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ABSTRACT

This paper examines how to seriously question the ways that teachers are prepared to cope with the realities and demands of teaching and are equipped with a theoretical background to translate into their teaching. It looks at the approach to teacher preparation in the Faculty of Education at Australia's Monash University. The paper discusses program structure versus principles of practice and considers three assumptions: learning about teaching involves continual conflicting and competing demands that need to be recognized and responded to; learning about teaching requires a shift in focus from the curriculum to the learner; and learning about teaching is enhanced through student teacher research. The paper presents an anecdote written by one student teacher who researched his teaching by examining what would happen if he forced himself to wait during questioning. It concludes by presenting seven propositions that offer a constructivist approach to teaching and learning (e.g., the transition from learner to teacher is difficult but is aided by working closely with one's peers, student teachers should see the preservice program as an educational experience of value; and preservice education programs are inevitably inadequate). (Contains 15 references.) (SM)

Learning To Teach By Embedding Learning In Experience

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Learning To Teach By Embedding Learning In Experience

John Loughran

Introduction

Internationally, there appears to be a growing recognition that teacher education programs do not fully prepare beginning teachers for the rigours of school teaching. However, rather than attempt to defend the need for universities to be able to meet this demand, I believe that it is more important to realistically appraise what is possible in teacher preparation - and what is not. Hence, it is more than reasonable to assert that teacher preparation programs are, by nature, inadequate and incomplete. This is not a new claim (see Northfield and Gunstone, 1983; Loughran and Russell, 1997; Northfield and Gunstone, 1997) but one that is far too often overlooked when teacher preparation programs are being structured/re-structured, organised and defended.

Dissatisfaction with teacher preparation programs may then be unduly exacerbated by attempting to achieve that which is not possible (fully preparing a beginning teacher to 'cope' with the demands of teaching) by responding to the multitude of requirements/expectations/competencies for beginning teachers (for example, such skills as those outlined by Reynolds, 1992; 1995). In so doing, it appears that an overarching understanding of what teacher preparation can be, and how it might be enacted, is pushed aside by the perceived need to pack the curriculum with all the knowledge, skills, attributes and practices necessary to address the multitude of demands that are perceived as needing to be addressed. Sadly, this approach to teacher preparation often means that there is a substantial lack of common understanding (especially amongst teacher educators and student-teachers) as to what could/should be done, and a paucity of articulable principles, or underlying philosophy, to direct the way that programs are conceptualised.

Therefore, in order to begin to seriously question how to prepare teachers in such a way that they might cope with the realities and demands of teaching and to be equipped with a theoretical background to translate into their teaching, we need, as Ashton (1996) has pointed out, a shift in the approaches to teacher education.

This questioning of what we do and why in teacher preparation has become increasingly important to me in recent times as the pre-service education programs in which I work have begun to be restructured. These restructuring moves have highlighted that the research knowledge that exists in teaching about teaching and learning about teaching is either of little value to teacher educators or simply not well known or understood. Unfortunately, what Korthagen and Kessels (1999) so aptly

describe as the traditional approach to teacher preparation, seems to almost universally impact on the organisation of teacher preparation regardless of its applicability and value in helping student-teachers learn about how to teach.

The approach to teacher preparation in the Faculty of Education at Monash University has long been a post-graduate qualification (Post-Graduate Diploma in Education). For at least the past 20 years the program has been reviewed, evaluated and researched such that the way the program has been structured has been in response to the perceived needs of the student-teachers. Features of this program have involved building on and enhancing learning about teaching experiences for student-teachers' so that they might view their own development in terms of the skills and abilities they require as teachers, but also their development beyond this into the construction of their learning about teaching in ways that might enhance their professional roles as reflective practitioners. Inevitably, those involved in the program have continually revisited and debated important issues (nature and scope of the practicum, needs and requirements associated with Foundation Subjects as opposed to Method subjects, the importance of modelling, and so on). The important point being that debate has continued and the knowledge from research has been important in shaping those debates.

In recent times, the Faculty has introduced undergraduate teacher preparation through Double Degrees (B.A./B.Ed., B.Sc./B.Ed. etc.) and now the perceived need to "rationalise teaching" across these programs has meant that the structure of these programs has become more important than the different needs of the student-teachers within each program. Hence, all student teachers have been viewed as "the same" regardless of whether they are in an end-on or consecutive teacher preparation program. What these discussions have highlighted for me is the lack of linkage between research on learning to teach and teaching about teaching and the construction of teacher preparation programs.

Consequently, it seems appropriate at this time that teacher educators be challenged about their need (and desire) to articulate that which they believe matters in teacher preparation. It is important that teacher educators are able to give reasons for their views and to share these in ways that might help move us from the 'unquestioned' views of traditional teacher preparation programs to teacher preparation based on understandings of teaching and learning about teaching that are genuinely responsive to the needs of student-teachers so that research and practice are to the forefront of teacher preparation in meaningful and valuable ways.

Korthagen and Kessels (1999) have certainly pushed this type of questioning about teacher preparation in the research literature for, as they note, teacher education in many countries continually struggles with issues such as whether to start with theory or practice, and that in the 'traditional' approaches to teacher preparation, the notion of integration of the two is largely ignored – therefore impacting on

programs' effectiveness. In comparing their Realistic Teacher Education Program with the traditional teacher education program they state that,

In Freudenthal's terms one could say that in this traditional approach, knowledge about teaching is considered as a created subject and not as a subject to be created by the learner, that is, the student teacher. An approach more in line with Freudenthal's ideas about learning would take its starting point in real problems encountered by student teachers during field experiences. The student teacher would then develop his or her own knowledge in a process of reflection on the practical situations in which a personal need for learning was created...the emphasis shifts towards inquiry-oriented activities, interaction amongst learners, and the development of reflective skills....During the learning processes involved, the teacher educator has an important role, although completely different from the traditional role of the lecturer. The kind of support that he or she should offer (including theory!) has to be very much adjusted to the specific problems the student teachers are having. (Korthagen and Kessels, 1999, p.7)

Therefore, an important issue raised through this view is the positioning of the student teacher as a learner in a curriculum that is constructed as a result of real experiences and reconstructed through interaction amongst learners. This is not, however, a reinventing of the wheel, but making the learning more meaningful and fruitful for student teachers. This paper is one attempt at responding to this type of challenge in teacher preparation.

Program structure vs. principles of practice

Teacher education programs have long been criticized for their failure to establish meaningful links between theory and practice. A difficulty that reinforces this theory-practice gap is associated with the disparity between the world of university teaching (often transmissive by nature) and the world of school experience (often a process of socialisation). Therefore, in both settings, the gap is accentuated.

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For those involved in teacher preparation programs, the two worlds often collide yet the stark differences in practice in both worlds often mask the underlying influences that direct such practices.

Unfortunately, in both worlds, the programs (the nature of teacher preparation; the nature of school teaching) themselves tend to direct what principles will 'fit' the program, rather than principles of practice (Loughran, 1997) shaping the program. For example, in teacher preparation there is an acknowledgment of the need for student-teachers to be familiar with new teaching procedures and strategies, yet attempts to do so often flounder because these teaching approaches are 'delivered' through lectures, handouts and reference material as opposed to creating situations through which students genuinely learn about the teaching by experiencing it as both a learner and a teacher. Similarly, school teachers commonly bemoan students' lack of commitment to developing as responsible active learners, yet they continually bow to the pressure to complete the syllabus and prepare assessment tasks that focus on simple recall and superficial learning - the very things that discourage engagement in learning. I use these stereo-typical examples to simply illustrate how in both worlds the programs shape the practice (eg. the perceived need to complete the work; the pressures of time that can be interpreted as limiting opportunities to teach in engaging ways; the demands of assessment) rather than allowing principles of practice to shape the program (eg. teaching for understanding; creating situations that encourage active responsible learning; developing students' metacognitive skills). If the above is a reasonable characterisation of the situation, it then begs the question, "How might each world appear if the structure of the program itself was not the major shaping force?" In this paper I will respond only in terms of the world of teacher preparation and I do so by considering three assumptions - they are that:

- Learning about teaching involves continual conflicting/competing demands that need to be recognised and responded to.
- Learning about teaching requires a shift in focus from the curriculum to the learner.
- Learning about teaching is enhanced through (student)teacher research.

Learning about teaching involves continual conflicting/competing demands

In conceptualising learning about teaching and teaching about teaching one needs to recognise and/or accept that appropriate practice is embedded in a range of conflicting demands associated with teaching, learning, student-teachers' concerns and expectations about practice.

Consider first of all two major aspects associated with the demands linked with teaching. The first is in the nature of the teaching that student-teachers experience from their teacher educators. Clearly, what they experience dramatically shapes their views of practice – both positively and negatively.

Therefore, telling student-teachers how they should teach would clearly diminish the intention of such a challenge whereas modelling such approaches would more likely enhance the challenge. Yet, at the same time, there is a need to understand student-teachers' development in learning to teach and

creating opportunities that respond appropriately to their expectations about their own teaching ability and that which is possible and probable in their practice at a given time in their personal and skill development.

Therefore, it would seem feasible to suggest that (almost) despite the teacher preparation program structure, if teacher educators are conscious of, and responsive to, these two major issues associated with teaching, that student-teachers' conception of teaching and learning about teaching might be enhanced.

Like teaching, learning also has two major elements that influence understanding. There is the student-teachers' learning as a learner in a teacher education class/program and how powerful, useful, and meaningful that is to them as they begin to link their specific learning with the approach to teaching that they experience. There is also the learning of their students when they are the teacher and how they, as the teacher, recognise and respond to the learning needs of their students.

Therefore, in these first two areas (teaching and learning) there are competing demands that must inevitably shift in response to the context and the perceived needs that accompany the particular situation.

Student-teachers' concerns have been well documented (Fuller, 1969; Fuller and Bown, 1975) and need to be both acknowledged and addressed. I am not suggesting though that there is a required time frame or an accepted model of development and change that 'controls' when and how these concerns arise. However, I do suggest that by creating situations that respond to, or bring to the surface, these needs is a positive and affirming way of teaching about teaching and concurrently creating opportunities for student-teachers to conceptualise their learning about teaching in meaningful ways.

The development of practice in light of such competing demands requires an approach that revolves around the need to create meaningful collaboration in learning and teaching (Loughran, 1996). This can be enacted by making explicit the need to apprehend alternative perspectives and approaches to practice so that an expectation of responding to these alternatives is grasped by participants (teacher educators and student-teachers alike). This means then that if student-teachers search for 'the recipe' for of how to teach, and/or if teacher educators inadvertently, or otherwise, portray teaching in such in a manner, that the conflicting demands associated with learning to teach become increasingly difficult to recognise and respond to. Hence, in the absence of a conceptualisation of teaching about teaching and learning about teaching such as this, teacher preparation programs can easily be interpreted as a fragmented array of classes offering disparate views about education rather than as a holistic approach to the development of teachers based around common shaping principles that go beyond the delivery of specific information.

If the argument above is reasonable, then there is a concurrent need to approach practice based on the tenet, “teach the students, not the curriculum” (Berry & Loughran, 2000).

Learning about teaching requires a shift in focus from the curriculum to the learner

In learning about teaching, it is crucial that student-teachers have opportunities to access the thoughts and actions of experienced teachers in ways that help to illuminate the pedagogical reasoning that accompanies the act of teaching. In one sense, without such opportunities, student-teachers are really only viewing (sadly too often viewing rather than experiencing) one perspective of the teaching – the side that is played out in the classroom.

To fully illuminate the dynamics of a teaching situation, student-teachers need opportunities to understand that which is involved in planning the teaching, doing the teaching, and reflecting on the teaching and linking all of these to the relationship between the teaching and the concurrent learning. I would argue that one way of creating such opportunities is by helping student-teachers to experience teaching practice being both constructed and deconstructed – and for them to be central to the process – so that their learning about teaching is embedded in their experiences of learning and teaching.

A common view of learning to teach is bound up in the notion that the University based components of teacher preparation offer the theoretical underpinnings of teaching and that school teaching experience (practicum) offers a situation through which teaching is practised – the theory practice gap being accentuated through such a view. A difficulty created through this view is then that the ‘expertise’ of teaching practice is often assumed to reside largely with teachers and this can then diminish the rich possibilities that can be made available at the university site.

One way of reconsidering this situation is by developing appropriate ways for student-teachers to genuinely engage in experiencing the various aspects of teaching in an environment where that is the focus, rather than in an environment where successful teaching and ‘controlling’ students is the dominant concern. In so doing, the school practicum experience might then be more meaningful and informing. In the following vignette, such a situation is briefly reflected on by two teacher educators who have attempted to teach with this type of focus as a guiding principle of practice.

I suppose because we saw a need to ‘unpack’ teaching (ours and theirs) with the student-teachers, there had to be a focus on a need for honest and professional critiques of the experiences created. The notion of ‘unpacking’ is important because we believe that student-teachers need to experience it being done. They need to see that teaching/learning is a complex amalgam of decisions that all teachers face – what is not so clear is how they decide to respond and why. So in teaching this subject, we thought that if we could help student-teachers see into what guided the decisions of others, and the implications of particular

decisions, they might come to view teaching as a much more thoughtful, professional planned activity rather than a spontaneous act of entertainment or adherence to some prescribed script.

However, unpacking teaching carries with it a problem. There is a need to help student-teachers learn to critique the teaching not the person, so we had to do it ourselves before we could ask them to take similar risks. There is also the worry that in many instances, what they experience as critique from school teachers who supervise them on practicum is generally more about how to "teach like me" or a list of "rights and wrongs", so this issue of critique is of paramount importance if we want to move beyond it – and/or help them to better recognise and deal with that when they experience it themselves.

To enhance what we hoped would be the learning through experience in the program we decided that most of our time would revolve around small groups of student-teachers teaching the rest of the class. For this to serve a real purpose we knew that the focus had to be on the teaching not the content so we asked students to work in two's and threes. They would be responsible for planning, teaching, and debriefing their teaching (approximately 1 hour) and we thought that to help them reflect on their learning we would add an 'impartial observer' – a video-tape of the session for them to refer to later. We wanted them to begin to see their teaching through others' eyes so that what they 'learnt' could be much more than what we might 'tell' them.

However, despite our best intentions, learning to teach for these student-teachers presented a number of dilemmas. For example, there is the inevitable focus on the content to be taught, rather than the teaching itself. This seems to be because knowledge of content gives a false sense of security in the teaching situation - content knowledge masks understanding of teaching. But in highlighting this issue, and through the experience of the subject over time, the participants themselves also recognise this and can therefore begin to challenge it.

Professional critique is a difficulty. Although there is a strong sense of the intention of professional critique, the reality is that participants want to treat each other 'nicely' - they do not really want to challenge others too much as they are not sure that they would want a similar challenge in return. Yet paradoxically, they are dissatisfied by polite responses to their teaching when they are aware of some of the instances in which they felt the teaching did not engage the learners appropriately or was lacking in some way in their own eyes.

For many participants, it is difficult to move beyond a technical-rational approach to learning to teach because there is a need to develop some of the skills of teaching (questioning, wait-time, listening, structuring content, timing) and to become competent at them before a focus on the learning through the teaching can readily be grasped and responded to.

Classroom trust is crucial for both the student-teachers and their teacher educators if progression in understanding is to extend beyond the superficial and needs to be constantly highlighted and reinforced. Yet, even though student-teachers may 'trust' the environment, what counts

as a risk for a teacher educator and a student-teacher are dramatically different.

Telling is not teaching, listening is not learning, is a message that must be embedded in experience and constantly revisited if it is to have real meaning for practice. Therefore, there is a constant need to 'not tell the class' about an issue (in the teaching situation), but to make the issue be a part of the teaching episode. This is probably at the heart of what it means to teach the students not the curriculum. The learning is meaningful and powerful when it is embedded in the experience of learning to teach. As teacher educators we need to be actively creating situations where this can occur and be a natural part of teacher preparation.

Learning about teaching is enhanced through (student)teacher research

Implicit in the two previous sections of this paper is the view that helping student-teachers come to 'see differently', to reframe (Schön, 1983; 1987) a situation, and to therefore gain insights into how they might come to better understand that situation, is not as simple as just highlighting the problem and telling them what it is they should know. In offering concrete ways to act in given (sometimes simple) situations – and assuming they apply these actions in those situations - they can come to see that which they were unable to see before. For example, student-teachers (and for that matter, many experienced teachers and teacher educators) often struggle with interpretive discussions (Barnes, 1975; Baird and Northfield, 1992). If student-teachers can create a situation where they physically force themselves to wait rather than rush in to fill the gap in a discussion, they can experience what it might be like if students are given time to think and respond thoughtfully rather than play 'guess what's in the teacher's head'. One way of accessing opportunities for student-teachers to begin to research their teaching and to begin to see things differently is through the development of anecdotes (van Manen, 1995; 1999). The following anecdote was written by a student-teacher who chose to see what would happen if he forced himself to wait during questioning.

Wait time

My first class. Palms sweating, breathing shallow, tie too tight, pulse too fast. I guess I was kind of nervous. I had fully prepared the whole lesson in intricate detail, and even rehearsed certain key sections. I shuffled my books, watching them enter the room noisily, with attitude to burn. They sat down. Eventually, I swallowed.

“Good morning 10B! My name is Mr. Burns, I’m a teacher from Monash University. Today we are...” and into the lesson I launched. Cool as a cucumber and smooth as a strawberry smoothie. I wrote on the board in big letters. ‘What Makes A Film?’

Having bonded with the students on an incredibly deep and substantial level in the first three minutes of the class, I swiftly and confidently turned

to face the class. With a big smile and the most open of expressions I could muster, I threw out my first question.

“Can anyone tell me some elements of film making?”

I paused for the expected barrage of excited responses. I waited and waited. Anyone? Longer and longer. Help? It felt like an hour. A week. A year. A...yes? Finally from the back of the class! “Um...scripts, sir?”

“Thank you!” I said, hopefully without too much desperation. The trickle of answers gradually became a waterfall. I was finally safe, splashing gleefully in the puddles of their intuitive responses, the dam of silence broken.

(Student-teacher’s anecdote, June, 2000)

By purposefully holding back rather than maintaining the flow of talk, new ways of seeing through experience can emerge that are dramatically different to being told about the value of ‘wait time’. By experiencing the situation in the way this student-teacher describes it, there is a greater likelihood that a genuine learning experience is created, one that is an episode (White, 1988) that carries personal meaning. As this student-teacher demonstrated, by withholding judgment about what might happen and choosing to find out about such action for himself, new ways of seeing emerged as he came to learn through the experience.

Further more, encouraging the episode to be reconsidered, developed and articulated through writing an anecdote enhances the meaning derived from the situation and can unsettle some of the taken for granted assumptions about teaching (Brookfield, 1995) and increase the likelihood that new ways of seeing might emerge. This is surely of enormous benefit in teacher preparation programs.

Therefore, in teacher preparation programs I believe there is a need to trust that student-teachers can – and should – research their own practice. Student-teachers should be seen as emerging professionals who are capable of directing their own professional development through researching their own teaching. By creating and sharing their understanding of practice through the results of their own research, the distinction between theory, practice, transmission of knowledge and socialisation into teaching may be confronted and their professional roles may be better recognised, defined and enhanced.

For example, as student-teachers encounter a great deal of new and perplexing experiences during their practicum placements (school teaching experiences), this substantial range of experiences can also be viewed as data from which they might be able to become more informed about their development as teachers.

If teacher education programs genuinely focus on the student-teacher as learner, then it is their ability to analyse and make meaning from experience that matters most – as opposed to when the teacher

educator filters, develops and shares the knowledge with the student-teachers. I have only recently come to recognise and better understand this subtle distinction, and it is not necessarily easy to grasp; and simply stating it here does not guarantee that it now also has meaning for the reader. The difficulty is in the fact that the 'knowledge' developed through student-teachers researching their own practice may not necessarily be new to teacher educators, but the process in developing the 'knowledge' is very different when the student-teachers are responsible for its development - who is doing the learning really matters.

For example, when student-teachers are 'given permission' to collect and analyse their own data from their own experiences during a practicum, the subsequent assertions about practice are qualitatively different in value and meaning for student-teachers compared to when the 'same' assertions are passed on to them by a teacher educator. This difference is extended even more when student-teachers document and share these assertions with their peers.

The assertions in Table 1 (below) were developed by student-teachers in a session through which their practicum experiences became more meaningful because they developed ways of reconsidering their (and their peers') experiences and attempted to make sense of these not just as isolated events but as events from which common understandings might be reached. Again, although the knowledge developed may not necessarily be new or different for many teacher educators, it was new and meaningful for these student-teachers who developed the table as a result of the ownership derived from the direct link to their experiences. This sense of ownership is based on drawing on their experiences in order to learn from those experiences that leads to a recognition of new ways of seeing the practice setting.

Table 1: Student-teachers' assertions about practice

- The medium of instruction influences the success (or failure) of the lesson.
- The students have a management script, you have to de-program before you re-program.
- Sometimes you teach in ways you don't like because it helps you cope.
- Teaching in a way that works isn't always a way that you'd like to be teaching.
- Too much enthusiasm (student and teacher) may be lead to other problems.
- Students and teachers can have different ideas of what is fun and exciting.
- Students have more control over what works in the classroom than the teacher.
- Students have to make connections between their school work and their existing knowledge for the tasks to be meaningful.
- Clear expectations and guidelines are important for students to know how to act/learn.
- The success of teaching strategies is dependent on students' skills -they may or may not have these skills.

Table 1 represents an important transition in thinking by student-teachers as it is a powerful way of them informing their own practice making such learning meaningful and useful and clearly demonstrating interesting insights into practice as a result of framing and reframing. Learning through researching their own practice I believe is therefore a crucial component in learning about teaching and teaching about teaching.

Conclusion

I have arrived at the views (outlined above) as a result of a decade's involvement in the Graduate Diploma in Education at program at Monash University. program continues to be shaped and influenced by seven important underlying propositions (Northfield & Gunstone, 1983; Gunstone & Northfield, 1992) that, taken together, may be described as a *constructivist approach to teaching and learning*. These propositions (Gunstone et al., 1993) illustrate the value of articulating the principles that guide and direct a teacher education program.

1. Prospective teachers have needs which must be considered in planning and implementing a program and these change through their pre-service development.
2. The transition from learner to teacher is difficult but is aided by working closely with one's peers.
3. The student-teacher is a learner who is actively constructing views of teaching and learning based on personal experiences strongly shaped by perceptions held before entering the program.
4. The teaching/learning approaches advocated in the program should be modelled by the teacher educators in their own practice.
5. Student-teachers should see the pre-service program as an educational experience of worth.
6. Pre-service education programs are inevitably inadequate (it is the start of a teacher's career that will involve appreciably more learning over time).
7. Schön's (1983) conception of the reflective practitioner is a vital model for those who teach the preservice program, as well as for those learning to teach.

The presentation for this symposium will graphically illustrate, through participants' studies, the manner in which this model is being developed and implemented in a teacher education program. It will also highlight the importance of placing a genuine emphasis on the notion of authority of experience (Munby & Russell, 1994) for teacher educators and student-teachers alike.

References

- Ashton, P. (1996). Improving the preparation of teachers. *Educational Researcher*, 25(9), 21-22+35.
- Berry, A., & Loughran, J.J. (2000). Developing an understanding of learning to teach in teacher education. In J. Loughran & T. Russell (Eds.), *Exploring myths and legends of teacher education [Proceedings of the third international conference on self-study of teacher education practices]* (pp.25-29), Herstmonceux Castle, UK.
- Korthagen, F.A.J., and Kessels, J.P.A.M. (1999). Linking Theory and Practice: Changing the Pedagogy of Teacher Education. *Educational Researcher*, 28 (4), 4 – 17.
- Loughran, J.J. (1996). *Developing reflective practice: Learning about teaching and learning through modelling*. London: Falmer Press.
- Loughran, J.J. (1997). Teaching about Teaching: Principles and Practice, In Loughran, J.J. and Russell, T.L. (Eds.) *Teaching about Teaching: Purpose, Passion and Pedagogy in Teacher Education*, London: Falmer Press.
- Loughran, J.J., and Russell, T.L. (1997). Meeting student teachers on their own terms: Experience precedes understanding, In (Richardson, V. Ed.) *Constructivist Teaching*. London: Falmer Press.
- Munby, H., & Russell, T. (1994). The authority of experience in learning to teach: Messages from a physics method class. *Journal of Teacher Education*, 45, 86-95.
- Northfield, J.R., and Gunstone, R.F. (1983). Research on alternative frameworks: Implications for science teacher education. *Research in Science Education*, 13, 185-192.
- Northfield, J.R., and Gunstone, R.F. (1997). Teacher Education as a process of Developing Teacher Knowledge. In Loughran and Russell (Eds) *Teaching about Teaching: Purpose, Passion and Pedagogy in Teacher Education*. London: Falmer Press.
- Reynolds, A. (1992). What is a Competent Beginning Teaching?: A Review of the Literature. *Review of Educational Research* 62(1), 1 - 35.
- Reynolds, A. (1995). The Knowledge Base for Beginning Teachers: Education Professionals' Expectations versus Research Findings on Learning to Teach. *Elementary School Journal*, 95(3), 199-221.
- Schön, D.A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D.A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass
- van Manen, M. (1995). Pedagogical politics? Political Pedagogy? In Siebren Miedema, Gert Biesta, Ben Boog, Adri Smaling, Wim Wardekker & Bas Levering (Eds.) *The Politics of Human Science*. Brussels: VUBPRESS.
- van Manen, M. (1999). The Language of Pedagogy and Primacy of Student Experience. In Loughran (Ed.) *Researching Teaching: Methodologies and Practice for Understanding Pedagogy*. London: Falmer Press.



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