Development of an engagement framework for a first year teacher education program

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This paper describes a research project that investigated first year pre-service teachers' learning experience and developed an engagement framework based upon the 'transition pedagogy'. Three components were identified in the framework: a) diversity of the first year pre-service teachers and their transition into the teaching profession, b) design of student engagement and assessment in teacher education programs, and c) Perceived Stress Scale (PSS) Screening and Support System. Teacher educators may find this paper useful in providing greater understanding of the learning experience of first year pre-service teachers. It also offers an evidence base for building support systems and strategies to improve retention rates, which can lead to ways of increasing education course completion rates.

Transition pedagogy, stress from first year pre-service teachers and importance of developing an engagement framework

The experience of first year tertiary students has been the subject of research for many years. Studies by Harvey, Drew and Smith (2006), Reason, Terenzini and Domingo (2006) and Tinto (1987, 2001) found that the first year of higher education is an important transitional experience that can lead to success or failure at university.

Research has identified several factors that influenced first year higher education students' academic experience: 1) prior academic performance (French, Immekus & Oakes, 2005; Johnson, 2008; Scott, Shan, Grebennikov & Singh, 2008); 2) social and academic readiness to collaborate with course lecturers and other students (Cox, Schmitt, Bobrowski, & Graham, 2005; Lohfink & Paulsemn, 2005); 3) technical readiness to use online technologies (Geng & Disney, 2010); and 4) conflicting work commitment (e.g. Long, Ferrier & Heagney, 2006). In particular, researchers such as Garcia-Ros, Perez-Gonzalez, Perez-Blasco, and Natividad (2012); Peel, Powell and Treacey (2004) and Willcoxson, Cotter & Joy (2011) identified the following specific factors leading to attrition of the first year higher education students: course dissatisfaction; financial problems; transferring to another university; academic difficulties; family responsibilities; personal problems; and poor quality teaching. Willcoxson et al. (2011) found that having a clear reason for attending university and knowing the type of occupation to which they aspired were significantly related to a lower likelihood of attrition in the first year.

Education students, or pre-service teachers, are required to undertake teaching practicums, in addition to their theory study load (Australian Institute for Teaching and School Leadership [AITSL], 2014; Mitchell, Maher & Brown, 2008). During their professional practicums, pre-service teachers are required to complete a range of experiential tasks, such as getting familiar with school culture, working very closely with their mentor teachers and planning their teaching. They are assessed on their performance in the practicums (Chung, 2008). In addition to the performance tasks in placement schools, pre-service teachers are expected to collaborate with peers on academic theory tasks, and are

assessed on this collective work in in the university setting (Chung, 2008). The demands of this load can create varying levels of stress among students and, unmanaged, has potential to affect their subsequent engagement with successful learning.

Numerous research papers discuss the negative effect that workload has on university students' overall health and wellbeing (Kao, 2009; Mitchell et al., 2008; Ong & Cheong, 2009; Ruohoniemi & Lindblom-Ylanne, 2009), and it was found that when students are overwhelmed and stressed with workload or completion of assessments, many either withdraw from the units, or in some cases the whole course.

Beginning in 2006, Professor Kift conducted a comprehensive study on the issue of Transition Pedagogy (Kift, 2009). The research-based Pedagogy includes six First Year Curriculum principles which underpin support for first year higher education students: Transition, diversity, design, engagement, assessment and evaluation and monitoring. In particular, she provided strategies to support the principle of assessment, which include development of a Feedback Strategy comprising: communicating to students; providing insight into errors and misunderstandings; and guiding students on ways to improve. Kift's Transition Pedagogy provides a solid theoretical background for course design, including assessment design, for courses undertaken by first year pre-service teachers.

While considerable research has been conducted on first year tertiary pre-service teachers' learning experience, very limited research has been focused on the development of a framework based upon research evidence to better understand the study pressures on this group of students. Such work would inform the development of strategies or support systems to assist this group achieve their professional goals. Therefore, this project seeks to develop a framework for first year pre-service teachers with a view to a) exploring the first year pre-service teachers' diversity of backgrounds and transition experiences, b) designing the first year assessments in teacher education programs based upon the Transition Pedagogy, c) understanding first year pre-service teachers' experience of study, including the roles of placement schools and mentor teachers, and d) understanding the needs of developing a support system for first year pre-service teachers' learning experience from assessment perspective.

Method

This study employed critical discourse analysis (CDA) (Tamatea, 2008) to analyse responses from open-ended questions in the purpose designed questionnaire. CDA is based upon both linguistic theory (Ainsworth & Hardy, 2004; Fairclough, 2001; Henderson, 2005; Wodak, 2001) and social theory (Habermans, 1990). CDA can be used to analyse data through a three-dimensional framework – micro, meso and macro-level interpretations about the participants' opinions towards engagement framework and strategies or support system that could be used to assist first year pre-service teachers' successful learning experience.

Participants

Of one hundred and forty-seven first year pre-service teachers, who participated in the open-ended questionnaire, 76.2 % were female students, and 21.8 % were male (some students did not indicate their gender). Approximately a quarter of the participants (26.5%) were between 18 to 25 years old, the majority of the participants (67.9%) were between 26 to 40 years old, and nearly 6 per cent were above 50 years old.
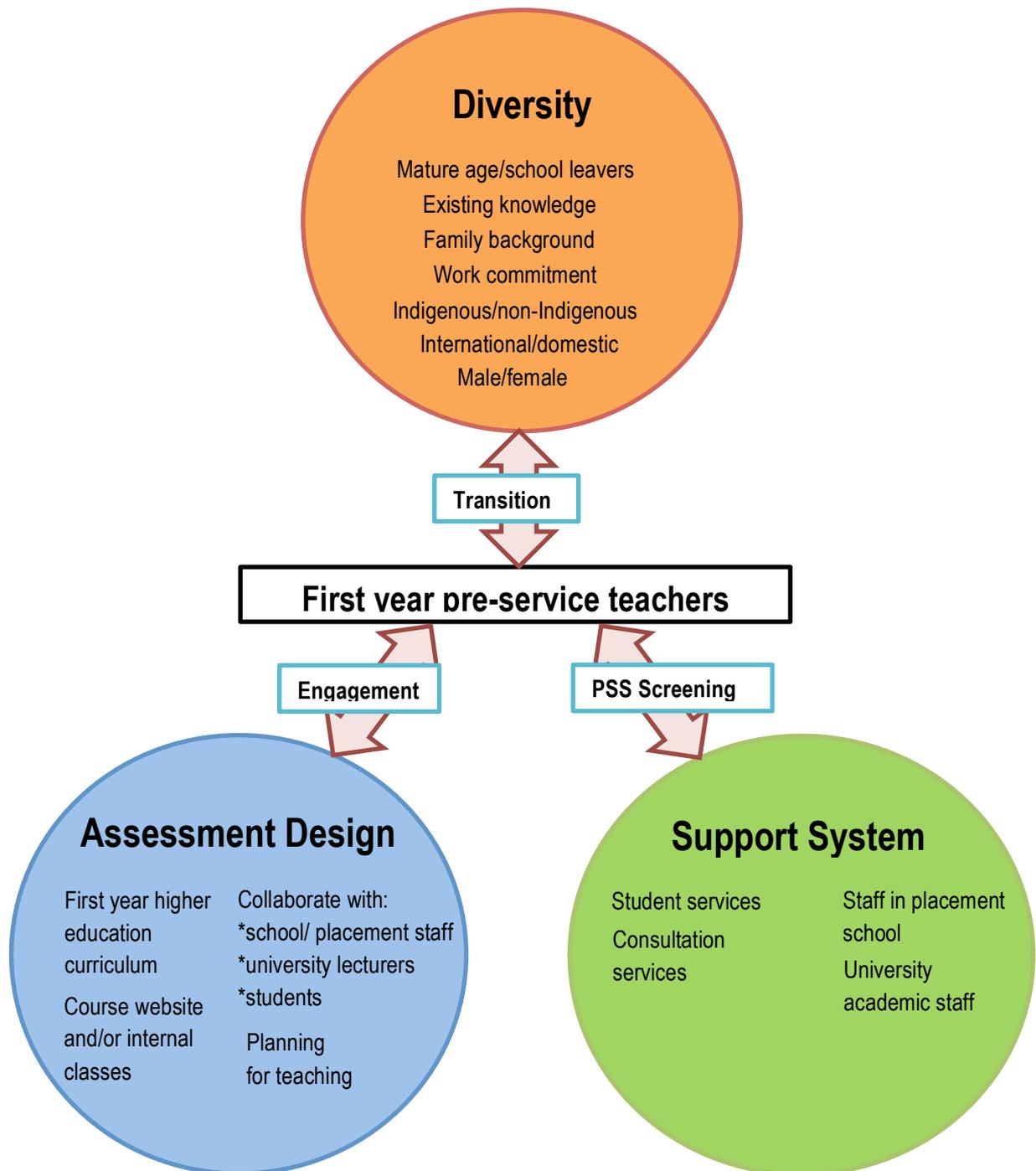
Instruments

The purpose-designed questionnaire was used to acquire information from the participants around characteristics, workload and opinions (Gay & Airasian, 2003; Leedy & Ormrod, 2005). The questionnaire consisted of 16 closed questions, covering participants' demographic characteristics and the hours they spent on work associated with their teaching practicums and education theory studying. The closed questions allowed comparison across respondents. The questionnaire also contained 8 open-ended questions as to participants' opinions on how to improve assessment of the placement and

theory units. Open ended questions were included in the survey as this "allows for the informants to answer from their own frame of reference rather than being confined by the structure of pre-arranged questions" (Bogdan & Biklen, 1982).

Three components of the engagement framework

Based upon the theory of 'transition pedagogy', the engagement framework was developed via discussing the results of the questionnaire (see Figure 1). The three components of the engagement framework include a) diversity of the first year pre-service teachers and their transition to teaching profession, b) Students' engagement and Assessment design in teacher education programs, and c) Perceived Stress Scale (PSS) Screening and Support System.

Diversity

Mature age/school leavers
Existing knowledge
Family background
Work commitment
Indigenous/non-Indigenous
International/domestic
Male/female

Transition

First year pre-service teachers

Engagement

PSS Screening

Assessment Design

First year higher education curriculum

Course website and/or internal classes

Collaborate with:
*school/ placement staff
*university lecturers
*students

Planning for teaching

Support System

Student services

Consultation services

Staff in placement school

University academic staff

Figure 1: Engagement framework for a first year teacher education program

Diversity of the first year pre-service teachers and their transition to teaching profession

The growth of students numbers entering the teaching profession, not only from a range of vocations and backgrounds but also from an increasing range of cultures and contexts, is representative of a modern, mobilised community that has the potential to value-add to the education sector.

In essence, for education, this means that the teachers of today represent various age groups, diverse backgrounds and cultures and who, amidst this multifaceted array of experiences, bring a wealth of learning opportunities to Australian classrooms.

In this research project, the participants' enrolment in teacher education programs was varied: 34 students (23.2%) were undertaking a four year primary teacher education program, 14 students (9.5%) were completing four year secondary teacher education program, 20 students (13.6%) were enrolled in an early childhood teacher education program, and 79 students (53.7%) students were taking one year graduate diploma teacher education program that provisioned graduates as primary or secondary school teachers.

The text below contains an illustrative comment from Student #35 as to a challenging, but positive experience of working with her placement school that gave better understanding of the teaching profession.

> At my placement school – weekly grade staff meetings contain a 'howzit' session – everyone confidentially sharing what has been bothering them lately. Also, weekly pre-service teacher meetings – with learning coordinator, providing a lecture and catch up session.

However, text from student #114 also indicated the importance of the diversity of the first year teachers and their dilemmas in transition into the teaching profession.

> I am struggling to transition between the academic learning required from the online course website /academic work and the practical placement. I had just managed to coordinate working/studying and being a wife/mum, and was getting my assignments in on time by a very rigid study routine after kids were asleep, but I have not managed the transition to practical lesson planning and time with real people very well, and have not completed my placement tasks in the time given. It didn't help that I was attending placement and ignoring requirements until I had handed in my last assignment. It meant I had got half way through placement, only taking notes without reflecting or planning time. Next semester I am only doing two units, and I have more understanding of what it's like to be in a school all day and what kind of planning and organisational tasks (and teaching and supervising tasks) a teacher actually does, so I won't have so much trouble adjusting.

Student teachers, who have more knowledge about the nature of teaching as an occupation, also have a higher level of satisfaction with their course and are more likely to continue studying (Willcoxson et al., 2011). With support from the university, placement schools and particularly from mentor teachers, first year pre-service teachers can be better integrated into their teaching, thus reducing attrition in the first years (Willcoxson et al., 2011). The corollary is that poor teaching (Willcoxson et al., 2011) from mentor teachers and other staff in schools and by university lecturers might lead to higher dissatisfaction and student withdrawal from study.

Students' engagement and assessment design in teacher education programs

Twenty-one participants stated that their stress level in placement was strongly related to completion of academic assessments. Nineteen students believed that the first assessment was not demanding; while two participating students preferred not to have any academic assessment during placements, because of their busy school schedule.

Participants indicated that placement tasks comprised a) planning for teaching, b) online course website requirement (understand learning materials and complete assignments), and c) working with

mentors. The theory units tasks comprised a) collaborative group work, b) online course website requirement (understand learning materials and complete assignments), and c) working with lecturers.

The text below contains a comment from Student #87 as to assessment design in teacher education programs.

> The assessment tasks are useful because they force focus of lesson plans and thinking but I also feel they somewhat impede freedom of experimenting with different teaching strategies and ways of working. They also somewhat take time from actual lesson planning because time is consumed by explaining to a third party of what I understand and can do! But this is the dilemma of most assessments of this kind.

According to the university standard (such as Charles Darwin University Academic and Assessment Policy, 2014) and Commonwealth government funding for tertiary students, each unit or subject requires at least 10 hours per week workload for students, with a total word limit for all the assessments for each unit or subject should be approximately 4,000 words. While this standard can be easily measured in assessment design among the theory units, there is greater complexity in the context of practicum assessment design. During school based professional experience the demand on students is high as they observe mentor teachers' classrooms, develop understanding and familiarity with students in different educational settings, and build strong communicative skills with teachers while completing placement assessments. Moreover, the style of placement assessment—designing and developing lesson plans, teaching students and applying strategies and pedagogy from their theoretical learning—within the tight timeline of teaching practice can be very stressful, and in some cases overwhelming (Rieg, Paquette & Chen, 2007). The rich tasks and experiences afforded by this style of professional assessment do not fit easily within the model outlined in university standards. Research on the mental health and wellbeing of pre-service teachers has indicated that this stress can result in students withdrawing from study, and ultimately from teaching as a future career (Rieg et al., 2007). As lecturers in education, we ask ourselves "How to better use rich assessment tasks", "How to introduce assessments that span unit boundaries?" and "How to ensure and assess student boundaries (capabilities) and language/numeracy development while supporting the wellbeing of students and subsequent retention in higher education study?" For example, when the pre-service teachers undertake their teaching practicum, the practicum consists of a 2 to 12 weeks undertaken as individual days or blocks at a local school, which is completed in conjunction with one or more additional unit(s) of study. With each unit comprising 10 hours of study, full-time students are completing 40 hours of study. When this load includes practicum experience, or the pre-service teacher is working the hours of a school teacher, their load is considerably increased. Compounding this load may be an overlapping of assessment items, which further impacts the pre-service teachers' capacity. One belief is that the first year student's high stress level can arise from lack of time (Gracia-Ros et al., 2012), although successful completion of the assessments and tasks could reflect student teachers' learning outcomes (Chung, 2008).

Perceived stress scale (PSS) screening and support system

As stated above, pre-service teachers complete a mandated number of assessable practicum days across their course. This time of 'learning on-the-job' integrates "formal learning and workplace experiences" (Matoti, Junqueira & Odora, 2011). During practicum pre-service teachers learn through observation, reflection and concept development, which they apply and test (Matoti, et al., 2011) in the daily rituals in classrooms. As they become involved in "the wider aspects of teaching" across staffroom, school and community (Grootenboer, 2005/2006, p. 19) they have the opportunity to rehearse dealing with the varied and often unexpected events that occur in schools. Therefore, despite a desire to meet multidimensional demands, pre-service teachers may require additional means to manage learning, workload and emotional exhaustion (Andrade, 2011).

Out of the 135 first year pre-service teachers who answered the questions in relation to their awareness and access to support provided by School of Education, only 54 participants (36.7%) were aware of and had access to the support provided by School of Education in relation to their theory units

assessment. Seventy-one participants (63.3%) did not know and did not have access to any support provided by School of Education. In regards to the support provided by School of Education in assisting pre-service teachers in completing their placement successfully, only 53 first year pre-service teachers (37.9% of the total 140 participants) were aware of and had access to the support, leaving 87 participants (62.1%) answering that they did not know of or did not have access to the support. This shows that although factors contributing to the course dissatisfaction were recognised (Peel, et al., 2004), there was lack of support that first year students were aware of or had access to.

Student #64 commented on the support system provided by the lecturers in university and her placement schools.

> I have checked 'I do not know'. I feel my mentor teacher is so stretched for time that I am apprehensive about asking them to complete paperwork. In saying this the school has been very kind and supportive of me when I have approached them about uni requirements. I have emailed lecturers and have got the distinct impression that I am not to contact them directly in any way which is disheartening. Appreciate collegial learning approach but think more guidance would be good.

Stress has long been a major research topic in health science since it is associated with a range of poor physical and mental health outcomes (Cohen, Janicki-Deverts, & Miller, 2007; Johnson, Perry, & Rozensky, 2002; Thoits, 2010). According to the Australian Institute for Teaching and School Leadership (AITSL) (2013), we should build strong relationships between different stakeholders in pre-service teachers' professional experience. While all students undertaking teacher education courses complete professional experience or practicums, a supportive model or support system is required. The PSS (Cohen, Kamarch, & Mermelstein, 1983) is one of the most widely used self-reported psychological instruments for measuring nonspecific perceived stress. The present framework used the shorter, 10-item PSS-10 to estimate the education students' current psychological stress associated with their completion of the theory units' assessments and their teaching practicum, and develop a basis for a support system to reduce first year pre-service teachers' stress, and increase the retention rates. Support systems are essential for learners to engage in the process of learning and needs to be developed in response to students' needs, such as their workload. It is also essential that a range of support systems (e.g., support from Professional Learning Leaders PLLs) is put in place to enable the pre-service teachers to be mentally healthy and competent in their placements in schools and to learn to teach successfully within a classroom setting.

Conclusion

This paper developed an engagement framework based upon the 'transition pedagogy' and a research project investigating first year pre-service teachers' learning experience in an Australian university. Three components were identified in the framework: a) diversity of the first year pre-service teachers and their transition into the teaching profession, b) design of student engagement and assessment in teacher education programs, and c) Perceived Stress Scale (PSS) Screening and Support System. The development of the engagement framework is an evidence based stepping stone to the development of a better support system and strategies to improve higher retention rates. In turn this can lead to increased education course completion rates.

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