standards* that evaluates teaching through demonstrations of critical skills and abilities (Darling-Hammond, 2006).

However, there are a number of identified barriers associated with establishing models of this kind that depend on meaningful and sustained collaborations between schools and universities. Bloomfield (2009), for example, points to the range of time and resource

constraints experienced by staff in both sectors, which can intrude on the creation of effective partnerships. This can result in a lack of reciprocity between academics and school teachers in acknowledging the differences between their cultures, histories and workplace responsibilities (Sachs, 1999). An associated concern is the lack of clarity surrounding the expectations and responsibilities of those involved in supervising the pre-service teacher practicum (Allen & Peach, 2007; Allen & Wright, in press; Cherian, 2007; Trent & Lim, 2010), which can result in very different stakeholder interpretations of what practicum entails (Bullough & Draper, 2004; Hayes, Capel, Katene, & Cook, 2008) and a less than optimum experience for the pre-service teachers involved (Allen & Wright, in press). In Australia, a 2007 federal government report into the nation's teacher education programs highlighted problems associated with the practicum and advocated the need for "major reform" (House of Representatives Standing Committee on Education and Vocational Training, 2007, p. 73). While there is productive work being done in this area (see, e.g., Allen, Howells, & Radford, 2013; Turner, 2006), there is a pressing need for more progress to be made in this area.

This paper reports on the way the theory-practice gap is addressed in two diverse Australian pre-service teacher education programs, one of which is located in an urban university in Tasmania, the other in a Queensland regional university (Australia comprises six states and various territories. Queensland, situated in the north-east of the country, is the second-largest and third-most populous state. Tasmania is an island state located to the south of the Australian continent. It is the smallest and least populated of the states). The particular focus of the paper is the beliefs and experiences of school and university supervising staff members regarding the efficacy of the practicum in enabling students to enact theory in practice. In conducting a comparative study of both programs, a number of findings were generated, three of which are presented and discussed in this paper.

Context

As well as being located in diverse geographical areas (rural Queensland and urban Tasmania), the two pre-service teacher education programs discussed in this paper are quite differently constructed. An overview of (primary) program structures, current at the time of the respective studies, is provided in Appendices A and B. Both programs offer primary and secondary teaching strands. The Queensland program is offered in on-campus and mixed oncampus/online delivery modes while the Tasmanian model offers on-campus, mixed mode and fully online modes.

The Queensland under-graduate (four-year - an accelerated three-year program is offered to eligible students) program, named the "Bachelor of Learning Management," (BLM) was created in the early 2000s with the core aim of creating a paradigm shift in the provision of pre-service teacher education (Turner & Lynch, 2006). Appendix C provides an overview of ways in which it was significantly reconceptualised from its Bachelor of Education (BEd) predecessor. For the purposes of this paper, we focus on the field experience component of the program, entitled the Teaching School Model (TSM), which is claimed to go far in addressing the theory-practice gap in the practicum (Smith & Moore, 2006; Turner 2006). Based on the concept of the teaching hospital, the TSM seeks to build the practicum around partnerships between the university and schools and school systems. Teaching staff from both the universities and the schools take part in the conceptualisation, design and implementation of the practicum. A group of pre-service teachers is assigned to each of the "teaching schools" which must meet certain criteria demonstrating the school's capacity to function effectively within the TSM.

A key element of the TSM is that of the number of days the pre-service teacher spends in school during the in-field component. The pre-service teacher spends

approximately 140 days in schools over the course of the four-year program, which represents 60 more days than are prescribed by the program accrediting authority. School practicum visits are divided into weekly day visits followed by a block of time in the first, second and fourth years. A culminating six-week internship takes place in the final year. Additionally, students undertake 10 days of school work experience in each of their first and second years. The extended period of time spent in schools is intended to provide additional opportunities for pre-service teachers to integrate theory and practice (Smith & Moore, 2006). Furthermore, the pre-service teachers are required to complete tasks, known as "portal tasks," explicitly associated with the coursework being undertaken at university. In many instances, the pre-service teachers complete the theoretical aspect as part of a task, which is assessed by the university lecturer, and then implement the task during the field placement that is assessed by the supervising school teacher, henceforth, "colleague teacher." The pre-service and colleague teachers are supported during the practicum by the university coordinator who communicates primarily with the lead teacher. The latter is a role generally filled by a senior teacher who provides professional learning for the colleague teachers and has oversight of the group of pre-service teachers doing practicum in his/her school. The university coordinator also visits the school in order to confer with and gather feedback from the school staff regarding the program.

The Tasmanian program, the Master of Teaching (MTeach), is also newly developed and accredited, having been implemented for the first time in 2010. The MTeach, which replaced the previous Bachelor of Teaching, is a graduate-entry program designed to build upon tertiary qualifications and experience, enabling students to complete a teaching qualification in two years. The minimum entry requirement is the successful completion of an initial degree at an approved tertiary education institution. The program aims to extend previously-acquired communication and interaction skills so that the pre-service teacher is prepared, upon graduation, to work effectively with students of diverse abilities, interests and backgrounds. The coursework and integrated field experience are intended to provide theoretical and practical opportunities that enable the aspiring teacher to practise what they have learned in supported environments (University of Tasmania, 2011).

The MTeach involves a more traditional approach to the pre-service teacher education practicum than that of the TSM. Although-school university partnerships exist and are deemed important in the success of the field experience program component (Allen et al., 2013), stakeholder responsibilities are generally quite separate in terms of the construction and implementation of the practicum. That is, teacher educators design coursework and prepare pre-service teachers for practicum through coursework and teachers and leaders in schools mentor and supervise them during their in-field experience (a small number of preservice teachers annually receive Scholarships under the National Partnerships Smarter Schools Initiative. Partnership arrangements function differently under this initiative and are reported elsewhere (Allen et al., 2013; Independent Schools Tasmania, 2011). Supervisory arrangements during practicum involve a university coordinator who maintains contact, generally via email or phone, with the pre-service teacher and his/her colleague teacher in the school. Due to budgetary restrictions, school visits only occur during the third and fourth placements, unless the student is deemed at risk of failing. Several students might be assigned to a particular school, but placements are generally made on an individual basis.

The Faculty's practicum office arranges placements within the State and nationally and internationally according to the pre-service teacher's location. A TSM model along the lines of the Queensland model would be not feasible, given the broad geographical spread of students. Four placements are undertaken during the course of the program, one per semester, during which pre-service teachers need to demonstrate competency against set criteria relevant at each developmental stage (Prac 1, Prac 2, Prac 3, Prac 4). While university teaching staff may set observational tasks for pre-service teachers during practicum, assessment of the field experience is the sole province of the colleague teacher

who is responsible for awarding a non-graded Pass/Fail mark. Placements are in full-time blocks and, at the time of the study, totalled 70 days which exceeded registration requirements by ten days. (This has since been reduced to the prescribed 60 days.)

Methods and Data Sources

This paper reports on a comparative study drawing on data from two previously-conducted studies in two Australian universities. The study was framed by the central research question: *In the view of participating school and university staff, what are the enabling and hindering factors in the integration of theory into practice during the preservice practicum?* In each of the original studies, purposive sampling (Patton, 2002) was used to select school and university staff involved in the pre-service teacher practicum. However, samples and the numbers of participants differed slightly between the two studies (see Table 1). For the purpose of readability, the same nomenclature (e.g. "colleague teacher" and "university coordinator") is used here for the two programs, despite some differences between the terminologies currently in place.

The sample in the Queensland study was drawn from one campus involved in the development and operation of the TSM. Thirty-six schools from the education district associated with that campus constituted the research sample. Two hundred and forty-two TSM practitioners represented by principals, lead teachers, colleague teachers in schools and university coordinators were invited to take part in the research, conducted in 2009. In the Tasmanian study, the sample was drawn from a much broader geographical spread in light of the fact that many MTeach students study in the fully online mode and are located throughout the State as well as nationally and, in some cases, internationally The pre-service teachers involved in this particular practicum (n=265) were the focus of an aligned study, reported in Allen & Wright (in press). Therefore, purposive sampling was used to collect data from colleague teachers in schools and university coordinators involved in one particular practicum, namely, the second practicum of the 2010 first-year MTeach cohort. This represented a sample of 166 potential participants.

Once ethical clearance had been obtained (Central Queensland University, 2009; University of Tasmania, 2010), a sequential mixed-methods approach was adopted for both studies, using online survey instruments and follow-up interviews (Tasmania) or focus groups (Queensland). A mixed methods approach was chosen because the use of qualitative and quantitative approaches was deemed to strengthen the studies (Greene, 2007). The online surveys, which were administered to large samples and, in the Tasmanian study, over a large geographic area, provided an efficient way to gather data on participants' perceptions of the practicum. Both surveys comprised a Likert scale questionnaire. The Queensland sevenpoint scale questionnaire included 44 closed questions and drew a response rate of 32% (76 valid responses) and the Tasmanian five-point questionnaire constituted 30 closed questions and a set of six open questions. The 43 valid responses in the latter study represented a 26% response rate. The questionnaires sought to gain an understanding of how school and university staff perceive the efficacy of the practicum in facilitating pre-service teacher learning and were tailored according to the group in the sample (e.g., questions were slightly rephrased for the colleague teachers and university coordinators). The Queensland survey sought to gain insights into a range of features of the TSM while the Tasmanian survey focused specifically on stakeholders' perceptions of the integration of theory and practice in the practicum.

Preliminary analysis of survey data was used in both studies as a basis for the design of the interviews and focus group schedules. The interviews/focus groups provided the researchers with the means of gathering more contextual data and allowed them to further probe the key issues that had emerged from the survey data (Cohen, Manion & Morrison,

2011). In the Queensland study, members of the survey sample were also invited to participate in one of five focus groups. Focus groups consisted of six participants each and they were conducted in schools to facilitate access to staff, and at the university.

Participants were drawn from those performing one of four roles in the TSM, namely, principals, lead teachers, colleague teachers and university coordinators. Each group comprised participants performing the same TSM role, with two sessions being held for colleague teachers and university coordinators. In the Tasmanian study, semi-structured interviews were conducted with 28 individual participants, of whom there were 16 colleague teachers and 12 university coordinators. This number represented all those who elected to be interviewed in a question inviting participation at the end of the survey. Interviews lasting between 45 minutes and an hour took place either at the university or by phone, depending on participant location and choice.

Data analysis methods used in the two studies were somewhat similar. The Queensland study used SPSS Version 17 to generate descriptive statistics and for factor analysis of the quantitative study while the Tasmanian study used Rasch analysis of Likert scale items also to generate descriptive statistics. Categorical analysis of the qualitative data was undertaken in both studies. For the purposes of this comparative study, researchers focused on the qualitative data only because these data were more helpful in responding to the research question. The qualitative data across both sets, i.e., focus group, interview and open ended survey question responses, were analysed following Coffey and Atkinson's (1996) coding and categorical analysis techniques, which enabled researchers to discern the most salient themes concerning school and university staff members' perceptions of the integration of theory into practice during practicum.

	Queensland study	Tasmanian study
Sampling method	Purposive sampling	Purposive sampling
Research sample	"Teaching School" staff, including school principals, lead teachers and colleague teachers University coordinators	 Colleague teachers in schools University coordinators
Sample size	242 in sample 166 in sample	
Quantitative data collection instrument	 Online survey comprising a seven-point Likert scale questionnaire of 44 closed questions 76 valid responses (32% response rate) 	 Online survey comprising a five-point Likert scale questionnaire of 30 closed questions and a set of six open questions 43 valid responses (26% response rate)
Qualitative data collection instrument	Focus groupFive focus groups of six participants	Semi-structured interview28 participants
Quantitative data analysis method	SPSS Version 17 to obtain descriptive statistics and for factor analysis	Rasch analysis of Likert scale survey items to obtain descriptive statistics
Qualitative data analysis method	d Categorical analysis Categorical analysis	

Table 1: Overview of Methods and Data Sources: QLD and TAS Studies

Findings

This paper focuses on three key themes that emerged from the comparative analysis of the data from both studies, namely that, in the view of participating school and university teaching staff:

- 1) Linking assessable university coursework to the practicum is an important way to integrate theory and practice and has the potential to facilitate professional learning by the pre-service and practising teachers. The implementation of this form of assessment is problematic.
- 2) Effective school-university partnerships, in which the respective roles and responsibilities of school and university staff are clearly defined, articulated and enacted, are crucial to the success of the practicum.
- 3) Such partnerships can only be sustained where there is open, regular and meaningful communication between stakeholders.

The importance of these particular themes lies in the fact that, despite the diverse programming arrangements for practicum between the two universities, school practitioners and university coordinators held a number of similar beliefs about how practicum can most effectively bridge the gap between theory and practice. Table 2 lists the themes and selected associated findings across the two programs.

Theme	Queensland study	Tasmanian study

Linking assessable university coursework to the practicum is an important way to integrate theory and practice and has the potential to facilitate professional learning by the pre-service and practising teachers. The implementation of this form of assessment is problematic.	 During practicum, pre-service teachers are required to undertake tasks, known as "portal tasks," to demonstrate the application of knowledge presented on campus in the workplace. University coordinators considered the portal task of central importance to the Teaching School Model, claiming that it facilitated the interaction of theory and practice. Principals and lead teachers perceived the portal task to be effective in that it required "specific" and "practical" action from those working in the school Many colleague teachers noted pragmatic constraints associated with the implementation of the task. 	 Faculty policy stipulates that pre-service teachers should not be required to perform any assessable coursework during practicum. University coordinators supported the inclusion of assessable coursework into the practicum and many were concerned that this was proscribed. Colleague teachers supported the in-principle notion of linking assessment to the practicum but were to an extent dissuaded by the practicalities of such an approach.
Effective school-university partnerships, in which the respective roles and responsibilities of school and university staff are clearly defined, articulated and enacted, are crucial to the success of the practicum.	 School staff expressed a strong commitment to the Teaching School Model and its inherent partnership arrangements. Strong collaborative arrangements between school and university staff were seen to signal the strength of the inter-sector partnership. 	 School and university staff supported the fostering of school-university partnerships as a means of enhancing the practicum. Both university coordinators and school staff believed that their roles and responsibilities regarding communication were, in the main, clearly demarcated and articulated, but that they were not always effectively enacted.
Such partnerships can only be sustained where there is open, regular and meaningful communication between stakeholders.	 School and university staff saw the lead teacher as playing a fundamental role in facilitating open communication between the pre-service teacher, colleague teacher and university coordinator. University coordinators were seen as critical to bridging the gap between knowledge taught at university and what is learned in schools. 	 Both school staff and university coordinators noted that they would welcome more involvement by the university coordinator. A number of impediments to the success of current partnership arrangements were acknowledged by both groups.

Table 2: Themes and Selected Associated Findings

Discussion

The three themes identified across both programs are discussed in this section. Participant quotations are drawn from focus group, interview and open-ended survey responses.

Linking Assessable University Work to the Practicum

Most school and university staff in both studies supported the inclusion of assessable university coursework in the practicum. Currently, programming arrangements in this area are distinctly different in the Queensland and Tasmanian models. As noted earlier, preservice teachers in the Queensland model are required to undertake tasks, known as "portal tasks," to demonstrate the application of knowledge presented on campus in the workplace. Portal tasks are an inherent feature of the practicum and, indeed, of the Teaching School Model (Turner, 2006). By contrast, in the Tasmanian model, Faculty policy stipulates that pre-service teachers should not be required to perform any assessable coursework during practicum. (Written reflections of observations of practice are encouraged.) Rather, they are assessed on a number of performance indicators in the areas of professional knowledge, professional relationships and professional practice. Colleague teachers are responsible for awarding a Pass (ungraded) or Fail.

The Queensland research demonstrated that, in the view of most school and university participants, the portal task underpins much of the activity in the TSM and is integral to fulfilling the model's aim of bridging the gap between theory and practice. Principals and lead teachers were particularly supportive of the inclusion of the portal task, noting that it determined the "specific and practical action" required by themselves and pre-service teachers in the application of knowledge and skills learned at university. They also commented that the portal tasks meant that expectations of the pre-service teacher were set high early in the program and allowed pre-service teachers to decide if teaching was an appropriate career for them. These comments are indicative:

I particularly like ... portal tasks that I think do marry up that theory-practice nexus... [the portal task] is not a feature of any of the other universities that I deal with and I particularly like it because it gives these students some real life opportunity to get their teeth into the nuts and bolts of the job. (Principal)

And the assessment tasks ... from other universities seem to be just lots of written stuff [that doesn't] seem to impact the classroom really, or impact the school. Probably no one would even know what they were doing and I probably wouldn't even know what real assessment tasks the students were doing within my classroom. But I do know with this university the [pre-service teachers] do impact the school, in a good way, and it makes changes in your room. (Lead teacher)

This second data extract points to a key feature of the portal task, as identified by principals and lead teachers, namely that it also provided professional learning opportunities for those already in the profession.

Colleague teachers, who work most closely with pre-service teachers in the practical implementation of the portal task, were, however, somewhat ambivalent about its merit. While they acknowledged that it could provide opportunities for pre-service teacher learning, they viewed some of the requirements of the portal task as problematic. In particular, they commented on the difficulty they had in giving pre-service teachers the opportunity to complete them, and of the terminology presented in the portal tasks. This difficulty was expressed in terms of the conflicting pressures placed on mentor teachers, as illustrated in the following statement:

The match doesn't always gel beautifully just simply because [of] what imperatives we [have]. I mean [the pre-service teachers] have got theirs coming from the university, and we also have ours ... from HOCs and headmasters.

University coordinators also expressed some uncertainty about the efficacy of the portal task. On the one hand, they expressed their belief that it was theoretically sound and an important element of the TSM, which potentially provided pre-service teachers with the opportunity to apply knowledge and demonstrate their capacity to undertake the duties of a teacher. On the other hand, they noted that it had lost some of its initial academic rigour and that there were problems with its implementation, arising predominantly from school curricular priorities taking precedence over the task.

Data in the Tasmanian study suggest that the Faculty policy prohibiting the linking of assessable coursework to practicum is contested—to differing degrees—by both school and university staff. University coordinators supported the inclusion of coursework assessment into the practicum and were somewhat disconcerted that this was proscribed. Many expressed concern that the gap between theory and practice was widened, rather than reduced, under current arrangements and that this would remain the case for as long as coursework was disassociated from practicum work, as explained by this participant:

I feel that students are still not explicitly making those links between theory and practice and that often they see no connection between some of what they do at Uni and what they do in the classroom.

At the very least, they argued that they should have some involvement in the practicum assessment:

The [university coordinator] should have the right to have a say in the assessment of students. (Too often weak students have been passed with glowing reports.)

Nevertheless, a number of predominantly pragmatic issues were acknowledged, such as catering for pre-service teachers following non-traditional program trajectories and ensuring that colleague teachers were "on side" with supervising any set tasks. This comment is indicative:

From my experience, colleague teachers don't like students doing assessment tasks during prac. I think this is something we need to work on.

For their part, colleague teachers were not particularly open to the idea of coursework being assessed during practicum although some noted that such an assessment method, if replacing the current approach, could enhance pre-service teachers' learning. Several viewed it as a more effective alternative to the status quo:

So if you both have the idea that schools are dynamic places and we need to keep up with what is happening at university and university needs to keep up with schools then you already have a culture of change and so it is not hard to make another little shift

Most colleague teacher participants, however, stated that they were dissuaded by the practicalities of overseeing the implementation of university tasks, as evident in the following:

Teaching is all consuming; doing it properly is all consuming. [Assessable coursework during practicum] is probably a great idea in theory, but I don't think it could happen.

I just sense that with the people I have had that the assessment part is such a burden that interferes with them having time to prepare lessons and just get on with it.

In summary, there was strong support for linking assessable coursework to the practicum, with principals and lead teachers in the Queensland study and university coordinators in both studies noting very positive (potential) benefits of such an approach to pre-service and in-service teachers. Those who were most closely involved in the day-to-day

practicum supervision, however, voiced concerns about the practicalities of coursework assessment. In particular, colleague teachers expressed, if not opposition, then serious concerns about the impact of this approach on classroom life and those involved in it. On balance, it would seem that, according to views expressed in this study, the notion of assessing coursework during practicum is conceptually strong but, as it is currently conceived, somewhat flawed in its application.

Notable in this finding is that, in one of the two studies (Queensland), strong collaborative partnerships, which have been shown to deliver the most positive results to preservice teachers (Allsopp et al., 2006; Cochran-Smith, 2009; Darling-Hammond, 2010) were in place at the time. Regardless, it would appear that more work is needed, at least in so far as the programs in question are concerned, at the "grass roots" level.

School-University Partnerships

The need to create and foster strong partnerships in teacher education has been widely acknowledged (Darling-Hammond, 2006; Louden & Rohl, 2006). In particular, the move to the professionalisation of teaching in the 1960s and the associated separation of theoretical and practical learning has highlighted the need for alignment between the two sectors (Allen, 2009; Bullough & Draper, 2004). The Queensland research revealed that, according to participants, many of the key elements of a successful school-university partnership can be found in the TSM. Participants from both the school and university sectors claimed to hold a shared philosophy around the practicum; they believed that both sets of stakeholders played active, rather than passive or "at a distance" roles; and they generally voiced strong support for the work of each other. Identified as central to the success of the TSM partnerships was the clear definition, articulation and enactment of the respective roles and responsibilities of school and university staff. These comments by principals about others' roles are representative:

We are very clear about the purpose for both the students and the [colleague teachers] that they are with and we talk about the professional development [of lead teachers] and BLM students. This is then managed by one of the school's deputy principals.

I like to have that one constant person at the uni that I can talk to, liaise with, seek advice from.

Lead and colleague teachers talked about the existence of a "culture" and "community" that the university coordinator role brings to the teaching school. People in this role were seen as supportive, "very productive" and "very professional," particularly in the case of any difficult or complex situations that arose in the teaching school. Similarly, colleague teachers valued the clarity around what was expected of others as well as of themselves:

Our role ... is like the conduit between the university and the school. So theoretically, that's an advantage of the ... role as I see it, we have a conversancy with the coursework, with the theory. And ... we also have a conversancy with what is being asked of students out in schools. So we know whether there is a match or a mismatch and how we can work with our schools to bring that into a closer alignment.

These results indicate the existence of a partnership consistent with Zeichner's (2010, p. 89) "hybrid space to more closely connect campus courses and field experiences in teacher education." Zeichner (2010, p. 89) suggests that this "hybrid" or "third space" is required to overcome the traditional dichotomy of academic and practitioner knowledge and to resolve one of the "central problems that has plagued" university-based teacher education, namely, "the disconnect between the campus and school-based components of programs."

Findings in the Tasmanian study show that school and university staff members believe partnerships play an important role in enhancing the pre-service teacher experience

during practicum. Both at the level of personal engagement and also at a systemic level, participants noted ways in which the partnership can impact on pre-service teacher engagement and learning:

Community needs to be valued and we all need to engage with schools. This should occur in a one-on-one capacity, such as during prac, but we also need to have it written into our role. There should be an expectation that we work to establish partnerships, just like there's an expectation that we write our unit outlines and that sort of thing. (University coordinator)

If the uni doesn't talk to the school and vice versa you might as well give up. Systematised changes would really help create/sustain relationships. (Colleague teacher)

Participants also noted a number of shortcomings, mainly due to limited time availability, in current partnership arrangements. Both colleague teachers and university coordinators expressed concern that they did not have the capacity to invest more heavily in fostering partnerships for reasons that have been previously highlighted in the literature, such as time and resource constraints (see, e.g., Bloomfield, 2009). Many university coordinators were also sympathetic to their inter-sector colleagues who they believed faced similar workload constraints as themselves, as exemplified in this university coordinator's comment:

The frantic, professional life of colleague teachers means that they often don't have time to get involved. There's so much going on for them, as there is for us.

Others were more critical of the ways in which colleague teachers fulfil their roles:

I don't believe that colleague teachers do always help students to link theory and practice because they are not aware of what theory the student has covered or even, in some cases, not up to date with their own theoretical knowledge.

This second quotation points to the roles and responsibilities of the respective school and university supervising staff. Most participants believed them to be clearly articulated (mainly through documentation circulated by the university) but acknowledged that the lived experience did not always match the role descriptions, as indicated in the following:

It's not that I am not sure of what the [university coordinator] role is, but I only see them coming and making a visit. I don't really see how involved they are in the PE that the student is dutifully doing. (Colleague teacher)

Some of [the colleague teachers'] work is below standard. They do not model good literacy skills or structure their tasks thoughtfully to encourage maximum student engagement. They don't always do what's expected of them.

Evident here is the tension to which Sachs (1999) refers that can arise between school and university staff in establishing and maintaining partnership arrangements.

A number of possible solutions were put forward as a means of strengthening the partnership. Resoundingly, participants called for more personal contact between university and school staff through such initiatives as regular, formalised discussions and social events and more frequent visits to schools by university staff. Several university coordinators suggested that there should be more consistency in the allocation of university staff to (the same) practicum schools.

In summary, it is clear that the participants in the two studies considered the school-university partnership to be a very valuable component of their teaching degrees. In the Queensland study, we identified that mutual understandings of and active participation in the roles associated with partnership can create strong partnerships that connect teaching schools and the university together in a "hybrid" space (Zeichner, 2010, p. 89). Those in the Tasmanian study understood their roles and were keen to be active participants, but were unable to always do so due to a number of constraints. In particular, we identified that a dearth of time, resources and workload flexibility restricted the activity of the university and

school staff in building partnerships. The differences in findings between the two studies highlight that the support provided for staff by university and school systems is crucial to the development of a partnership that is valued and sustainable (Martin, Snow & Franklin Torrez, 2011).

Sustained and Open Communication Between Stakeholders

Not surprisingly, school and university staff in both studies expressed the belief that sustained and open communication was critical to the success of the practicum, particularly in ensuring the enactment of theory into practice. From the research results of the Queensland study, it was possible to identify two pivotal roles in this regard. Specifically, effective intersector communication was seen by both school and university staff to "hinge" on the roles of the lead teacher and the university coordinator. Focus group data revealed that the lead teacher is the "go to" person within the teaching school for all involved, namely, the preservice teacher, school staff and leaders and the university coordinator. Most participants believed that lead teacher roles were successfully enacted and that staff in these roles had effectively opened up communication channels both within the school and with the university, as evidenced in one principal's comment that lead teachers had "transformed practice" in terms of how schools approached hosting pre-service teachers, and in the following:

I think that having the [lead teacher] really does try to pull [the TSM] together ... they understand very clearly what the expectations [are]. I think it brings that consistency and quality control into it. (Principal)

I think the [lead teacher] is a key person from many different aspects, for students, for [colleague teachers], for university contacts and for admin too. (University coordinator)

The university coordinator role was seen as equally important to effective inter-sector communication. Principals and lead teachers noted how easy their access was to those in this role and commented on the timely responses they provided to school-requested support. Comparisons were made to other pre-service programs in which responses were less forthcoming and in which contact with the university was often limited to administrative staff with little knowledge of the pre-service teachers. The university coordinator was perceived to have "explicit knowledge" of the program, as highlighted in this principal's comment:

I would [no longer] be comfortable dealing with an admin officer... I want to talk with one of the lecturers, or coordinators, from the university.

University coordinators also commented on the ways in which the open communication channels in the TSM strengthened partnerships, particularly insofar as they benefitted the preservice teacher experience during practicum.

Research results from the Tasmanian study highlighted a perceived fracture between ways in which, on the one hand, responsibilities regarding communication were defined and, on the other, how communication actually occurred. That is, the university documentation (mentioned earlier) was seen as effective in informing all those involved in the practicum of what was expected of them in interacting with each other and with their inter-sector colleagues. However, there were differences of opinion about how well individual stakeholders performed this function of their role, as illustrated in the following:

If I have problems [university coordinators] would be the people I should ring aren't they? I've not. Why bother? I have always worked through with the problems myself. (Colleague teacher)

There should be stronger communication between the three parties to regularly discuss the theory/practice integration. (University coordinator)

Interestingly, many university coordinators iterated the types of concerns held by preservice teachers that have been reported in the literature (see, e.g., Allen & Wright, in press) in arguing that they themselves need to collaborate more effectively with school staff in order to gain shared understandings about how best to support the pre-service teacher during practicum. This comment is indicative of many others:

There are misunderstandings, contentions [and] the reality is we could do more to communicate between the uni coordinator and the colleague teacher.

Many said they were unable to adequately support their students "from afar," given that school visits only occur during the third and fourth (of four) practicum placements and that, in such circumstances, communication with school staff was virtually non-existent:

As uni lecturers we need to also visit schools and build up an understanding of what they are doing and why - and of their contexts. We don't really communicate with [school staff] at all, unless the student is placed a risk. So, a deficit model.

School staff echoed many of the university coordinator concerns, claiming that they would welcome more opportunities to talk and to encourage more meaningful university involvement in the practicum, as reflected in this colleague teacher's comments:

While you are at work and you are even supervising a student teacher and you've got a [university coordinator] coming in to interview you and asking how they are going it is a difficult situation to try and think about what you need to say and find the time to do it. The whole structure of [how we communicate] is not ideal.

In summary, sustained and open communication was identified as an important factor in the practicum, particularly insofar as it related to the efficacy of the school-university partnership. The two studies highlighted that the availability of time and resources impacts significantly upon meaningful communication between university coordinators, lead teachers and colleague teachers. Participants in the Queensland study identified that the allocation of sufficient human and time resources to the Teaching School Model fostered partnerships that benefited the development of pre-service teachers. In contrast, the Tasmanian study indicated that the lack of such resources impeded upon the efficacy of the partnership, despite the intentions of the program. This finding is particularly evident in regards to the university practicum documents provided to the schools; although Tasmanian participants described them as comprehensive, they became more of a structural guide, open to individual interpretation, than practical and accessible communication tools (Douglas & Ellis, 2011).

Summary and Conclusion

The findings reported in this paper on a comparative study into two diverse preservice teacher education programs are threefold. First, the study showed that, across both the Queensland and Tasmanian programs investigated in the study, school and university staff considered the linking of assessable coursework to the practicum as an important way to integrate theory and practice. In the Queensland model, prescribed practicum tasks, known as "portal tasks," were deemed by both sets of stakeholders to be integral to the facilitation of theory-practice integration. Further, the completion of such tasks was seen to provide the potential to facilitate professional learning by both pre-service and colleague teachers. However, the implementation of the portal task was perceived by those most closely involved in supervision (colleague teachers) as very problematic. The Tasmanian practicum policy currently proscribes embedding coursework assessment into the practicum, a policy principle contested by many in both the school and university sectors. Although they acknowledged a number of mainly practical constraints to linking assessment to the practicum, many participants in the Tasmanian study argued that doing so would help to align university theory with classroom practice.

Second, stakeholders across both programs considered effective school-university partnerships to be crucial to the success of the practicum. In the Queensland study, school staff expressed an ongoing commitment to the Teaching School Model and its inherent partnership arrangements. Strong collaborative arrangements between school and university staff in this program were seen to signal the strength of the inter-sector partnership. In the Tasmanian counterpart study, school and university staff supported the fostering of partnerships as a means of enhancing the practicum but acknowledged a number of impediments to the success of current partnership arrangements. Several possible solutions were put forward as a means of strengthening the partnership.

A third and associated finding was the importance of sustained and open communication between stakeholders. The studies demonstrated how such communication is facilitated and hindered in the two programs. On the one hand, participating school and university staff in the Queensland study saw the lead teacher as playing a fundamental and largely successful role in facilitating open communication between the pre-service teacher, colleague teacher and university coordinator. University coordinators were considered critical to bridging the gap between knowledge taught at university and what is learned in schools and were deemed to fulfil this role as it was intended. On the other hand, both university coordinators and school practitioners in the Tasmanian study believed that although their roles and responsibilities regarding communication were, in the main, clearly demarcated and articulated, they were not always effectively enacted. Both sets of stakeholders said they would welcome the opportunity to communicate more meaningfully with each other.

In conclusion, this study provides insights into how two diverse teacher education programs construct and implement the pre-service practicum. Each program serves a distinctly different "clientele" and, as such, the successes of one program might not necessarily be achievable in the same way in the other. Similarly, the same impediments might not apply. Nonetheless, the perceptions of key stakeholders reported above shed some light on ways in which teacher educators and school staff might work collaboratively to design practicum experiences that best assist the pre-service teachers with whom they work to integrate theory into practice. Importantly, this study shows that the development of genuine partnerships between schools and universities can assist in narrowing the disconnectedness between theory and practice and in enhancing the practicum experience for both pre-service and colleague teachers. However, sufficient resources must be provided if both sectors and, by association, pre-service teachers, are to derive a benefit from the partnership.

References

- Allen, J. M. (2009). Valuing practice over theory: How beginning teachers re-orient their practice in the transition from the university to the workplace. *Teaching and Teacher Education*, 25, 647-654.
- Allen, J. M. (2011). Stakeholders' perspectives of the nature and role of assessment during practicum. *Teaching and Teacher Education*, 27, 742-750.
- Allen, J. M., & Peach, D. (2007). Exploring connections between the in-field and on-campus components of a preservice teacher education program: A student perspective. *Asia-Pacific Journal of Cooperative Education*, 8(1), 23-36.
- Allen, J. M., & Wright, S. (in press). Integrating Theory and Practice in the Pre-service Teacher Education Practicum. *Teachers and Teaching: Theory and Practice*.
- Allen, J. M., Howells, K., & Radford, R. (2013). A "Partnership in Teaching Excellence": ways in which one school-university partnership has fostered teacher development. *Asia-Pacific Journal of Teacher Education*. 41, 99-110.
- Allsopp, D. H., De Marie, D., Alvarez-McHatton, P., & Doone, E. (2006). Bridging the gap between theory and practice: Connecting courses with field experiences. *Teacher Education Quarterly, Winter*, 2006, 19-35.
- Bloomfield, D. (2009). Working within and against neoliberal accreditation agendas: Opportunities for Professional Experience. *Asia-Pacific Journal of Teacher Education*, 37, 27-44.
- Bloomfield, D., Taylor, N., & Maxwell, T. (2004). Enhancing the link between universities and schools through action research on teacher practicum. *Journal of Vocational Education and Training*, 56(3), 335-372.
- Bullough, R. V., Jr., & Draper, R. J. (2004). Making sense of a failed triad: Mentors, university supervisors, and positioning theory. *Journal of Teacher Education*, 55, 407-420.
- Central Queensland University. (2009). *Social Sciences HREC*. Rockhampton, Qld: Author. Cherian, F. (2007). Learning to teach: Teacher candidates reflect on the relational, conceptual, and contextual influences of responsive mentorship. *Canadian Journal of Education*, 30, 25-46.
- Churchill, R. (2007, Nov 21-22). *Transitions and triggers research project forum*. Queensland Deans of Education Forum (QDEF) Research Project. Brisbane, Qld: Australian Catholic University.
- Cochran-Smith, M. (2005). Studying teacher education: What we know and need to know. *Journal of Teacher Education*, *56*, 301-307.
- Cochran-Smith, M. (2009). Re-culturing teacher education: Inquiry, evidence and action. *Journal of Teacher Education*, 60, 458-469.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research methods in education* (7th ed.). New York: Routledge.
- Coffey, A., & Atkinson, P. (1996). *Making sense of qualitative data: Complementary research strategies*. Thousand Oaks, CA: Sage.
- Connelly, F. M., & Clandinin, D. J. (1995). Teachers' professional knowledge landscapes: Secret, sacred, and cover stories. In D. J. Clandinin & F. M. Connelly (Eds.), *Teachers' professional knowledge landscapes* (pp. 3-15). New York: Teachers College Press.
- Darling-Hammond, L. (2005). Teacher as a profession: lessons in teacher preparation and professional development. *Phi Delta Kappan*, 87(3), 237-240.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco: Jossey-Bass.

- Darling-Hammond, L. (2010). Teacher education and the American future. *Journal of Teacher Education*, 61, 33-47.
- Dean, C., Lauer, P., & Urquhart, V. (2005). Outstanding teacher education programs: What do they have that others don't? *Phi Delta Kappan*, 87(4), 284-289.
- Douglas, A.S. & Ellis, V. (2011). Connecting does not necessarily mean learning: Course handbooks as mediating tolls in school-university partnerships. *Journal of Teacher Education*, 62, 465-476.
- Eyres, V. (2005). Guidelines for quality in practicum. Canberra: NIQTSL.
- Greene, J. (2007). Mixed methods in social inquiry. San Francisco, CA: Jossey-Bass.
- Hayes, S., Capel, S., Katene, W., & Cook, P. (2008). An examination of knowledge prioritisation in secondary physical education teacher education courses. *Teaching and Teacher Education*, 24, 330-342.
- House of Representatives Standing Committee on Education and Vocational Training. (2007). *Top of the class: Report on the inquiry into teacher education*. Canberra, ACT: Author.
- Independent Schools Tasmania. (2011). *National Partnership Implementation Plan Improving Teacher Quality* [Online]. Available at: www.independentschools.tas.edu.au/national-partnerships-smarter-schools-low-ses
- Kessels, J. P. A. M., & Korthagen, F. A. J. (1996). The relationship between theory and practice: Back to the classics. *Educational Researcher*, 25(3), 17-22.
- Korthagen, F. A. J. (2007). The gap between research and practice revisited. *Educational Research and Evaluation*, 13(3), 303-310.
- Korthagen, F. A. J., Loughran, J. J., & Russell, T. (2006). Developing fundamental principles for teacher education programs and practices. *Teaching and Teacher Education*, 22, 1020-1041.
- Lenz Taguchi, H. (2007). Deconstructing and transgressing the theory-practice dichotomy in early childhood education. *Educational Philosophy and Theory*, *39*, 276-290.
- Levine, A. (2006). Educating school teachers. Princeton, NJ: The Education Schools Project.
- Louden, W., & Rohl, M. (2006). "Too many theories and not enough instruction": Perceptions of preservice teacher preparation for literacy teaching in Australian schools. *Literacy*, 40, 66-78.
- Martin, S. D., Snow, J. L. & Franklin Torrez, C. A. (2011). Navigating the terrain of third space: Tensions with/in relationships in school-university partnerships. *Journal of Teacher Education*, 62, 299-311.
- Masters, G. N. (2009). A shared challenge: Improving literacy, numeracy and science learning in Queensland primary schools. Camberwell: ACER.
- Neville, K. S., Sherman, R. H., & Cohen, C. E. (2005). *Preparing and training professionals: Comparing education to six other fields.* Washington, DC: Finance Project.
- OECD. (2005). Teachers matter: Attracting, developing and retaining effective teachers. Paris: Author.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.
- Sachs, J. (1999). Using teacher research as a basis for professional renewal. *Journal of Inservice Education*, 25, 39-53.
- Schön, D. A. (2003). *The reflective practitioner: How professionals think in action*. Aldershot, UK: Ashgate.
- Smith, R., & Moore, T. (2006). The learning management concept. In R. Smith & D. E. Lynch (Eds.), *The rise of the learning manager: Changing teacher education* (pp. 9-23). Frenchs Forest, NSW: Pearson Education.
- Trent, J., & Lim, J. (2010). Teacher identity construction in school-university partnerships: Discourse and practice. *Teaching and Teacher Education*, 26, 1609-1618.
- Turner, D. R. (2006). The Teaching School. In R. Smith & D. E. Lynch (Eds.), The rise of the

- learning manager (pp. 69-78). Frenchs Forest, NSW: Pearson Education.
- Turner, D. R., & Lynch, D. E. (2006). The Teaching School: A new paradigm in teacher education and catalyst for building capability in the current teaching workforce. *International Journal of Knowledge, Culture and Change Management. Vol. 6.* Melbourne: Common Ground Publishing.
- University of Tasmania. (2010). Social Sciences HREC. Hobart, Tas: Author.
- University of Tasmania. (2011). *University of Tasmania Course Handbook*. Hobart, Tas: Author.
- Valencia, S., Martin, S., Place, N., & Grossman, P. (2009). Complex interactions in student teaching: Lost opportunities for learning. *Journal of Teacher Education*, 60, 304-322.
- Vick, M. (2006). It's a difficult matter: Historical perspectives on the enduring problems of the practicum in teacher preparation. *Asia-Pacific Journal of Teacher Education*, 34, 181-198.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61, 89-99.

Appendix A: Program Structure of the Queensland Bachelor of Learning Management (Primary)

Sequence	Course	Practicum/Work experience
Year 1	Learning Management 1	Work Experience: 10 days
Sem 1	Health & Physical Education Curriculum & Pedagogy	
	Health & Physical Education Curriculum & Pedagogy	
	The Arts	
	Principles of University Learning	
Year 1 Sem 2	Learning Management 2	Prac 1: 20 days
	Numeracy in the Classroom	
	Competence in English	
	Embedded Professional Learning 1	
Year 1 Sem	2 x primary electives	
Year 2 Sem	Learning Management 3	Work Experience: 10 days
1	Science Curriculum & Pedagogy	
	Technology Curriculum & Pedagogy	
	Literacy in the Classroom	
Year 2 Sem	Learning Management 4	Prac 2: 30 days
2	Sustainable Communities (SOSE)	
	English Curriculum and Pedagogy	
	Embedded Professional Learning 2	
Year 2 Sem 3	2 x primary electives	
Year 3 Sem 1	Managing Diversity	
	Numeracy in Action	
	Teaching Reading	
Year 3 Sem 2	Managing eLearning	
	Ensuring Student Success	
	The Global Future	
Year 4 Sem 1	Learning Management 5	Prac 3: 20 days
	Building Learning Partnerships	
	Embedded Professional Learning 3	
Year 4 Sem	Professional Skills	Prac 4: 20 days Internship: 30 days
2	Embedded Professional Learning 4	internsinp: 50 days
	Embedded Professional Learning 5	

Note: Embedded Professional Learning refers to courses whereby the students are placed in a teaching school for their practical experience. Along with portal tasks to complete, the students actively engage in observations and reflections and participate in the everyday routines of the classroom.

Australian Journal of Teacher Education

Appendix B: Program Structure of the Tasmanian Master of Teaching (Primary)

Sequence	Course	Practicum
Year 1	Foundations of Literacy: Teaching & Reading Prac 1: 10 da	
Sem 1	Personal & Professional Numeracy	
	Human Development in Educational Contexts	
	Foundations of Teaching	
Year 1	Society & Environment	Prac 2: 15 days
Sem 2	Primary Science & Technology Education	
	Planning for Positive Behaviour	
	Teacher as Planner, Assessor & Reporter	
Year 2	Ethics, Education & Teacher Identity	Prac 3: 20 days
Sem 1	Inclusive Practices in Education Settings	
	English Pedagogy & Practice in the Primary Years	
	Knowledge & Pedagogy for Teaching Primary Mathematics	
Year 2	Personal Development & HPE	Prac 4: 25 days
Sem 2	Introduction to Arts Education	
	Cultural Awareness: Aboriginal Studies	
	Preparing for the Profession	

Australian Journal of Teacher Education

Appendix C: Ways in which the Bachelor of Learning Management is Differentiated from its Bachelor of Education Predecessor (Adapted from Smith & Moore (2006, p. 14))

Bachelor of Education	Bachelor of Learning Management
Teacher education programs standardised around	Teacher education as a disruptive innovation in
BEd industry rules	industry definitions
Cultural reproduction of teacher education as a	Transformation of teaching and teachers' work as
conduit to teaching	learning management
Teaching prowess a matter of subjective preference	Emphasis on pedagogical practice and the science
(teacher-as-poet)	of learning
Knowing a lot about the <i>what</i> and other tangible	Knowing what with emphasis on the how and
assets	intangible assets
Curriculum development and planning	Design of pedagogical strategies that encompass
D I'C d C I	curriculum content and context management
Proliferation of teaching approaches amongst	Establishment of a common language, core concepts
teachers and student teachers	and responsibilities
Professionalism a subjective, personalised and	Professional identity based on a shared, systematic
private matter	professional endeavour and improvisation
Immature profession	More mature profession
Novice graduates requiring induction and years of experience	Graduates workplace ready and futures-oriented
Conceptual and procedural knowledge taught on	Conceptual and procedural knowledge taught on
campus to be demonstrated later	campus demonstrated by students in real-life
	settings (portal tasks)
Semi- and informal relationships with schools and	Business-to-business relationships with employers
employers	
Academic staffing and reputational work based on	Mixed academic and practitioner staffing focused
teacher education	on generating capability
Governed by chunky bureaucracies	Network-centric work distributed across
	interdependent groups