

2014

Enhancing Understanding of Teaching and the Profession Through School Innovation Rounds

Wendy Moran

Australian Catholic University, wendy.moran@acu.edu.au

Recommended Citation

Moran, W. (2014). Enhancing Understanding of Teaching and the Profession Through School Innovation Rounds. *Australian Journal of Teacher Education*, 39(3).

Retrieved from <http://ro.ecu.edu.au/ajte/vol39/iss3/4>

This Journal Article is posted at Research Online.

<http://ro.ecu.edu.au/ajte/vol39/iss3/4>

Enhancing Understanding of Teaching and the Profession Through School Innovation Rounds

Wendy Moran
Australian Catholic University

Abstract: Currently, Australian teacher education programs include professional experiences as a means of enhancing preservice teacher understanding about teaching and the profession. The challenge the programs face is the lack of places available in schools and, at times, the unpredictable quality of the placements as some teachers are time-poor, are not good models of effective teaching practice, and/or lack the skills of articulating their practice. This paper briefly explores features of past models of professional experience before describing a new model that, as an inclusion in a range of field-based placements, addresses many of the challenges in teacher education today. Results from two years' of surveys (N=262) inform a practitioner research process designed to investigate the effectiveness of this new model. Findings suggest that while the program cannot negate all the difficulties associated with ensuring quality placements, it does provide some solutions that assist in improving the professional experiences of preservice teachers.

Introduction

A primary aim of teacher education institutions is to create quality courses that effectively prepare preservice teachers (PSTs) for their future career. Quality programs of study require field placements to give opportunities for PSTs to experience the context of their career, to watch and learn from experts in the field, to understand more of the workplace culture into which they are entering, and to demonstrate their transferability of theory into practice (Zeichner, 1996a). The role of field placement as an important component of training is undisputed from both a university perspective (Dewey, 1904; Grudnoff, 2011; Ryan, Toohey, & Hughes, 1996) and from an undergraduate's perspective (Caires & Almeida, 2007; Caires, Almeida, & Vieira, 2012; Smith & Lev□Ari, 2005). However, as this paper will demonstrate, over several decades a number of complexities and issues have arisen in Australia with regard to the quality of field placements in teacher education inciting a call for new approaches in professional experiences that will reduce at least some of these issues (Parliament of Australia, 2007; Ramsay, 2000).

A new model of field-based learning called *School Innovation Rounds (SIRs)* designed for preservice teacher education will be shared in this article demonstrating how it addresses several of the current issues and difficulties confronting teacher education courses today. Beginning with an international review of literature and research associated with the practices, beliefs and challenges of field-based placements in teacher education, the paper then explains the features and mechanics of the program. Preliminary findings of two years' of evaluations follow to demonstrate how *SIRs* have responded to commonly shared challenges in tertiary field-based learning.

Current and Past Practices in Field Placements

In-school placements as part of teacher education courses have changed over the past forty years as a result of: the recognition that teaching is more than a technical skill but also a profession consisting of its own micro-culture; an expanded understanding about cognitive development; and political agendas impacting on ways in which teacher education, and professional experience in particular, is enacted. During the 1970s and into the 1980s PSTs were thought to learn the 'craft' of teaching by imitating and practising the demonstrated skills of expert teachers (Le Cornu & Ewing, 2008). In a field placement, a PST was typically placed to work with a supervising teacher who would model good practice and assist the PST to imitate his/her techniques practising them until proficient. But during the late 1980s under the influence of Schon (1987) and others (Bullough, 1991; Bullough & Stokes, 1994; Gore & Zeichner, 1991; Van Manen, 1995; Zeichner & Liston, 1987) the need to devise programs that encouraged reflection on teaching practice with a view to promoting more considered rather than reflexive approaches became a strongly held opinion (Tomlinson, 1999; Zeichner, 2002).

This awareness and understanding about reflection broadened the shift from field experiences focusing on observation, modelling and practice of teaching skills to other structures where reflective discussions formed a significant part of the learning about teaching and the profession (Korthagen & Vasalos, 2005). Furthermore, social cognitive theory (Bandura, 1986), and social and psychological constructivism (Palincsar, 1998; Vygotsky, 1978; Woolfolk & Margetts, 2007) prompted the utilisation of scaffolded experiences accompanied by gathering knowledge about the wider world of teaching beyond the classroom door; the socialisation of the teaching profession became an important focus (Zeichner & Gore, 1990). The result, from the late 1980s through to the 1990s, were field experience models that sought to also explore engagement of PSTs in a socialisation process (see Caires et al., 2012 for a comprehensive list). Models provided opportunity for PSTs to reflect and discuss with mentor or supervising teachers about the thinking and decisions that had led to effective student learning. Preservice teachers were expected to learn the skills of reflecting on their own practice and demonstrating improved practice as a result. As Grossman (1992) states:

If our [present] goal is not helping prospective teachers attain immediate mastery of classroom routines but preparing prospective teachers to ask worthwhile questions of their teaching, to continue to learn from their practice, to adopt innovative models of instruction, and to face the ethical dimensions of classroom teaching, then we must place our emphasis elsewhere. (p. 176)

Zeichner similarly urged teacher educators to create opportunities for PSTs to learn about and be prepared "for the full scope of the teacher's role, for accomplishing the central purposes of schooling with all students, and ... [for] foster[ing] the ability and disposition to learn from further experience" (Zeichner, 1996a, p. 218).

Moving further in time to more recently, PSTs have been required to engage in thinking about teaching and reflecting on pedagogical decisions using a language of thinking (Tishman & Perkins, 1997; Woolfolk & Margetts, 2007) or critical thinking (Ennis, 1993; Pithers & Soden, 2000). This has led not only teacher educators but similarly nurse educators and other professions alike to initiate experiences where undergraduates, their teachers at universities, and experts in the field build communities of practice (White, 2010) and learning communities (Cochran-Smith, 2003; Le Cornu & Ewing, 2008; Westheimer, 2008).

Reviews of teacher education in the 2000s (National Commission on Teaching and America's Future, 1996; Parliament of Australia, 2007; Ramsay, 2000) led to politically driven demands for university-school links and partnerships which has produced an increased variety of field placement programs (Le Cornu & Ewing, 2008; Sim, 2006; Zeichner, 2002, 2010), wide-ranging contexts for placements (Akibo, 2011; Foote & Cook-Cottone, 2004; Lauriala, 1997; Zeichner, 1996b), and revised roles of university and school staff working in

communities of practice (Le Cornu & Ewing, 2008; Sim, 2006; Tang, 2003).

The nomenclature of field-based learning also changed to keep pace with, and more accurately reflect, the different approaches. From more traditional models represented by expressions such as *teaching practice*, *student teaching*, and *practicum* to the more recent collegial relationships between schools and universities such as *communities of practice*, *learning communities* and *school-university partnerships*. Over the last forty years changes to school placement opportunities by way of these different approaches have endeavoured to prepare PSTs more fully for the teaching profession.

Issues in Creating Quality Professional Experiences

We arrive then in the early 2010s with an understanding that quality teacher education programs should include an intellectual space for PSTs to reflect and learn from, and with, others by observing, discussing, practising, critiquing, collaborating and improving on practice across a variety of contexts. Many teacher education institutions work towards creating these opportunities however, in Australia, there can be quality placement issues (Ramsay, 2000). The Australian parliamentary report on the inquiry of teacher education entitled *Top of the Class* (Parliament of Australia, 2007) listed the following persistent issues specifically in the area of practicum: shortage of practicum placements, weak links between practical and theoretical components, quality of supervisors (in schools), inadequate funding, and rural and remote placements (costs and resources associated with placements). Furthermore, with increased numbers of teachers being trained for the profession competition between universities in gaining places for PSTs in schools is commonplace (5.10 and 5.11 from *Top of the Class*) (Parliament of Australia, 2007). Some schools can receive up to 15 requests per term from teacher education institutions regarding PST placements. If a school agrees to accommodate the placements the supervision of PSTs may not always be allocated to the best teachers in the school who are typically busy with added responsibilities of coordination or school executive commitments. Instead, the PST is sometimes placed in a class with a teacher who is unable to demonstrate or articulate good pedagogy, or who may not have the time or commitment to do so (5.16 and 5.17 from *Top of the Class*) (Parliament of Australia, 2007; Ramsay, 2000). Furthermore, a commonly held belief of some in the field is that a more interactive and involved process of learning about the profession is not really necessary; the trainee should simply watch and 'do as I do' and he/she will become competent (Moran, Long, & Nettle, 2002) harking back to earlier models of practicum. The quality of the professional experience can therefore be somewhat 'hit and miss' depending on the colleague teacher, the class, and the school.

Furthermore, constraints persist with regard to the distance PSTs are able and willing to travel to get to a school placement with unsurmountable difficulties such as work commitments, child-minding, getting own children to and from school, and costs of travel cited as reasons why a placement some distance from the PST's home may be considered unreasonable. Preservice teachers' willingness to undertake rural practicums has been a difficulty for many years as time away from home requires the PSTs to gain leave from jobs (usually unpaid leave) and sustain rental agreements at home while paying for accommodation at a rural location (5.19 from *Top of the Class*) (Parliament of Australia, 2007). The result, in many instances at our university, is that experiences in schools are as close to the home of the PST as possible or are in similar geographic and socio-economic areas to where he/she lives.

Yet, the work of Akibo (2011); Foote and Cook-Cottone (2004); Lauriala (1997); Parliament of Australia (2007); and Zeichner (1996b) urge teacher educators to consider the importance of placements outside of the PSTs' experience to foster understanding and knowledge of different cultural and socio-economic areas and to challenge beliefs. Teacher

education programs in Australia face the dilemma of desiring to provide PSTs with quality, diverse professional experiences in which

‘on-campus’ and in-school components/units are closely related or integrated with one another, and which progressively lead the TEI [Teacher Education Institution] students towards developing and demonstrating a set of well-regarded knowledge-based skills, capabilities and dispositions that the profession agrees are essential for a teacher at the beginning stages of a professional career. (Parliament of Australia, 2007, p. 73)

yet struggle to address or circumvent the many factors that plague such placements. This dilemma has led our Faculty of Education at the Australian Catholic University to devise a new model as a supplement to other field-based learning experiences. The program is not overly time-consuming for schools, ensures that quality pedagogical decisions and practices are being explored and critiqued, while facilitating travel to areas that expose PSTs to different settings without significant cost in time or money for them.

Program Overview

School Innovation Rounds (SIRs) was inspired by Instructional Rounds (City, Elman, Fiarman, & Teitel, 2009) and uses selected schools from wide-ranging geographical locations across a large metropolitan city in Australia. The schools participate by showcasing a pedagogical innovation they have implemented to solve an issue or problem for which the principal and school executive team required a radical and new solution. The PSTs involved are in the second year of a four-year primary teacher education course.

The Mechanics of the Program

A round begins with the arrival (mid-morning) of a group of approximately 40 PSTs accompanied by an academic who teaches in the university course in which this professional experience program is embedded. The group is introduced to the school-based innovation first through a 30-minute explanation given by the principal or school executive team covering the following questions:

1. What is the main aim of the innovation?
2. Why did you implement this? Was there a problem you were hoping to address?
3. What did you as a school leader need to do to prepare for and implement this innovation (research basis)?
4. What do you think it has achieved? How do you know?
5. What should the PSTs expect to see on observations?
6. Where to from here? Do you want/need to extend it in any way?

In the course of the briefing, principals are encouraged to discuss the challenges of implementing new pedagogical approaches. If they experienced resistance from parents, or from teachers who preferred to use their older or own methods, the principals are asked to discreetly describe the approaches they needed to take in order to facilitate community willingness to be involved. Hence, the need to embrace change, where research has shown that the learning of the school students will be enhanced as a result of a new innovation, and to do so collaboratively with other teachers and the school community is an important aspect of this briefing.

Preservice teachers then in small groups of 6 – 8 observe the innovation in operation in a range of classrooms using a specific method of observation technique called ‘Learning to see, unlearning to judge’ provided by City, Elman, Fiarman and Teitel (2009) (see chapter

four in: *Instructional rounds in education*). The method of observation imitates that used by medical students completing medical rounds and requires the gathering of evidence before moving to judgements. The observations typically take an hour, sometimes slightly more and the aim is for the PSTs to see a range of class ages (kindergarten through to year 6) but not visit so many classrooms in the hour that there is not opportunity to see the patterns, depth and/or breadth in the lessons (usually about three separate classes). The principal may selectively choose the teachers and classes observed but typically the PSTs see standard classes ('warts and all') with ordinary teachers implementing the innovation or new approach in teaching.

After the observations the PSTs return to the hall and, for a further fifteen minutes, are free to ask questions of the school principal regarding their observations. To conclude the visit the accompanying academic then discusses with the PSTs what they have seen and links aspects to studies and theories learned in other units so far in their studies. An opportunity for questions and superficial critical reflection briefly occurs at this point. The whole visit lasts approximately two and a half hours and at the end the PSTs are encouraged to go and have lunch for further informal critique together before journeying home.

The *SIRs* are held on three Tuesdays over three weeks enabling the PSTs to visit three different school sites. As a result there is need for only five to six school sites each week reducing the need to find individual placements for a cohort of 180 PSTs. At the conclusion of the three rounds they are required to write a reflection about one of the schools and its innovation. The reflection requires the selection of two artefacts that demonstrate sound learning observed in the classroom as a result of the innovation, justification of their selection, and linkage to learning theories learnt in the first year of their course. While *SIRs* are not unlike the demonstration lesson approach of past years the difference lies in the focus of whole-school change to meet student needs, the rigorous use of research to underpin pedagogical innovation, and scaffolded and supported evidence-based reflection.

The advantage of *SIRs* is that PSTs are required to travel to areas outside of their own socio-economic area but are not expected to arrive at the school before 10:30am. The entire visit is completed by 1:00pm. With the whole day set aside in the university timetable for a professional experience visit this allows time for the PSTs to get to and from the school regardless of geographic location.

The schools are recommended to the university professional experience coordinator by education system consultants or regional directors who have good knowledge of which schools are forging forward with new ideas and practices and are making a difference. The advantage of this approach is that PSTs have increased likelihood of experiencing a school culture that encourages inquiry and reflection amongst its teachers (Zeichner, 2002). A phone call to each of the recommended principals to discuss what the school is doing results in safeguarding an offering of diverse innovative pedagogies across varied geographic locations. Remuneration in terms of a cheque per visit (\$100AUD) is usually 'waved away' by principals in initial discussions but nonetheless a letter of thanks, wall plaque, and cheque arrives a few weeks after the rounds as a token of gratitude. The motivation primarily for principals appears to be more focused on the opportunity to discuss their work with the cohorts of PSTs and accompanying academics who visit the school. While there are sometimes variations in what the PSTs see as they visit different classrooms the opportunity for quality teacher observation is greatly increased due to the strong leadership, research culture, and collaboration of teachers in the school. Furthermore, there is sufficient time given to the 'unpacking' and explanation of the strategies observed.

Hence, the main aim of *SIRs* is to deepen and broaden the understanding of PSTs with regard to sound pedagogy and how it can be designed to meet the needs of children in specific contexts. There are also five subsidiary aims intended for the PSTs:

1. To move outside of known geographical and socio-economic areas to discover differences and similarities to challenge pre-conceived ideas.

2. To develop skills in reflecting on evidence rather than making quick judgements
3. To consider the importance of becoming a teacher who *embraces* change for the good of the students and the school.
4. To recognise that collaborative school communities are vital in creating a strong culture of learning.
5. To be inspired by school leaders and teachers who know how to teach well and can articulate their practice.

There is an additional aim for school personnel:

6. To affirm and validate the courageous school leaders and their staff who have taken pedagogical and financial risks to enhance learning.

The Participants' Beliefs and the Positioning of the Program

This field experience program is positioned judiciously within the teacher education course structure to ensure scaffolding and appropriate challenges reflecting the constructivist approaches of its designers. Across the four-year program each cohort of PSTs has opportunity to experience a variety of field placements. The *SIRs* follow almost directly after the first teaching block of four weeks in the course. The intention to place *SIRs* directly after the first teaching block is strategic given the following research over the last twenty years.

Educational Beliefs and the Role of Teachers

There is substantial research claiming that PSTs' educational beliefs are routinely simplistic, unsophisticated and limited (Pajares, 1992; Tillema, 1998; Tomlinson, 1999; Weinstein, 1989). Furthermore these beliefs are often firmly entrenched and difficult to change in the duration of a teacher education program (Kagan, 1992). This is problematic for the teaching profession because the beliefs most likely formed during the PSTs' own schooling are inadequate due to the audience-related role they have played in the classroom. Lortie (1975) here explains:

Students do not receive invitations to watch the teacher's performance from the wings; they are not privy to the teacher's private intentions and personal reflections on classroom events. Students rarely participate in selecting goals, making preparations or postmortem analyses. Thus they are not pressed to place the teacher's actions in a pedagogically oriented framework. They are witnesses from their own student-oriented perspectives. They assess teachers on a wide variety of personal and student-oriented bases, but only partially in terms of criteria shared with their teacher and with teachers in general. (p. 62)

And later he asserts "what students learn about teaching, then, is intuitive and imitative rather than explicit and analytical; it is based on individual personalities rather than pedagogical principles" (p. 62). The explanation given by the principal in *SIRs* in which he/she identifies a pedagogical issue of concern, describes the research undertaken as the means of addressing it, and explains the process of leading the school in its implementation, opens up the notion for PSTs of being backstage prior to the performance (observations). Furthermore, *SIRs* take a firm step forward in providing "implicit observational learning through substantial exposure to a very broad range of instances of good teaching" (Tomlinson, 1999, p. 540). What is provided to them is *explicit and analytical* which assists in anchoring the observations to come.

Positioning of the Innovation Within the Teacher Education Program

The position of the *SIRs* after their first four-week teaching experience maximises the opportunity for PSTs to reflect and consider the vulnerability and stability of their previous understandings about teaching. And, depending upon contextual factors in the teaching block such as: the level of support from the supervising teacher; behaviour management modelling; complexities of lesson delivery; or time-consuming detailed preparation; the PST may have already begun to internally challenge the educational beliefs held from previous schooling experiences. According to Tabachnick and Zeichner (1984), depending on the quality of the student teaching experience, a challenging encounter in the role of teacher rather than as a student may affect change in beliefs about teaching however the nature of the change is less predictable. Opportunities for reflection and constructive discussion are vital if PSTs are to reconstruct their personal philosophies in light of the realities of the classroom (Tillema, 1998). Furthermore, the timing of *SIRs* is sagacious in that the retreat from being in the spotlight as the teacher in the teaching block to once again returning to that of observer provides timely opportunity to reflect – creating post-performance critique that may have positive effects on belief change (Tillema, 2000). The innovation aims and positioning within the teacher education course therefore support Zeichner's (1996a) view that:

The most important thing we can do in the practicum in initial teacher education is to help prospective teachers become clearer about their own personal theories, which inform and are informed by their practice, and to help them establish themselves as researchers of their practice. (p. 225)

Simplistic views of teaching may be broadened and challenged; their personal framework of what constitutes a good teacher may be less stable than when they began their teacher education; it may be more flexible and ready to accommodate different perspectives. At this juncture the PSTs hear school leaders speak of challenges, of 'leaps into the unknown', and even, of setbacks and regrouping. Hence, there is time given through this model of professional experience to learn about how teachers must embrace change, even if the process is uncomfortable, for the good of the students in the whole school.

Notions of a Community of Practice are Explored

In addition, the interdependency of teachers is explored through the principal explanation and question time in the rounds. The notion that teachers need to work collaboratively and supportively in preparation, implementation and evaluation is less likely to be part of the understandings previously formed about teaching. Recognition of the importance of reflecting with other teachers within a school community has been urged by Liston and Zeichner (1991) and Zeichner (1992) from the early 1990s who maintain that reflection has been neglected as a social practice and yet is critical to teacher growth as a means of support and encouragement. *SIRs* gives them an opportunity to see this aspect of teaching from the inside.

The Role of the Accompanying Teacher Education Academic

The education academic who accompanies the group to the school assumes a role of facilitation; he/she observes with the PSTs, notes the learning processes of the classrooms, and assists the group to ethically critique, and ease, if needed, the deconstruction/re-

formation of previously held beliefs about the role of teachers. This approach of working alongside PSTs and schools in a genuine relationship answers the call of the parliamentary report to “give greater priority to properly supporting students on practicum...[by building] strong relationships with schools in order to ensure that the practicum is linked to theory” (Parliament of Australia, 2007, p. 78). The concept of this type of facilitation is affirmed by Tillema (2000) who states that “an ‘incremental approach’ (Tillema, 1995) in which the practical experience is used to open up existing beliefs – i.e., through supervision and guidance with facilitators who address the PSTs’ own beliefs – may have ultimately a knowledge-generating effect” (pp. 577-578). *School Innovation Rounds* ensure that PSTs have at least three opportunities to hear about the rationale of pedagogical change and to observe it in action at a time when they are able compare it with *actually* being the teacher, before they participate in their next teaching block, and to position these learnings into a more flexible ‘what constitutes good teaching’ framework.

The Evaluation Design

Implementation of this constructivist approach to professional experience is in early stages and therefore a research process was required that would facilitate exploration of this new supplementary model of field-based learning and would determine the extent to which it achieves several of the current aims of professional experiences espoused today. The preliminary evaluation investigates the following research questions to determine the program’s effectiveness in meeting the challenges and issues facing quality placements in professional experience:

1. How successfully do *SIRs* create opportunities for preservice teachers to observe, reflect, critique and discuss current models of pedagogical excellence?
2. In what ways do *SIRs* assist preservice teachers to understand more fully the role of teachers in the profession and the process of pedagogical-decision making?
3. What benefits do schools experience as a result of such a professional experience program?

The recent implementation of the model requires research that will inform and shape further decision making so that it can be modified and enhanced throughout. The results of the whole research project are anticipated to produce a list of recommendations for future implementation. Participants are expected to perceive and absorb what they observe and hear based upon their own position; the experiences in a new model of professional experience will enable them to fashion their own construction of the experiences and to attach meanings to them. For this reason the theoretical stance assumed in this project is primarily phenomenological within which symbolic interactionism plays a part (Blumer, 1986). The articulation, reflection and discussion are the expected driving forces of the learning process for all participants. The research purpose is to discover just how effectively the program enables alternative meanings and understandings with previously understood concepts (Bogdan & Biklen, 2007).

Primarily, due to the nature of the study, the methodological approach is one of practitioner research (Bogdan & Biklen, 2007), that is, a qualitative approach where practitioners or professionals endeavour to gain the perspectives or views of their clients about their work or programs in order to be more effective. Typically, data collection methods may involve the use of surveys consisting of rating scale type questions as well as opportunity for open comment. Despite the project’s phenomenological stance a degree of pragmatism has also played a part given that this paper reports preliminary evaluation data for the purpose of practitioner research. A survey, while a more quantifiable method and not traditionally used for research requiring exploration of experiences and understandings, is

used to gain an overall picture of the program through percentages of agreement/disagreement. Yet open comment is invited throughout the survey that effectively enables each question to dually act as a prompt for individual reflection and subsequent comment.

Preliminary Evaluation Results

To date, two cohorts of approximately 180 PSTs each have participated in the program. Three academics and four of the six school leaders have been involved in *SIRs* for both years providing a consistency across evaluation. A simple 10-question survey was administered online via Survey Monkey® (Collis & Wende van der, 2002; Delandshere & Arens, 2003) and made available to the PSTs and school leaders. To maximise participation the questions were designed to be quick to complete (questions one to nine) yet giving opportunity for further comment (question ten). The purpose was to gather an overall sense of how well the model was achieving the aims of the program and to assist in identification of the areas needing modification. In each year the staff involved with *SIRs* met together prior to and after the three rounds. Wishing to avoid the small number of colleagues involved feeling obliged to list advantages or to minimise disadvantages of the program academics were not explicitly asked to comment on the perceived benefits for them in a formal survey. Instead, after each school visit, emails, informal meetings, and phone conferences were shared between the academic staff about the appropriateness of each school site, the quality of the PST questions and critique, and suggestions were made for adjustments to the process for future implementation. This provided relevant practitioner information for use in modification.

Staff Feedback

Candid comments made by the academics after visits strongly indicated that they were positive about innovation rounds, for example, “*WOW - what a great school and visit - not only their [name of] program but the wonderful vibrant classrooms full of excellent examples of pedagogy – [their] use of technology, differentiated learning, enthusiasm, engaged kids etc.*” [2012 academic]. Even when there were school principals with whom the academics did not pedagogically agree they were able to see the value in exploring the choices and implementation approaches with the PSTs:

The teaching was OK...a lot of 'teacher talk' about the [name of program]...the kids were itching to get on to the iPads (iPads in Grade 5, 1-to-1) and get on. I think "curbing impulsivity" is interesting to be dwelling on...I need more sociocultural/linguistic pedagogy to be truly impressed, but it was interesting....this is VERY big in [type of school] in [name of Australian state capital]. [2011 academic]

And at a school that had taken an open classroom approach to learning one academic (who was not associated with the PST subject but who volunteered to help out with an extra school) noted:

Yes, you were right about students saying it was too noisy and frantic for them. There was no way they would want to work in classrooms like that. So I put my EC [early childhood] hat on and suggested how they might find that kind of environment beneficial for themselves as professionals, the resources - as far as knowledge and support of other staff members and how that would be supported by

relationships. I had some of them thinking about what kinds of strategies they could use in the future if they ended up working in a setting like this as far as teamwork and negotiation with other staff and children. [2012 academic]

It is fair to suggest that by attending *SIRs*, and observing and critiquing current teaching practices and innovations in classrooms, academics were provided with a pool of recent examples to draw upon for their own teaching purposes in lectures and tutorials.

Results of Survey Items

In 2011, from a cohort of 182 PSTs, 113 responded to the survey in their own time yielding a 62% response rate. In 2012, from a cohort of 179 PSTs, 137 responded to the survey during a tutorial giving a 76.5% return rate. Overall there were responses from 250 PSTs across the two years. The school leaders who participated in the evaluation survey numbered six in both 2011 and 2012 but it should be noted that in 2011 this represented a 100% return rate while in 2012 (with an increase to eight schools involved) this represented a 75% response rate.

In both 2011 and 2012 the perspectives of both school and PST groups of participants were explored in similarly worded statements. For example, the first six survey items asked PSTs about their *own* experience of the effectiveness of aspects of the *SIRs* while the school leaders were asked about their *perception* of the experience for PSTs. The first survey item required participants to select any number of five listed features of the rounds that they believed would enhance PSTs' understanding of teaching. Table 1 (Tab. 1) shows the results for both groups of participants in 2011 and 2012 for question one.

Feature of <i>SIRs</i>	Preservice teachers (%)		School leaders (%)	
	2011(n=113)	2012 (n=137)	2011 (n=6)	2012 (n=6)
Seeing schools doing things that were new to my experience	87.6	82.5	83.3	100.0
Seeing and hearing effective classroom practices in action	66.4	58.4	100	100.0
Having the opportunity to see a variety of approaches and practices	86.7	79.6	66.7	100.0
Seeing the importance of staff collaboration and team work needed in a school environment	54.9	46.0	83.3	66.7
Participating in <i>SIRs</i> between teaching blocks	46.0	35.8	*	*

* School leaders were not asked to comment on the placement of *SIRs* in the teacher education course.

Table 1. Features of *SIRs* that enhanced preservice teacher understanding of teaching

Most PSTs appeared to value most of all the opportunity to see new ways of teaching and learning yet school leaders believed that seeing and hearing effective classroom practices would contribute more strongly to their understanding. It is interesting that when asked to select features of the program that the PSTs believed enhanced their understanding of teaching the least selected item was the one about the importance of staff collaboration and team work (54.9% and 46% in 2011 and 2012 respectively). It would appear that the PSTs do not identify this as key aspect of understanding teaching unlike the school leaders who responded more positively.

Questions two to six in the survey consisted of statements about the program on a 4-point Likert scale using degrees of agreement and disagreement. The ‘agree’ and ‘strongly agree’ items were tallied together as were the ‘disagree’ and ‘strongly disagree’. Table 2 (Tab. 2) shows the percentage of positive responses in 2011 and 2012 from both groups of participants.

Item	Preservice teachers (%)		School leaders (%)	
	2011(n=113)	2012 (n=137)	2011(n=6)	2012 (n=6)
I felt that I began to understand more about how schools need teachers who are willing to adapt and change	99.0	98.5	100.0	83.0
I saw some worthwhile ideas and/or strategies that I would like to implement in my own teaching	95.5	97.0	100.0	100.0
It was useful to have school staff talk about their school and their experiences in this innovation	95.0	96.0	100.0	100.0
Writing down what I saw and heard assisted me in thinking about the learning occurring in the classroom	76.0	94.0	100.0	*
Overall, I felt that the <i>SIRs</i> was a worthwhile program in developing PSTs’ understanding of teaching and the profession	94.0	97.0	100.0	100.0

* After the 2011 survey it was decided that school leaders would be unlikely to accurately comment on the effectiveness of the observational process and so the item was deleted for 2012.

Table 2. Participants in agreement with common items in both surveys

Despite a less strong response from PSTs about staff collaboration and teamwork in Table 1 (Tab. 1), the responses for the following items in Table 2 (Tab. 2) indicated that the

PSTs saw value in the personal experience of the innovation:

- “I felt that I began to understand more about how schools need teachers who are willing to adapt and change” (representative comment from the 99% and 98.5% PSTs in 2011 and 2012 respectively)
- “It was useful to have school staff talk about their school and their experiences in this innovation” (representative comment from the 95% and 96% PSTs in 2011 and 2012 respectively)

This could indicate that the PSTs had felt that they had begun to understand more fully the role of teachers in the profession and the process of pedagogical-decision making (*research question two*).

Some slight changes were made to the program as a result of the 2011 survey feedback and advice from the participating academics. Firstly, the observational method designed for educational teams by City et al. (2009) became frustrating for some PSTs who were keen to observe without the burden of constantly documenting. They needed the verbatim notes to use for the reflection assignment but some PSTs felt it detracted from the observational process. In 2012 it was suggested that the PSTs work in pairs, taking turns in who was responsible for the writing giving the other opportunity to observe without distraction. This modified arrangement explains the significantly more positive response in 2012 to the last item in Table 2 (Tab 2.).

The remaining items in the PST survey were not duplicated in the school leader survey and only one of these was common across both the 2011 and 2012 surveys (Tab. 3).

Item	2011		2012	
	Agree	Disagree	Agree	Disagree
I needed more time to debrief with other preservice teachers at each school	32.8	67.2	*	*
I needed more time to debrief with the academics who accompanied us to each school	43.8	56.3	61.7	38.3
As a result of the rounds I feel more inspired and excited about teaching and the ways in which I could shape student learning experiences	*	*	93.0	7.0

* Item was not in survey for participants of that year.

Table 3. PSTs in agreement and disagreement with remaining survey statements

Informal discussion among staff and in post-program meetings suggested that there were difficulties with de-briefing onsite directly after the principal question time. It was found that staying to critique the observations became awkward as it required asking the principal to leave the briefing so that the academic and PSTs could critique openly. A decision in 2012 was made to hold discussions in tutorials back on campus at the conclusion of the three rounds. However, this appeared to weaken the opportunity of ‘seizing the moment’ after each round that in turn affected the quality of the critique and depth of questions in some ways; questions or impressions were sometimes forgotten. On the plus side, the tutorial discussions facilitated by the academics who had been on the rounds enabled groups to more fully explore others’ experiences as well as their own without the concern of being overheard. Debate and more considered reflection were enabled because PSTs could contribute their opinions freely. Ideally, a private space, off the school grounds directly after the round would perhaps produce a better result but this is not always practical.

Lastly, items in the school leaders survey that were not common to the PST survey were focused upon benefits to the school and to the school leader. The results of these items for both 2011 and 2012 are given in Table 4 (Tab. 4) using number of responses rather than percentages given the small number of participants.

Item	2011 (n = 6)			2012 (n = 6)		
	Strongly Agree	Agree	Skipped question	Strongly Agree	Agree	Skipped question
SIRs were of benefit to my school	1	5	0	2	3	1
As a key person in the innovation I found that SIRs had benefits to me in my role	3	3	0	2	4	0

Table 4: School leader responses concerning benefits for schools

The results show that across the two years of the program there was a firm sense that school leaders did not view the SIRs as a burdensome task with little of benefit to them.

Optional Comments from School Leaders

For every question of the survey (and again at the end) an optional space for comment was provided. A number of school leaders chose to further comment at the conclusion of the items listed in Table 4 (Tab. 4). Of the total number of participants across both years (n = 12) there were 23 comments given that focused upon four key benefits suggesting that there are advantages to not only the PSTs in this professional experience program (*research question three*):

1. Affirmation and validation of their work in the innovation
2. Enabled reflection of their own practices and beliefs about teaching and leading
3. Facilitated articulation of beliefs and their implementation
4. Promoted professional development as they responded to questions and critique

These are listed in Table 5 (Tab. 5) with a sample comment to illustrate.

Benefit	Sample comment
Affirmed and validated our school initiative	<i>It gave us opportunity to re-affirm what we do and why we do it.</i>
Enabled us to reflect on our beliefs and how the beliefs are realised at our school	<i>Allows us to reflect on our practice, we needed to focus our attention on what is essential in the way that we teach and lead.</i>
Facilitated the articulation of our beliefs and how we transfer them to practice	<i>It is a good exercise for us as a school to articulate what we are trying to achieve.</i>
Developed us professionally	<i>Receiving comments and questions from those outside the school helps me see other perspectives, and acknowledge that we are (and ought to be) on a continuous journey, evolving over time and across places.</i>

Table 5: Benefits to schools with sample comments

Two comments suggested that the benefits in hosting the rounds were not directly evident for the school: “we see it as an opportunity to give back to the university” [2012] and “I do not think it was of any particular benefit to our staff” [2012].

Optional Comments from Preservice Teachers

In 2011, there were 44 comments provided by the PSTs about the program overall; in 2012 there were 25. Aggregated optional comments provided by PSTs in both years of surveys were overwhelmingly positive. A typical example of a comment is provided here: “The rounds were very beneficial for opening my eyes to all the different things that are going on in different schools in terms of teaching and learning. It was very interesting and gave me lots of ideas for my own teaching” [2011].

Benefits

The most commented upon benefit concerned the opportunity for PSTs to compare and be introduced to a variety of school approaches, strategies, and contexts that were new or not previously experienced. As evidenced in these examples: *“the rounds were very insightful and I enjoyed the range of schools available for students to choose”* [2012], *“it was good to see schools in other areas because otherwise I would never have seen schools outside of my own”* [2011] and *“I found the rounds very useful, the opportunity to observe some teaching practices that I otherwise would not have had the opportunity to see”* [2012]. These responses suggest that *SIRs* create opportunities for PSTs to observe, reflect, current models of pedagogical excellence (*research question one*) has been supported by the data. The quality of reflections submitted by the PSTs provided further confirmation of *SIR* opportunities as PSTs had effectively isolated evidence of sound learning from their observations in the classrooms, analysed the evidence, and applied it to their own practice. The PSTs were able to gather data, reflect, discuss and critique their observations of the pedagogical innovation and in doing so were able to consider how the practices observed could be implemented in their own teaching.

A number of comments acknowledged that enhanced awareness of the ways in which school communities work together was a helpful outcome of *SIRs*. Here is an example: *“school innovation rounds is a very good tool to see how schools work together in unison”* [2012] and *“I was shown there was a large amount of ways to use a whole school approach”* [2011]. There is some indication here from this data that the PSTs had gained an understanding about the role of teachers in the profession and the process of pedagogical-decision making (*research question two*). Two participants each year spoke particularly of the expert modeling, for example, *“such inspiring and dedicated teachers implementing new concepts”* [2011]. Equal numbers of PSTs from both years claimed that hearing and watching highly competent teachers teach (and speak about their practice) was inspiring and highly motivating.

Issues

The open comments section revealed that two PSTs in each year expressed the view that some classroom observations were not as good as others, for example, one classroom was noted to be busy with technology but the actual learning wasn't obvious and *“some content and understanding was lost in an attempt to produce ‘authentic learning’ ”* [2012]. Although this was not what we had hoped for in terms of ensuring experiences of pedagogical excellence this comment does suggest that the ability to critique and reflect on whether ‘sound learning’ had been enhanced. Quite a number of PSTs requested more sustained time in classrooms: *“I feel like more time at each school would be very beneficial to us, and in particular, more time in a couple of classrooms”* [2012].

There were considerable comments voiced about implementation issues, for example, there were less schools available for selection in 2011 and due to limited places of 40 per school a few PSTs had no option but to visit the same school twice. The selection of schools for 2012 was increased to avoid this problem, which, in turn, increased staffing demands for the university; colleagues who were interested in the program generously assisted with the visits. Remaining comments were primarily focused upon assessment concerns, as well as a wish to see an even wider selection of school types and locations, and the disappointment in not having completed *SIRs* before the first teaching block.

Conclusion

Overall, the *SIRs* have quite successfully created opportunities for PSTs to observe, reflect, critique and discuss current models of pedagogical excellence. They have exposed PSTs to authentic and effective models of pedagogy and innovation and provided them with opportunities to observe, discuss, reflect and critique on-site and back on campus (Parliament of Australia, 2007). The extent of the effect *SIRs* have had on PSTs' educational beliefs and the socialisation process is not as strongly evident and will need further exploration in subsequent years through more extensive interviews and qualitative data collection. However, what is apparent is that: the PSTs could identify that they had begun to understand the importance of teachers adapting and changing their teaching strategies as required by the needs of the student population; that hearing of the teachers' experiences when adapting to new pedagogical approaches was helpful even if those experiences were challenging; and that there had been some improvement in PST understanding the importance of team-work and collaboration among staff. *School Innovation Rounds* has given a number of PSTs the opportunity to reconsider or reconstruct to some extent the previously held beliefs about the ways in which teachers work (Tillema, 1998, 2000).

School leader responses demonstrated that not only did they believe that the program was beneficial for PSTs' learning about the profession but that they considered that there was benefit for them as well in terms of affirmation and validation, reflection practices, articulation of beliefs, and professional development. For the academic staff involved in the program there appeared to be benefit in observing and critiquing concrete examples of new pedagogical innovations as it created opportunities for them to think about these themselves and to explore them with their students.

In recent years, the high need for placements and the lack of certainty concerning the supervisor or mentor teachers having time and/or expertise to work productively and positively with PSTs has resulted in an uneven quality across Australian teacher education professional experiences. Combined with limited geographical, socio-economic and cultural locations for PSTs who are constrained by transport, family and financial circumstances has resulted in a dilemma for teacher education courses. However, in our teacher education course *SIRs* have contributed to addressing a number of these concerns by providing opportunities for PSTs to observe, discuss, and critique across a variety of articulate and successful school communities without burden to PSTs, schools, or academics making this a favoured approach embedded within our suite of professional experiences.

References

- Akibo, M. (2011). Identifying program characteristics for preparing preservice teachers for diversity. *Teachers College Record*, 113(3), 658-697.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall Inc.
- Blumer, H. (1986). *Symbolic interactionism: Perspective and method* (2nd ed.). Berkeley, CA: University of California Press. PMCid:PMC268621
- Bogdan, R., & Biklen, S. (2007). *Qualitative research for education: An introduction to theory and methods* (5th ed.). Boston: Pearson Education Inc.
- Bullough, R. (1991). Exploring personal teaching metaphors in preservice teacher education. *Journal of Teacher Education*, 42(1), 43-51.
<http://dx.doi.org/10.1177/002248719104200107>

- Bullough, R., & Stokes, D. (1994). Analyzing personal teaching metaphors in preservice teacher education as a means for encouraging professional development. *American Educational Research Journal*, 31(1), 197-224.
<http://dx.doi.org/10.3102/00028312031001197>
- Caires, S., & Almeida, L. (2007). Positive aspects of the teacher training supervision: The student teachers' perspective. *European Journal of Psychology of Education*, 22(4), 515-528. doi: 10.1007/bf03173469 <http://dx.doi.org/10.1007/BF03173469>
- Caires, S., Almeida, L., & Vieira, D. (2012). Becoming a teacher: Student teachers' experiences and perceptions about teaching practice. *European Journal of Teacher Education*, 35(2), 163-178. <http://dx.doi.org/10.1080/02619768.2011.643395>
- City, E., Elman, R., Fiarman, S., & Teitel, L. (2009). *Instructional Rounds in Education*. Cambridge, MA: Harvard Education Press.
- Cochran-Smith, M. (2003). Learning and unlearning: The education of teacher educators. *Teaching and Teacher Education*, 19, 5-28. [http://dx.doi.org/10.1016/S0742-051X\(02\)00091-4](http://dx.doi.org/10.1016/S0742-051X(02)00091-4)
- Collis, B., & Wende van der, M. (2002). Models of technology and change in higher education: An international comparative survey on the current and future use of ICT in Higher Education. The Netherlands: University of Twente.
- Delandshere, G., & Arens, S. (2003). Examining the quality of the evidence in preservice teacher portfolios. *Journal of Teacher Education*, 54(1), 57-73.
<http://dx.doi.org/10.1177/0022487102238658>
- Dewey, J. (1904). The relation of theory to practice in education. In J. Boydston (Ed.), *Essays on the New Empiricism 1903 - 1906* (Vol. 3. The Middle Works of John Dewey 1899-1924., pp. 249-272). Carbondale: Southern Illinois University Press.
- Ennis, R. H. (1993). Critical thinking assessment. *Theory into Practice*, 32, 179-186.
<http://dx.doi.org/10.1080/00405849309543594>
- Foote, C., & Cook-Cottone, C. (2004). Field experiences in high need, urban settings: Analysis of current practice and insights for change. *The Urban Review*, 36(3), 189-210. <http://dx.doi.org/10.1007/s11256-004-0685-0>
- Gore, J., & Zeichner, K. (1991). Action research and reflective teaching in preservice teacher education: A case study from the United States. *Teaching and Teacher Education*, 7(2), 119-136. doi: [http://dx.doi.org/10.1016/0742-051X\(91\)90022-H](http://dx.doi.org/10.1016/0742-051X(91)90022-H)
[http://dx.doi.org/10.1016/0742-051X\(91\)90022-H](http://dx.doi.org/10.1016/0742-051X(91)90022-H)
- Grossman, P. (1992). Why models matter: An alternative view on professional growth in teaching. *Review of Educational Research*, 62, 171-179. doi: 10.3102/00346543062002171 <http://dx.doi.org/10.3102/00346543062002171>
- Grudnoff, L. (2011). Rethinking the practicum: limitations and possibilities. *Asia-Pacific Journal of Teacher Education*, 39(3), 223-234. doi: 10.1080/1359866x.2011.588308
<http://dx.doi.org/10.1080/1359866X.2011.588308>
- Kagan, D. M. (1992). Professional Growth among Preservice and Beginning Teachers. *Review of Educational Research*, 62(2), 129-169.
<http://dx.doi.org/10.3102/00346543062002129>
- Korthagen, F., & Vasalos, A. (2005). Levels in reflection: Core reflection as a means to enhance professional growth. *Teachers and Teaching: Theory and Practice*, 11(1), 47-71. <http://dx.doi.org/10.1080/1354060042000337093>
- Lauriala, A. (1997). The role of practicum contexts in enhancing change in student teachers' professional beliefs. *European Journal of Education*, 20(3), 267-282. doi: 10.1080/0261976970200306 <http://dx.doi.org/10.1080/0261976970200306>

- Le Cornu, R., & Ewing, R. (2008). Reconceptualising professional experiences in preservice teacher education...reconstructing the past to embrace the future. *Teaching and Teacher Education*, 24, 1799-1812. <http://dx.doi.org/10.1016/j.tate.2008.02.008>
- Liston, D. P., & Zeichner, K. (1991). *Teached education and the social conditions of schooling*. New York: Routledge.
- Lortie, D. (1975). *Schoolteacher: A sociological study*. Chicago, IL: The University of Chicago Press.
- Moran, W., Long, J., & Nettle, E. B. (2002). Changing teacher education for a changing world. *Catholic Schools' Studies*, 75(2), 28 - 31.
- National Commission on Teaching and America's Future, N. Y. (1996). *What Matter Most: Teaching for America's Future* (pp. 161). New York: National Commission on Teaching and America's Future, New York.
- Pajares, M. F. (1992). Teachers' beliefs and educational research: Cleaning up a messy construct. *Review of Educational Research*, 62(3), 307- 332. <http://dx.doi.org/10.3102/00346543062003307>
- Palincsar, A. S. (1998). Social constructivist perspectives on teaching and learning. *Annual Review of Psychology*, 49, 345-375. <http://dx.doi.org/10.1146/annurev.psych.49.1.345> PMID:15012472
- Parliament of Australia. (2007). *Top of the class: Report on the inquiry into teacher education*. Canberra, ACT, Australia: House of Representatives Standing Committee on Education and Vocational Training.
- Pithers, R. T., & Soden, R. (2000). Critical thinking in education: A review *Educational Researcher*, 42(3), 237-249.
- Ramsay, G. (2000). *Quality matters: Revitalising teaching: Critical times, critical choices. Report of the review of teacher education*. Sydney, Australia: NSW Department of Education and Training.
- Ryan, G., Toohey, S., & Hughes, C. (1996). The purpose, value and structure of the practicum in higher education: A literature review. *Higher Education*, 31, 355-377. <http://dx.doi.org/10.1007/BF00128437>
- Schon, D. (1987). *Educating the reflective practitioner*. San Francisco: Jossey Bass.
- Sim, C. (2006). Preparing for professional experiences - incorporating preservice teachers as 'communities of practice'. *Teaching and Teacher Education*, 22, 77-83. <http://dx.doi.org/10.1016/j.tate.2005.07.006>
- Smith, K., & Lev?Ari, L. (2005). The place of the practicum in pre?service teacher education: the voice of the students. *Asia-Pacific Journal of Teacher Education*, 33(3), 289-302. doi: 10.1080/13598660500286333 <http://dx.doi.org/10.1080/13598660500286333>
- Tabachnick, B. R., & Zeichner, K. (1984). The Impact of the Student Teaching Experience on the Development of Teacher Perspectives. *Journal of Teacher Education*, 35(6), 28-36. <http://dx.doi.org/10.1177/002248718403500608>
- Tang, S. Y. F. (2003). Challenge and support: The dynamics of student teachers' professional learning in the field experience. *Teaching & Teacher Education*, 19, 483-498. [http://dx.doi.org/10.1016/S0742-051X\(03\)00047-7](http://dx.doi.org/10.1016/S0742-051X(03)00047-7)
- Tillema, H. (1998). Stability and change in student teachers' beliefs about teaching. *Teachers and Teaching: Theory and Practice*, 4(2), 217-228. <http://dx.doi.org/10.1080/1354060980040202>
- Tillema, H. (2000). Belief change toward self-directed learning in student teachers: Immersion in practice or reflection on action. *Teaching and Teacher Education*, 16, 575-591. [http://dx.doi.org/10.1016/S0742-051X\(00\)00016-0](http://dx.doi.org/10.1016/S0742-051X(00)00016-0)

- Tishman, S., & Perkins, D. (1997). The language of thinking. *Phi Delta Kappan*, 78(5), 368-374.
- Tomlinson, P. (1999). Conscious reflection and implicit learning in teacher preparation. Part II: Implications for a balanced approach. *Oxford Review of Education*, 25(4), 533-544. <http://dx.doi.org/10.1080/030549899103973>
- Van Manen, M. (1995). On the epistemology of reflective practice. *Teachers and Teaching: Theory and Practice*, 1(1), 33-50. <http://dx.doi.org/10.1080/1354060950010104>
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, NY: Harvard University Press.
- Weinstein, C. (1989). Teacher Education Students' Preconceptions of Teaching. *Journal of Teacher Education*, 40(2), 53-60. <http://dx.doi.org/10.1177/002248718904000210>
- Westheimer, J. (2008). Learning among colleagues: Teacher community and the shared enterprise of education. In M. Cochran-Smith, S. Feiman-Nemser & D. J. McIntyre (Eds.), *Handbook of Research on Teacher Education* (3rd ed., pp. 756-783). New York: Routledge, Taylor & Francis and the Association of Teacher Educators.
- White, C. (2010). A socio-cultural approach to learning in the practice setting. *Nurse Education Today*, 30(8), 794-797. <http://dx.doi.org/10.1016/j.nedt.2010.02.002>
PMid:20362367
- Woolfolk, A., & Margetts, K. (2007). *Educational psychology*. Frenchs Forest, Australia: Pearson Education Australia. PMCid:PMC1934981
- Zeichner, K. (1992). Rethinking the practicum in the Professional Development School Partnership. *Journal of Teacher Education*, 43(4), 296-307. doi: DOI: 10.1177/0022487192043004009 <http://dx.doi.org/10.1177/0022487192043004009>
- Zeichner, K. (1996a). Designing educative practicum experiences for prospective teachers. In K. Zeichner, S. Melnick & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education*. New York: Teachers College Press. PMCid:PMC190788
- Zeichner, K. (1996b). The role of community field experiences. In K. Zeichner, S. Melnick & M. L. Gomez (Eds.), *Currents of reform in preservice teacher education* (pp. 176-196). New York: Teachers College Press.
- Zeichner, K. (2002). Beyond traditional structures of student teaching. *Teacher Education Quarterly*, 29, 59-64.
- Zeichner, K. (2010). Rethinking the connections between campus courses and field experiences in college- and university-based teacher education. *Journal of Teacher Education*, 61(1-2), 89 - 99. doi: 10.1177/0022487109347671 <http://dx.doi.org/10.1177/0022487109347671>
- Zeichner, K., & Gore, J. (1990). Teacher socialisation. In W. R. Houston (Ed.), *Handbook of research on teacher education* (pp. 329-348). New York: Macmillan.
- Zeichner, K., & Liston, D. P. (1987). *Teaching Student Teachers to Reflect*. Harvard Educational Review, 57(1), 23 - 48.