Supervision in initial teacher education: A scoping review

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Supervision in initial teacher education is a pivotal component of professional experience, widely considered to be the most valued aspect of preservice teacher learning. Key to these experiences is the work of the university appointed supervisors who mentor the novices during their in-classroom learning. This is a dichotomous and often under-rated role, fraught with challenges, yet remains under-theorised and under-researched. Situated in a framework of readiness for teaching, this literature review provides a synopsis of the challenges facing the provision of quality teacher education programs and the supervision of preservice teachers and details the myriad of tasks undertaken by these supervisors. The importance of research into the contribution of these experienced teachers to preservice teacher learning will be clarified, as will the need for development of a model for supervision to guide future work in this space.

Introduction

Supervision of preservice teachers on professional experience has long been an important feature of initial teacher education (ITE) programs, yet the contribution of the university appointed supervisor (UAS) in supporting future teachers through their learning journey remains under-researched (Cuenca, 2012; Hays & Clements, 2011). This support is crucial to the development of high calibre teachers who are a pivotal component of a quality education system, considered central to a nation's prosperity (White, Bloomfield & Le Cornu, 2010).

This review was initiated to examine current literature concerning preservice teacher supervision, as the basis for an investigation into the contribution of the UAS to the learning of these future teachers. It is framed by the importance of education and the complexity of teaching, and will highlight the challenges of delivering quality professional learning experiences for preservice teachers. The intricacies of providing these learners much needed supervision will be clarified. Through the lens of readiness for the classroom, as referred to in the Teacher Education Ministerial Advisory Group's [TEMAG] Action Now, Classroom Ready Teachers (TEMAG, 2014), the learning journey of the preservice teacher will be explored. This voyage to 'classroom readiness' is currently occurring in a neoliberal political milieu, causing significant stress for teachers, with the contradictions of the social importance of teaching interacting with the backdrop of standardised testing and 'indirect surveillance' (Connell, 2013; Patrick, 2013). Given this 'evidence-based best practice' paradigm, the need for further investigation into the activities of the supervisor will become evident, as will the need for a clear model of supervision to define that role.

Within the context of this review, the term mentor refers to the classroom teacher who provides guidance to the preservice teacher while on professional experience. The term supervisor, or UAS, refers to a third-party teacher who is employed by the university to

visit preservice teachers during their professional experience, to provide support and direction. Both of these stakeholders contribute to the assessment of the student teachers.

The importance of education

The global community acknowledges the importance of education. This is evident in United Nations Educational, Scientific and Cultural Organisation's (UNESCO, 2019) Futures of Education initiative which aimed to reimagine education to shape the future. The organisation acknowledged that knowledge and learning are the greatest renewable resource humanity has and that education is transformative. This initiative is stimulating global debate on the reimagination of education in this increasingly complex and uncertain world, made all the more uncertain by Covid-19.

Findings from the *Programme for International Student Assessment* (PISA) rankings, suggested that quality education is strongly linked to national prosperity (Organisation for Economic Co-operation and Development [OECD], 2016). These findings reinforced White et al.'s (2010) clarification of the link between national prosperity and quality education, drawing connections between high-performing education systems and the importance of skilling citizens in the interests of "fairness, integrity and inclusiveness in public policy" (OECD, 2016, p. 3). The scope of the PISA assessments is significant, with eighty countries and more than one-half a million students participating in 2018 (OECD, 2019). In recent years, Australia's performance has dropped in these rankings, falling six places in reading, 12 places in maths and 11 places in science since 2012 (OECD, 2019). This has strengthened the Australian Government's focus on ITE regulation.

Government focus on education and ITE

Given the importance of education, it is critical for the Australian Government to maintain its focus on quality education and on providers of ITE courses. Without a quality education system, national prosperity is at risk. The involvement of governments at both State and Federal levels cultivates a political frame for the concerns around quality education and subsequently, ITE (White et al., 2010). This political context partly contributes to providers' decisions. Evidence of the Government's extensive regulation and rigorous monitoring of the education sector is seen by the 2010 introduction of the Australian Institute for Teaching and School Leadership (AITSL). This organisation was purposed to provide leadership and build a shared vision of quality education, establishing the National Professional Standards for Teachers (AITSL, 2015), against which all teachers are assessed. In addition, the establishment of TEMAG in 2014 specifically strengthened focus on teacher education courses.

TEMAG's 2014 report noted concern over ITE in Australia and made 38 recommendations to lift the quality of teacher education programs nationally, including structured professional experience and sufficient time for classroom practice. It highlighted that professional experience in classrooms is central to the education of future teachers. AITSL (2015) mandated a minimum number of professional experience days which must be undertaken in both undergraduate and postgraduate teacher education

courses and dictated that ITE programs must comprise supervised and assessed teaching practice, with a formal assessment of preservice teachers against the Graduate Teacher Standards. Therefore, universities must select an appropriate method by which their students are supervised and assessed to meet AITSL requirements. While AITSL provides many resources for supervising teachers, which University Appointed Supervisors (UAS) are able to access, it provides no specific guidelines for them in their support of preservice teachers. However, AITSL has identified seven key components of professional experience which include, in part, well-structured programs that provide supervisory support for those learning to teach (Le Cornu, 2015).

The rigorous accreditation processes of ITE providers in each Australian state and territory (for example, Teacher Registration Board of Western Australia, Victorian Institute of Teaching) highlight the importance also placed by state governments on education. This clear focus by state and federal regulators underscores the vital nature of investigating the contributors to quality education. This includes the role of the UAS.

Quality teaching and teacher education

Having established that quality education is a crucial element of a nation's prosperity (OECD, 2016; White et al., 2010), the provision, maintenance and retention of quality teachers is vital to accomplish this goal. However, retention is a persistent problem as early career attrition rates in teaching are considerable (Buchanan et al., 2013; Parliament of Australia, 2007; Trent, 2019). Buchanan et al. (2013) suggested that one reason for this attrition rate is the disconnect between the expectations of ITE students and the reality of teaching once qualified. Originally coined by Corcoran (1981), Grudnoff (2011, p. 224) referred to "transition shock" as graduates move from university to full-time teaching. Quality professional learning experiences have the potential to contribute positively to the provision and subsequent maintenance and retention of high calibre teachers (Buchanan et al., 2013).

Teaching is an intricate and multi-faceted profession, involving the development of relationships with multiple stakeholders, adherence to and delivery of curriculum, reporting, behaviour management, accountability to standardised tests and providing tailored learning for each student, while equipping them with the skills for a changing workforce (Boshuizen, 2016; Hitz, 2008; Joseph, 2019; Loughran & Hamilton, 2016; Polikoff et al., 2015). The increasing complexity and intensity of this profession can be attributed to societal changes, increased work tasks, and the focus on morals and values, with teachers being expected to influence students to a greater degree than previously (Brante, 2009). The importance of valuing this complexity is central to unveiling quality in teacher education, seeing it as more than merely training to deliver curriculum content to students, but as an educative experience towards classroom readiness (Loughran & Hamilton, 2016).

Britzman (2003) suggested that the first experience preservice teachers may face when commencing their study is the overwhelming complexity of the role, acknowledging the innumerable negotiations teaching requires. Research indicates that quality professional

experiences are vital for preparing preservice teachers for the realities of the classroom (Rots et al., 2007; White et al., 2010). Therefore, as experienced teachers who understand these intricacies, supervisors work to scaffold preservice teachers to gain practical understanding and build proficiency (Hardy, 2016; Mathewson Mitchell & Reid, 2017). UAS are positioned to provide support for the novice in these environments, but their contribution needs to be clearly understood and defined as they assist in the preparation of quality teachers.

Professional experience

Investigation of this multi-faceted learning ground reveals a complex web of interrelated factors that must be navigated during this pivotal component of teacher education courses. The importance of professional experience cannot be overstated, with the majority of graduates citing this as the most valuable component contributing to their preparation for the classroom (Le Cornu & Ewing, 2008; Mayer et al., 2014). So important is this component that the Australian Council of Deans of Education formed the National Academic Directors of Professional Experience (NADPE) in 2016, specifically established to provide leadership and innovation in professional experience in ITE.

Each component of this complex web is addressed in the following paragraphs, but one must remain cognisant of the interconnectedness of these facets as a whole, interwoven reality.

Teacher professional identity

Professional experience provides preservice teachers with the opportunity to put into practice what they have learned at university and to begin to develop their own professional identity (Britzman, 2003; Cooper et al., 2010). Literature details the journey of the development of each teacher's identity over their career as they reflect on and modify their practice in the evolution of their skills (Beauchamp & Thomas, 2009; Flores & Day, 2006; Sachs, 2001). For the novice, professional experience is the inception of this voyage and occurs with input from multiple contributors in a social milieu. Britzman (2003) observed that constructing one's own identity as a teacher is a social negotiation, acknowledging the vulnerability of the preservice teacher who is reliant on the support and guidance of mentors, the classroom teachers who host the novices, in what she described as "a combination of authoritative and internally persuasive discourses" (p. 221). As experienced teachers who have developed their own identity throughout their career, supervisors have potential to act as a guide in this development for preservice teachers, yet their contribution to this evolution is unknown.

Schools: social environments

Much of the literature exploring professional experiences for preservice teachers reflects the highly social context in which this learning occurs (Britzman, 2003; Ó Gallchóir et al., 2019; Sim et al., 2013). There are interactions with multiple stakeholders including mentors, students, parents, supervisors and whole-of-school staff. Each of these

contributors brings their own "educational biography" (Britzman, 2003, p. 27) to the experience, that is their culture, beliefs and personal experience of schooling. This interplay of stakeholders, each with their own educational biography, presents a challenging array of communications for preservice teachers beginning to formulate their professional identity. However, as the novice seeking to succeed, each preservice teacher looks to gain membership and be accepted into each school's society (Ó Gallchóir et al., 2019), thus adding another level of convolution. The interactions that occur as they seek approval and membership have the potential for issues caused by the power imbalance between mentor and mentee who work together daily in the classroom.

Finding the balance: mentor and mentee

Mentors are tasked with guiding preservice teachers to develop their own professional identity (Britzman, 2003; Cooper et al., 2010; Mpisi, Groenewald & Barnett, 2020). However, each stakeholder in any situation has their own perspective, deriving from their own context, and will have therefore their own views of what they believe to be 'correct' (Bloomfield et al., 2004; Isenbarger & Zembylas, 2006; Sim, 2011; Sim et al., 2013). Therefore, advice and support from mentors can vary markedly. In the professional experience environment, this can significantly impact on the experience for the novice whose assessment is typically dependent in part, on the mentor. Belschak and Den Hartog (2009) cautioned mentors to be mindful of this power position and its potential to impact the preservice teacher.

The power that the mentor holds to pass or fail the preservice teacher, coupled with the previously mentioned desire of the novice for acceptance into the school society, can lead preservice teachers to feel an onus to mimic their mentor teacher, rather than develop their own identity through experimentation with and implementation of strategies learned at university (Flores & Day, 2006; Grudnoff, 2011). As the development of professional identity is an important aspect of professional experience, this has potential to impact novices' classroom readiness on graduation. The UAS has a role to play here in guiding the stakeholders to allow this exploration to occur and navigating the onus to mimic, as an inability to trial one's own strategies prior to graduation may further contribute to the "transition shock" of early in-service teaching to which Grudnoff referred (p. 224).

The pinnacle of professional experience: classroom readiness

The culmination of all ITE learning experiences, importantly including professional experience, is graduation, following which, one is determined to be classroom ready. Supervisors work with preservice teachers in school settings to contribute to this readiness to which TEMAG (2014) refers. The notion of graduate readiness or preparedness for employment is a relatively new concept and one which is used as a predictor of graduate potential (Caballero et al., 2011). Recent decades have seen an increase in the number of studies attempting to establish a set of competencies to define graduate work-readiness, but within current research, there is limited evidence for a specific measure of this (Prikshat et al., 2019). This graduateness, that is, the range of competencies required to

address the demands of the workplace in part include being engaged, enterprising, proactive, knowledgeable, responsible, and collaborative (Keogh et al., 2015).

Within the Western Australian (WA) context, a review of universities revealed a similarly extensive list of competencies and also incorporated capabilities of cultural competence and global engagement, all worthy of consideration in assessing the preparedness of preservice teachers (Curtin University, 2019; Murdoch University, 2019; University of Western Australia, 2019). However, none are sufficiently specific to meet the AITSL requirements for graduation into the Australian teaching profession, which comprise seven Standards detailing 37 elements that must be met to Graduate standard. While UAS are tasked with assessing against these, their role is more complex, supporting preservice teachers to navigate the multiplicity of school settings and to develop reflective capacity and their professional identity. Therefore, the importance of identifying components of quality supervision is crucial to better preparing preservice teachers for future employment.

The complexity of the supervisory role

Preparing graduates for the reality of teaching is challenging, requiring complex pedagogical tasks to be undertaken (Cuenca, 2012). Supervision is a powerful learning and teaching strategy, based on a collaborative relationship, which allows preservice teachers to develop their professional skills and importantly, their own professional identity (Cooper et al., 2010). Within the context of this review, the supervision is understood to be completed by experienced teachers who are employed specifically by the university to visit preservice teachers while on professional experience. They are trained by and liaise with academic staff who teach the theory, and act as the conduit between the university and the schools in which the novices are training. The role is complex, requiring the supervisors to maintain relationships, provide feedback, and foster critical reflection. However, it is also a dichotomous role with inherent contradictions, having competing priorities of both assessor and supporter/mentor (Chur-Hansen & McLean, 2006; Le Maistre et al., 2006; Winchester-Seeto et al., 2016).

Mentoring

Whether one argues that mentoring has existed since Homer's Odyssey or Fenelon's Les aventures de télémaque (Roberts, 1999), the concept of a novice being supported by a more experienced and knowledgeable colleague (West, 2016) has prevailed in some form for centuries. Mentoring frameworks exist for professions too numerous to list, a brief review of which illustrate commonalities of mentor competencies broadly including support, goal setting, reliability, content and contextual knowledge, feedback, role-modelling, and reflection. However, the structures established by accrediting bodies in ITE, coupled with the complexity of the social milieu of the classroom require a much more detailed model for mentoring future teachers.

In education, mentoring has long been a feature of ITE programs, with varying degrees of quality, leading to the recommendation that AITSL implement guidelines to ensure that

supervising teachers are skilled to effectively mentor (TEMAG, 2014). Ambrosetti, Dekkers and Knight (2017) observed the complex nature of mentoring and noted that the increased focus on mentoring within ITE has seen the emergence of various alternative approaches. Graves (2017) referred to the significant body of literature highlighting the key qualities of effective mentors for preservice teachers.

It is beyond the scope of this paper to detail the myriad of mentoring frameworks proffered for teaching, but the following two examples provide evidence of successful programs still in use today. AITSL developed an online training resource for supervising teachers in 2013 which was independently reviewed in 2015 and found to be meeting the professional learning needs of participants. This freely available resource was updated in 2017 (AITSL, 2017) and is again undergoing review. Hudson's five-factor model (2005) has led to the development of the commercially available *Mentoring for Effective Teaching* program, specifically designed to advance mentoring practices for preservice and early career teachers. This comprises 11 modules which focus on the key areas of feedback, reflection, relationship, school context, knowledge, and modelling, and has had widespread success, nationally and internationally. Results from an investigation into this model by the author indicated that mentors who apply the principles outlined in the five factors contribute to ensuring effective support for preservice teachers (Bird & Hudson, 2015).

These examples provide useful tools for those who supervise preservice teachers, but neither explicitly acknowledge the multiple stakeholders involved in ITE supervision and the complexities that can arise from the interactions. Therefore, they do not encapsulate the enormity of the role the UAS which extends beyond mentoring to providing guidance, support, mediation, and formative and summative assessment. There is a clear need to understand the full gamut of this role and to develop a model that aligns with this purpose.

Assessment

In Australia, preservice teachers are assessed against the AITSL National Standards for Teachers which comprise seven areas of competency, and each must be met to Graduate level to be assessed as classroom ready. Established standards "represent a marker or reference point for judgments about preparedness of beginning teachers" (Swabey et al., 2010, p. 31). TEMAG (2014) indicated that the AITSL Standards provide a strong basis for quality assurance in ITE, but suggested they are not being effectively applied as an assessment measure, with implementation timeframes being too slow and requirements for evidence of achievement of the Standards being inadequate.

Recommendation 6 of the TEMAG Report (2014) indicated that ITE programs must ensure the "rigorous and iterative assessment of pre-service teachers throughout their education" (p. xiv), indicating that there must be genuine assessments against a national framework that encapsulate the myriad of skills required for teaching. Recommendations 19 and 23 (p. xvi) of that report designated that ITE providers must formalise partnerships with schools to ensure delivery of structured professional experience with

agreed assessments. With genuine assessment being supported by robust evidence (TEMAG, 2014), the various stakeholders, being university teaching staff, mentor teachers, preservice teachers, school leaders and supervisors, require a shared understanding of the requirements for assessment and indicators of achievement. As representatives of the university, UAS are positioned to manage stakeholders' understandings and communicate the expectations of the ITE program to school staff (Cuenca, 2012). However, there are challenges in developing a common understanding of what constitutes evidence, even when provided with clear indicators, which can be attributed to mentor teachers' perceptions of their role, their expectations of the learning stage of the preservice teacher, and the UAS interpretation of the criteria and evidence (Sim et al., 2013).

Assessment in workplace learning is complex and includes both summative: the grading of work-related elements (Yorke, 2011) and formative: the provision of information on student performance to contribute to learning (Yorke, 2003). Developmentally appropriate feedback is vital in supporting students to reflect on their teaching to inform their learning and affording them valuable feedback with which to progress (Sachs & Rowe, 2016; Walker, Oliver & Mackenzie, 2020), and encouraging dialogue and self-esteem (Nicol & MacFarlane-Dick, 2006). Further, novices value the input of the experienced experts (Peach et al., 2014). Therefore, the UAS, as experienced teachers, are a crucial and valued contributor to this aspect of their learning (Chur-Hansen & McLean, 2006).

The concept of feedback as an important tool for learning extends well beyond ITE but as established, is pertinent to preservice teacher preparation, as the delivery of feedback is a fundamental component of professional experience. A psychological study undertaken by Belschak and Den Hartog (2009) investigated the affect-related consequences of feedback delivery. This study noted that the provision of critique can be beneficial in stimulating learning and goal setting, and improving performance. However, the authors cautioned that care must be taken in its delivery, as this occurs in a socially interactive space with multiple stakeholders, finding that negative feedback, delivered positively can still stimulate positive affect and increase commitment levels.

Another study outside of the ITE realm provided valuable insight into feedback as an essential element of supervision. Chur-Hansen and McLean (2006) observed that feedback is a key aspect of psychiatry supervision and identified that there was a need for regular and continuous feedback, balancing positive comments with critique, as there were benefits identified, to highlighting difficulties. The second aspect of this study included interviews with 21 supervisors who identified reasons for reticence to provide critical feedback, which included concerns over damaging the relationship, fear of mentee response, and of legal repercussions. Not surprisingly in the intricate web of interactions between personalities in professional experience supervision, this reticence can occur and has potential to mar the delivery of effective feedback.

Relationship management

The subtleties of social negotiation and the vulnerability of the novice (Britzman, 2003) which influence professional experience for both supervisor and preservice teacher are highlighted by Bloomfield (2010). She provided insight into some of the many intricacies that can occur in this less than predictable space, with supervisors and mentors potentially being reticent to provide critique, preservice teachers seeking acceptance, and mentors and supervisors interacting to assess the novices. Bloomfield's study focused on one Australian undergraduate primary teacher and highlighted the preservice teacher's affective state, observing the inner conflict between her desire to forge good relationships with her students, mentor and supervisor, and her difficulty in receiving critique. The study further illustrated the power of the mentor as assessor and of preservice teachers' challenges in openly critiquing their own performance with them. The author noted that this is to some degree alleviated by an objective supervisor yet expounded the inherent challenges for the UAS in developing relationships with both the mentor and mentee.

Frequently cited in the literature, a case study by Bullough and Draper (2004), provides another example of this challenging reality. In this study, the supervisor opined personal theories of teaching that contrasted with those of the classroom mentor, creating a difficult situation for the student in navigating the interactions between the two power stakeholders. This situation added a complexity to an already stressful environment and highlighted not only the social network that exists in professional experience, but also how these interactions can destabilise the novice and impede the important development of their own professional identities in the short time they have in classrooms (Flores & Day, 2006). This example is reinforced by Patrick's 2013 study which reported that power issues between mentor teacher and preservice teacher were a critical factor in the experience of the novices during professional experience.

These two case studies typify preservice teachers' anecdotes of professional experience and illustrate that UAS are in a powerful, yet delicate position, managing these interactions for the benefit of the student who is attempting to put into practice the theory they have learned at university.

Bridging the theory-practice divide

The theory-practice divide is widely acknowledged as long having been a feature of ITE (Harford & MacRuairc, 2008; Loughran & Hamilton, 2016; Sim et al., 2013; Zeichner, 2010). Britzman (2003) reflected on the separation of theory from practice, suggesting that theorising should neither be enacted in isolation separate from experience, nor imposed as a truth, rather grounded in the experience of the stakeholders and dependent on interpretation and change. Hays and Clements (2011) indicated that "the role supervision plays in learning and, specifically how it serves to bridge the theory-practice divide remain unexplored and under-theorised in the literature" (p. 1).

Loughran and Hamilton (2016) argued that the theory-practice divide is shaped by the ways in which theory and practice are perceived and applied by mentors and by students

of teaching. They contended that the process of learning to teach would be viewed differently if it is envisaged as a scripted training regime or apprenticeship, as opposed to a problematic process where learning originates from inquiry and reflection.

In discussing the connections between on-campus courses and workplace experiences, seminal educator Ken Zeichner (2010) detailed a number of programs throughout the United States of America that have attempted to bridge this hierarchical gap between the authoritative, academic training and workplace learning. These examples highlighted ways in which these practitioners attempted to create what he described as 'hybrid' spaces where transformative learning can take place. These included the integration of highly qualified teachers into ITE programs for two years, incorporating the research of practising teachers into campus-based curriculum, the development of multimedia, webbased resources by practising teachers, and mediated analysis of the gaps between campus courses and preservice teacher in-school experiences. There is potential for these strategies to reduce the divide, but none address the possibility of a trained UAS contributing to this aspect of the professional learning environment. Focused training for UAS may be an effective component of a supervision model.

Grudnoff (2011) noted that the theory-practice gap has been identified as a concern internationally, providing the example of 20 reviews of ITE in New Zealand between 1990 and 2010 and aligning the results with those of other countries, wherein programs were criticised for being too theoretical and lacking sufficient classroom practice. Allen (2009) similarly cited multiple authors in support of the same argument. In the Australian context, TEMAG (2014) emphasised the importance of the provision of opportunity to integrate theory and practice, noting that professional experience provides a critical link for this integration, and that the supervisor is a pivotal component of this connection. UAS are uniquely positioned to assist the novice to apply the theory they have learned to the classroom setting. However, this capacity can only be realised if effectively nurtured. To assume that because one has knowledge and experience in classrooms, one can effectively bridge the theory-practice divide, does not take into account that supervisors often have limited knowledge of specific theoretical details being delivered to the preservice teachers they are supporting. Furthermore, the quality of the supervision may be impacted by what theory they have retained from their own studies, or the value they place on its importance. Palmeri and Peter (2019) observed that supervisors are provided with limited professional learning opportunities in the ITE program space. However, these opportunities could encompass a review of the theoretical underpinnings of the students' learning, thus increasing UAS knowledge of the teacher education process which could assist in bridging this divide as they guide the preservice teachers through their inschool learning. However, this important role extends beyond that of guide.

Duality of roles

Supervision designs vary internationally, but many configurations include the requirement to complete both formative and summative assessment of preservice teachers, as well as scaffold, support, and mentor the novice to apply the theory they have learned, to their classroom setting.

This duality of roles was investigated by Burns and Badiali (2015), who expanded on the 2010 work of Nolan and Hoover who had identified seven dimensions of supervision and evaluation. Burns and Badiali acknowledged the claim that "supervision and evaluation differ with respect to purpose, rationale, scope, relationship, data focus, expertise and perspective" (2015, p. 421), but broadened the concept to include a "degree of action", that is, active and/or passive participation. This added dimension emphasised the active participation of both supervisor and preservice teacher in the mentoring aspect of supervision, but observed that the supervisor was the only active participant in the evaluation process. It should be noted that these dimensions of supervision are not specifically attributed to preservice teacher supervision but are part of a much larger focus on instructional supervision across the teaching profession, which can feature regular supervision of teaching staff by school leaders. However, this focus on the dual role of the UAS has relevance for the ITE supervisor, where the purpose of supervision from a mentoring perspective is to cultivate growth, but from an evaluation outlook, is to ensure minimum competence.

This conflation of roles presents a contradiction and there are those who would argue that supervision and evaluation should be viewed as separate entities (Burns et al., 2016). However, this could also exacerbate previously mentioned power struggles, were the mentor teacher to have greater influence over assessment. The supervisor, as third party and representative of the university, can ameliorate the impact of the classroom mentor's power position, although this paradigm maintains the conflation. At present in Western Australia the role exists in this dichotomous form, as supervision is acknowledged for its significance (TEMAG, 2014), thus offering another compelling reason for a detailed investigation into the supervisory undertaking.

Stimulating reflective practice

Reflective practice is essential to workplace learning (Nielsen et al., 2017; Vaughan, 2014). As such, the importance of the UAS incorporating the stimulation of reflective practice in novices into their professional repertoire cannot be underestimated. Acknowledged as countries with high-performing education systems (Darling-Hammond, 2006; Sim et al., 2013; TEMAG, 2014), Finland and Singapore have both developed models that incorporate explicit focus on reflection and a culture of critical thinking. Literature frequently acknowledges the works of Dewey and Schön as the basis for reflective practice (Dimova & Loughran, 2009; Harford & MacRuairc, 2008; Lyons, 2009). Bates, Ramirez and Drits (2009) observed that literature on teacher education is replete with the importance of teachers' ability to engage in critical reflection. However, Harford and MacRuairc (2008) suggested that while teachers are aware of the importance of appearing to be reflective, they do not necessarily acknowledge its application to their actual teaching experience. Their small-scale study reported a tangible improvement in the development of ITE students' reflective skills over the course of one year through the use of peer video as an analytical tool in a community of practice. While not intended to detract from the success of the results, the study was conducted with students in a one-year postgraduate diploma course whose improvement would arguably be tangible regardless, due to the course's intensive nature.

The community of practice model adopted by these authors is one which is growing in popularity due to its capacity to develop critical dialogue with peers. While teaching has been seen by some as an individualistic endeavour (Daniel et al., 2013; Le Cornu & Ewing, 2008), this approach provides opportunity for the use of frequent, systematic, and transformative discourse as an important aspect of critical reflection within a community. Daniel et al. (2013, p. 160) described the development of a "mechanism of rigour" within a base of knowledge. While acknowledging their study was limited by the inexperience of the participants who were in their first year of their course, the results indicated increased understanding and appreciation of engaging in critical reflection over the duration of the study and the authors called for an enculturation of this paradigm.

Preservice teachers require structured tasks to promote reflection and to critically examine their teaching while on professional experience (Choy et al., 2014; TEMAG, 2014). They need to be afforded opportunities to reflect critically, through the use of specific supervisory skills to engender transformative learning via the stimulation of critical reflection (Choy et al., 2014; Crasborn et al., 2008; Nicol & MacFarlane-Dick, 2006; Zeichner, 2009). However, Bloomfield et al. (2004) noted that due to the complexity of teaching and the professional experience environment, achieving this goal can be problematic. Thus a model of supervision that identifies effective methods to stimulate reflective practice could contribute to alleviating the problems caused by this convolution.

The challenges of supervision

The role of the supervisor is complex, helping to bridge the divide that exists between on-campus theoretical learning and the reality of the classroom (Harford & MacRuairc, 2008; Sim et al., 2013; Zeichner, 2010). The UAS is tasked with completing training by the university, disseminating course knowledge to mentor teachers, observing preservice teachers in classroom settings, providing feedback, engendering reflection, liaising with university and schools' staff, managing issues between mentor and mentee, and assessing students. These interconnected multiplicities render the undertaking somewhat challenging.

It is acknowledged that the administration of supervision by ITE providers is impacted by resourcing challenges (Burns et al., 2016; Hays & Clements, 2011; Le Cornu & Ewing, 2008). Preservice teacher supervision is labour-intensive and delivered under progressively tighter budgetary controls (Burns et al., 2016; Hays & Clements, 2011; Le Cornu & Ewing, 2008). Universities must pay both the mentoring teachers and the UAS who support and assess the preservice teachers. From a human resource perspective, these UAS must be qualified, experienced teachers, and universities are required to employ sufficient numbers of them to provide supervision for all their students. Seminal teacher educator Linda Darling-Hammond (2005) reflected on the importance of adequate resources to allow greater support to preservice teachers in encouraging their commitment and growth. In acknowledging the challenges of the cost of professional experience placements, TEMAG (2014) referred to the *Top of the Class* report (Parliament of Australia, 2007), which suggested that financial constraints have left universities with no option but to reduce the level of supervision offered to their ITE students.

Given that research attests to the importance of quality professional experiences (Rots et al., 2007; White et al., 2010), the implications for diminished levels of supervision potentially place the quality of graduates at risk, as these experts are afforded less time to support preservice teachers to develop the complex set of skills required for teaching in their time on professional experience.

Conclusion

There is a clear link between the pivotal role that education plays in the prosperity of a nation and the consequent action by governments to ensure the quality of their education systems. In attempting to improve Australian education through ITE programs, the Government has sought advice from industry experts and comprehensive reviews of professional experience have been undertaken (Sim et al., 2013; TEMAG, 2014). However, neither the resources that have been developed as a result of these investigations, nor the parameters established by AITSL to guide mentors and supervisors have addressed the specific and unique contribution that supervisors make to the learning of the future teaching workforce.

The intricacies of the teaching role and the complexities and challenges of workplace supervision are well addressed in the literature (Peach et al., 2014; Winchester-Seeto et al., 2016), yet the contribution that supervisors make to preservice teacher learning remains under-theorised (Hays & Clements, 2011; Palmeri & Peter, 2019). The necessity for quality supervision, provided by experienced teachers, to guide the learners' learning journeys should not be underestimated. They are possibly the most undervalued contributors to preservice teacher learning (Burns & Badiali, 2015), and understanding how UAS work and the impact they make is critical in defining this role.

A priority is now to theorise supervision through an investigation of the perceived contribution by supervisors to the learning of the preservice teachers, from the perspective of both stakeholders. This analysis will facilitate the development of a model that assists universities to articulate the specific tasks of the UAS and optimise their training to maximise the quality of supervision delivery for the next generation of teachers. Cuenca summarised this perfectly in saying "the dialogue ... should be taken up as a call to continue to identify the problems and address [them] through more dialogue, conceptualization, and investigation" (2012, p. xiv).

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