Chapter 16
Understanding Professional Knowledge of Teaching and Its Importance to Scholarship in Teacher Education

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Lovat and Clemant (2008) have persuasively argued that the nature of teachers' professional knowledge is fundamental to 'creating conditions where both students and teachers are actively, critically and reflectively engaged in knowledge-making' (Lovat and Clemant 2008, p. 2). Therefore, to better understand what quality in teaching and learning looks like, it is important to understand what teachers 'know and are able to do' (i.e., their professional knowledge of practice). In so doing, insights into teaching about teaching and the scholarship of such sophisticated business comes into sharp focus.

This chapter explores the nature of teachers' professional knowledge by considering two fundamental assertions about practice and builds on each to make an argument about the development of scholarship in teacher education (where expertise in the teaching of teaching should reside). In doing so, it shines a light on how quality in teaching and learning might be better recognized and understood and also illustrates why scholarship in teacher education is crucial to the development of the teaching profession more generally.

16.1 Assertion 1: Teaching Is Problematic

> Quality teaching is … concerned with identifying the factors that impact most directly on student achievement and wellbeing. … it entails the application of contextually suitable and appropriate pedagogies to engage the full learning capacities of students. … teaching and learning are not perceived to be simply the transmission and reception of knowledge … (Lovat and Clemant 2008, p. 1)

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Despite decades of research demonstrating that quality teaching is complex and sophisticated, a contrary and often overwhelming public stereotype persists based on a view of teaching as the transmission of information. It is widely acknowledged that there is not one way of doing teaching, yet an expectation that the right or best way can be found continues to confuse understandings of the real world of practice. Considering the fact that amongst any group of students there is a diversity of learning needs, and that research has highlighted the multitude of learning approaches that exist, the notion of a mixed-ability classroom is much more complex in terms of teaching than curriculum and policy documents can genuinely respond to or portray. Teachers are confronted by a multitude of competing demands in the classroom, hence informed decision making is crucial. Therefore, it is not difficult to see why quality teaching is not about the delivery or transmission of information, activities or actions, but rather is a complex web of decision making embedded in a sensitivity to the dynamic relationship between teaching and learning *and* learning and teaching. Understanding quality is therefore bound up in recognising teaching as being problematic. It is neither static nor linear and cannot be script bound.

The use of the term ‘problematic’ sometimes carries connotations of negativity. However, it is far from that. Understanding teaching as problematic means that it is dilemma based and, because by definition dilemmas are situations that need to be managed (not necessarily solved), it means that teachers are continually making judgments about what might be appropriate and helpful to learners in a given situation at a given time. Because teaching is problematic it also means that what a teacher does in one situation does not mean it will have the same impact in a different context, or at a different time. Hence, doing ‘the same thing when confronted by a similar situation’ is not what learning to be responsive to pedagogical experiences is all about. Rather it means that teachers’ personal professional judgment is paramount in responding to their students’ needs and concerns. Informed decision making is crucial, and being informed is embedded in a learning about practice that goes way beyond routines and protocols. It is the very nature of the pedagogical demands inherent in classroom practice that makes teaching problematic and is why deep understandings of practice matters.

Understanding teaching as problematic is easier said than done. To become comfortable with the uncertainty of working with the problematic is a challenge. There is always a gap between intentions and actions in practice; working to minimise that gap is demanding. However, although there may well be recognition that there is not one correct and best way of doing teaching, this does not mean that actions in accord with that belief always prevail. There is a certain comfort in ‘sticking to a routine’ – as beginning teachers well recognize. To challenge routines requires a confidence in the ability to act ‘in the moment’ to enhance student learning, and that does not come easily. Nor can it always be planned for; learning to do so is embedded in experience:

> I can see important changes that have occurred in my practice as a result of confronting the gaps between my rhetoric and the reality of my teaching. … The process of coming to terms with teaching dilemmas is, of course, neverending. (Zeichner 1995, p. 20)

Looking into teaching from the outside can be confusing. To the untrained observer, it can look as though there are 'answers' about what to do and the best way to do it. Seeing teaching as problematic rather than rule driven is difficult when looking in from the outside because the pedagogical reasoning, the underpinning of practice, is not explicit or on show to others – especially to students.

A long time ago, Dan Lortie coined the term the 'Apprenticeship of Observation' (Lortie 1975) to describe what students come to know about teaching from years of observation from the 'other side of the desk'. What Lortie's work illustrated was how difficult it really is to see into, and better understand, teaching. On the surface, teaching appears to be quite straightforward and simple. The reality is that good teachers make teaching look easy. Russell (2007) explains this situation in the following way:

> In sharp contrast to the everyday views of teaching held by those who do not teach, most teachers have a sense that they are working quite hard, not just when planning lessons or assessing work, but also when actively engaged in a lesson … Most teachers do not involve their students in activities that would indicate the complexity of teaching. Most teachers do not take the time to indicate the rationale for either a lesson's content or the way that it is taught … [therefore] much of what happens and how it happens in a classroom appears to be arbitrary, left to the teacher's personal or professional whim and certainly not requiring careful analysis. While teaching is definitely not easy, every member of a society who attends school is inadvertently and unintentionally taught several things about teaching:
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> 1. Teaching is relatively easy.
> 2. Teaching involves a great deal of talk by the teacher.
> 3. Management of students has nothing to do with how they are being taught.
> 4. Schools must ensure that children meet standards, but how schools operate should be the same as one's own schooling; innovation and change are too risky. (p. 32)

The 'Apprenticeship of Observation' suggests that teaching is a relatively orderly process. However, from a teacher's perspective, there is an undercurrent of competing concerns, dilemmas and tensions all of which influence what happens, how and why, but few if any of those decisions are able to be observed from a non-teaching position. Donald Schön (1983, p. 1) described teaching as an 'indeterminate swampy zone'; more recently, Berry (2004, p. 1312) described it as 'a complex and messy terrain, often difficult to [map and] describe'. Teaching is not as smooth and straightforward as it may appear, but because it can appear to be that way, it inadvertently reinforces public views of teaching along the lines of those suggested by Russell (above). Unfortunately, the complexity in teaching is not easily seen – although teachers continually feel it in their practice.

Because of the 'messiness of teaching' and the fact that its complexity is not easily seen from the outside, recognising and developing quality in practice is bound up in accepting the challenge, and being engaged in, mapping the indeterminate swampy terrain. One way of doing this is through a focus on professional learning. That requires an acceptance of a personal learning agenda in which learning how to adapt, adjust and construct teaching (i.e., developing knowledge of practice) is facilitated by gathering evidence of the impact (or not) of that developing knowledge on student learning.

Mason (2002) used the term 'noticing' as a way of encapsulating such an enquiry approach to personal professional learning. He was of the view that a teaching situation is not really seen until it is seen differently and argued that teaching is rarely the same thing.

> At the heart of all practice lies noticing: noticing an opportunity to act appropriately. To notice an opportunity to act requires three things: being present and sensitive to the moment, having reason to act, and having a different act come to mind. Consequently, one important aspect of being professional is noticing possible acts to try out in the future … A second important aspect is working on becoming more articulate and more precise about reasons for acting. The mark of an expert is that they are sensitised to notice things which novices overlook. They have finer discernment. They make things look easy, because they have a refined sensitivity to professional situations and a rich collection of responses on which to draw. Among other things, experts are aware of their actions. (Mason 2002, p. 1)

Because teaching looks easy, the uncertainty of practice is not so obvious and so what an observer might perceive and interpret in a pedagogical situation is very different to that which the teacher knows and feels when teaching. One way of beginning to see into that which a teacher experiences is made explicit through cases (for a full description of cases see, Barnett and Tyson 1999; Mitchell and Mitchell 1997; Shulman 1992). Cases are constructed around a dilemma, critical incident or problematic situation. Cases begin to illustrate what it is that causes a teacher to stop and look again at what is happening and to begin to reconsider their actions and their students' learning. The following abbreviated case is an example of how such thinking and learning is brought to life.

Letting go

Walking into the lab I was feeling confident that today's lesson was going to be different and the girls were going to like it.

No notes today (at least not written by me). Today I was going to stand back and let the girls take control.

We were starting our new topic Mixtures, and as the girls got settled I said:

'Ok ladies today you are going to teach each other. In groups of four you are going to take one of the sub-topics from the board, research it and then present it to the class.'

Think, **pair**, **share**

As I was going through exactly how a Think Pair Share works, the hands started to go up.

'Can we pick our own groups?'

'Are we going to get marked on this?'

'Are we presenting them today?'

Not the response I was looking for … Although the learning styles of some students are suited to this type of teaching, I wanted to take the focus of our lessons off me, my notes and my structured discussions and start to challenge my students' ideas about learning.

So these questions weren't helping me feel confident about changing the focus of my lessons.

'Hands down! You can ask questions later,' I say and as today's the day I'm passing the control of the lesson over to my girls, I let them pick their own groups.

'Yes!!' I hear them whisper. Down goes my confidence again.

But as I watched them in their pairs I was pleasantly surprised. Almost everyone appeared to be on task.

'Five more minutes and then it's time to discuss in your group of four.' I instructed confidently.

As I wandered the room, I fought my natural urge to interrupt their discussions and steer their thoughts in a more productive direction but I did ask one group:

'How's it going? Are you enjoying this activity more than our usual science classes?'

'Yeah, this is so much better,' was the overwhelming response.

'Wow! that's exactly the response I was after,' I thought to myself trying not to feel too crushed about what it meant about my 'normal' lessons.

'Maybe this is working. The girls are taking some control over their own learning and they are enjoying it. I'll give them a little more time, then it's back to the centre and away they'll go with their presentations.' I told myself.

The first group got up and without any prompting they began their presentation.

'Not bad,' I thought to myself.

Then the next group and then the next. Before I knew it they had all done their presentations.

As their classmates were presenting, the girls were attentive and to my surprise writing notes as they went.

'So they don't need me writing endless notes on the board,' I thought to myself.

Even more surprising was that every girl had a go at presenting. I was sure that a few of the quieter, less confident girls would try and get out of having a go.

It had all gone rather well, we had covered a lot of content and the girls seemed to really enjoy the different approach to the lesson. Up went a hand.

'Are we having a test on this stuff?'

'Yes, but not for a while. Don't worry about that now though please.'

'Will you give us proper notes for this stuff though?'

'What? You've got good notes,' I thought.

Apparently if the notes are not from me they are not 'proper notes'.

At this point I realised some of the girls had missed the point. They were totally capable of taking control of their own learning. They had just been doing it. I had seen it for myself. These girls, and so many others like them at our school, are spoon fed information and don't think they have accomplished anything unless they have pages of writing to prove it.

'Am I going to be able to change their thinking overnight?' I thought to myself. 'No way.'

Could I chip away at it using activities such as this one to try and make them see their learning from a different angle? 'Sure!' I told myself with a sense of satisfaction and confidence … (Rowe 2008, pp. 93–95)

This case illustrates the tensions and dilemmas that teachers experience on a daily basis. Questioning the taken-for-granted though – as illustrated through the case – requires teachers to see into their practice with new eyes; to start noticing. As made clear in the case, the decision making, the competing demands, the dilemmas and issues a teacher faces begin to shed new light on the complexities of teaching and learning, and what it takes to accept the challenge of actually doing teaching in ways that go beyond a script or routine.

Through experimenting with practice in the way demonstrated by Rowe (the teacher author of this case), it is not difficult to see how 'noticing' can make a difference to the quality of a teacher's practice. In reflecting on and articulating aspects of practice, the unseen becomes seen and a teacher's professional knowledge begins to be captured, developed and portrayed. As a consequence, student learning is brought into sharp focus and is more likely to be enhanced.

Because teaching is understood as problematic, teacher thinking can be seen as a shaping factor in the quality of the resultant practice – which in turn influences the quality of student learning. As is outlined later in this chapter, this understanding of teaching is important in shaping scholarship in teacher education because it is a basis for considering teaching and learning about teaching as being embedded in the crucible of practice. However, before embarking on that aspect of this chapter, the second assertion underpinning these ideas needs to be considered, i.e., that professional learning is enhanced by researching practice.

As the next section explains, professional learning can enhance a teacher's understanding of the relationship between teaching and learning, and researching practice is one way of engaging in meaningful professional learning and fostering the development of knowledge of practice. Unpacking those ideas is also important for understanding the nature of scholarship in teacher education.

16.2 Assertion 2: Professional Learning Is Enhanced by Researching Practice

The daily work of teaching is demanding and a common view of what teaching comprises is pictured in the image of someone out the front of a classroom directing the work of students. Teaching itself is often envisaged as an ongoing array of such scenes, lesson by lesson, across a school day. However, teaching as comprising preparation, thinking about practice, discussing professional knowledge, researching ideas and practices, testing them out in a variety of contexts, reflecting and reviewing is not such a common view. Generally, if teachers are not seen to be in class 'doing teaching' they are not perceived to be teaching. The unfortunate outcome of such a view is that little value is placed on aspects of teaching that are dependent on *not* being in the classroom doing teaching. As a consequence of the busyness of the face-to-face teaching routine, teachers often feel pressured to pursue short-term goals that revolve around finding what Appleton (2006) described as activities that work. As a consequence, the constant search for activities that work influences how teachers talk about teaching and what they tend to look for most in relation to their own professional learning.

Teachers share much of their thinking about practice through stories and experiences of teaching and student learning. They share how they do things, the types of responses they get from students and the ways in which they adjust and change practice as a result of interpreting those experiences. It is therefore not hard to see why a constant search for teaching activities, procedures and ways of doing teaching can dominate and obscure what teachers' professional knowledge might really look like, how it might be articulated and portrayed. However, as the literature demonstrates, when teachers are given opportunities within their work to research their practice, new ways of seeing into their professional knowledge of teaching quickly emerge.

When experimenting with new or different teaching procedures there is a natural tendency towards a heightened sense of awareness about the nature of the pedagogical experience. However, as noted above, there is a difference between how we might feel about a given situation and actually collecting data to seek evidence on which to base particular conclusions. There is a difference between thinking about and reconsidering practice as opposed to researching that practice.

Cochran-Smith and Lytle (2004) have been strong advocates of teacher research. They have argued that teachers' ways of knowing are different to that which is more typically depicted through traditional educational research. Teachers' learning about teaching *and* learning is inextricably linked to their classroom experiences. They do not necessarily seek 'imported' knowledge from external sources but tend to trust the 'authority of their own experience' (Munby and Russell 1994, p. 86). They do that because they have a privileged position in terms of understanding classroom dynamics and how those dynamics shape practice – their practice. Teacher researchers focus on what they want to know more about and what they see as real and meaningful measures and outcomes in relation to student learning. The type of questions and inquiries they are interested in and choose to pursue are fundamental to enacting meaningful educational change. Long ago, Stenhouse highlighted this very point:

> … it is difficult to see how teaching can be improved or how curricula proposals can be evaluated without self monitoring on the part of teachers. A research tradition, which is accessible to teachers and which feeds teaching must be created if education is to be significantly improved. (Stenhouse 1975, p. 165)

A common goal of teacher research is improved classroom practice – a clear and strong professional learning driver of development and growth and a clear sign of quality. However, despite the obvious value of teacher research, little if any encouragement or extrinsic reward is associated with that effort. Generally, teacher research is an additional extra on top of existing classroom demands and so requires a commitment that extends beyond the normal expectations of teaching. Herein lies a major issue for the profession and the bureaucracies that direct the work of teachers.

Education systems tend to seek out 'measureable' outcomes that they can ascribe to teaching, i.e., to measure cause and effect in teaching and learning. Yet the outcomes that teachers find convincing do not necessarily fall so neatly into such a linear and consequential (or short term) pathway. That is not to say that teacher research goals are better than the goals of education systems, but rather that respective views of research and how they impact practice are quite different. For example, in teacher research, the initial inquiry commonly leads to the need for action. Hence, results derived from questioning a pedagogical situation almost always lead to deeper considerations of what to do as a consequence, thus enhancing quality; as noted by Baumann:

> my research efforts were most often compatible with – and enhanced – my teaching … My initial purpose for keeping a journal was to document classroom events and my reactions to them so I would have a daily record of my research experience. However, I soon realized

> that dictating entries on my drive home from school each day had an immediate, positive impact on my teaching … Had I not been conducting classroom research, I probably would not have kept a journal and thus would not have been as thoughtful about what was working and was not working in my teaching … The research process, therefore, was compatible with my teaching … problems in classroom inquiry, conflicts or tensions become a natural, if not healthy, aspect of the research evolutionary process. (Baumann 1996, pp. 31–34)

From a teaching perspective, there is little point in becoming more informed about practice if appropriate change does not follow. Teachers' professional satisfaction is intimately tied to the quality of their students' learning and that offers a greater impetus for inquiry and change than that which might be mandated or directed from 'outside or above'. It therefore stands to reason that paying serious attention to learners is crucial, and again, offers access to the nature of quality.

16.2.1 Listening to Students

In his return to high school teaching, Jeff Northfield[1], an experienced and well-credentialed teacher educator and researcher, was taken aback by his students' views of school teaching and learning, which could be summarised as:

- Learning is associated with gaining right answers. Thinking and personal understanding are different and often frustrating ways of achieving the required outcomes.
- The learning process and thinking is difficult to associate with school work. Texts and notes are important indicators that *school* learning is occurring.
- Linking experiences is very demanding and unreasonable when added to the classroom demands for students.
- The final grade is the critical outcome and the basis by which progress is judged.
- Enjoyment is not always associated with school learning – real learning is hard and not usually enjoyed.
- Learning is done to students and teachers have a major responsibility for achieving learning.

The students' view (above) stood in stark contrast to his personal views of what he hoped for as a consequence of his desire to engage them in quality learning, which he summarised as:

- Where possible students should have opportunities to be active and think about their learning experiences.

[1] Jeff Northfield was a Professor of Teacher Education who accepted a teaching position in a high school for a year to research and learn more about how to teach students in ways that might help them to become more active learners. He did that through a focus on teaching for metacognition. His experience was documented in the book *Opening the Classroom Door* (Loughran and Northfield 1996).

- Students should experience success in learning and gain the confidence and skills to become better learners.
- Linking experiences from both within and outside school greatly assists learning.
- Effort and involvement are important outcomes of school activities and students need to gain credit and encouragement for their efforts.
- Enjoyment and satisfaction with learning are important outcomes.
- Learning involving the above features requires learner consent.

Northfield's (yearlong) study of his efforts to enhance the quality of his students' learning was insightful, but as a very strong example of teacher research, it also served another worthwhile purpose. It was a readable and informing account that was accessible and meaningful to other teachers (Connell 2002), which is an important point, because it has been noted many times in the literature that much of the research in education has little influence on teachers' daily practice. There are many reasons for that situation, but one of note is the inability of teachers to identify with the type of work conducted by external researchers and the ways in which their results are portrayed. However, teacher research can be seen as offering a way of addressing that situation.

Northfield's account of his pursuit for quality in teaching and learning was the catalyst for another teacher to research her classroom in a similar manner (see Cate Baird, chapter 10, Loughran 2010). Baird embarked on a study in which she decided to focus on listening carefully to her students' experiences of learning (all recorded in her journal over a semester) and found that she was compelled to respond in ways that were specifically designed to address their learning needs. By being uncomfortable with how her students constructed their role as school learners, and in being confronted by the ways in which they developed classroom behaviours that inhibited their learning, she could not help but pursue pedagogical responses designed to improve their learning outcomes. As a consequence, she not only assisted her students in developing more positive images of themselves as learners, she simultaneously became a more innovative, creative and responsive teacher.

As she worked to engage her students as learners, her own professional knowledge of practice was enhanced. Through her account, the underlying drive for quality in teaching and learning stands out in a myriad of ways. At the core of her effort was a concern for the quality of student learning and how that was influenced by the ways in which she approached her professional role as their teacher. Her professional learning – and the expectations for that learning in the future – were key to her ongoing development.

> I have been in a position both within my school and in external teacher forums to share the experience gained from this project and to therefore discuss with other professionals some of the strategies and difficulties encountered along the way. Similarly, I have been asked for, and received, both formal and informal feedback from colleagues that has allowed me to further my own professional development and opening up new possibilities for other teachers to think about their practice.
>
> I am now aware of the areas in my practice that I would like to further study and gain help in through specific professional development for these are now the areas that will add

> meaning and value to my personal teaching experiences and most importantly the learning skills and outcomes of my students. This is also consistent with a growing need to enhance the teaching and learning process overall. (p. 182)

There can be little doubt that how students construct their view of themselves as learners has a major impact on the quality of their learning. When teachers seek to better understand those views, particularly when done in systematic ways through teacher research, the result is more often than not, positive and productive pedagogical experiences for all. Supporting teachers in ways that encourage them to recognize and develop their professional knowledge lies at the heart of developing a 'quality agenda'; the same applies when thinking about the notion of scholarship in teacher education.

16.3 In Pursuit of Scholarship in Teacher Education

The detailed explanations of the two assertions (detailed above) have been designed to illustrate the complex nature of teaching. That complexity stands in stark contrast to the 'teaching as telling, learning as listening' view that tends to dominate less informed views of practice. I am arguing that teaching is complex, sophisticated business and that generally, it is poorly and/or superficially understood outside the profession – and sadly, sometimes within. If that is the case, then it seems reasonable to assert that teacher education is equally misunderstood and undervalued.

Teaching of teaching must do considerably more than simply impart information about practice. However, if views of teaching are dominated by notions of transmission then the overall effect of that view is likely to be magnified when considered in relation to the expectations and practices of teacher education. In contrast, understanding teacher education as being based on expert knowledge *and* practice of teaching and learning about teaching, there is a greater likelihood that attention will be focused on a requirement for, and pursuit of, scholarship in teacher education. But what might that scholarship look like and how might it be articulated and portrayed?

A pedagogy of teacher education (Bullock 2009; Korthagen et al. 2001; Loughran 2006; Russell and Loughran 2007) has been described as the way of developing, defining and advancing the expert knowledge and practice of teaching *and* learning about teaching. A pedagogy of teacher education is based on a view that teaching is shaped by (at least) the two assertions at the heart of practice outlined earlier in this chapter. As a consequence, the ways in which students of teaching are confronted by deeper understandings of practice and the manner in which teacher educators create the conditions and experiences for so doing, offers insights into the scholarship at the heart of a pedagogy of teacher education.

Teacher educators, like other members of the academy, are expected to be knowledge producers in their field. Such knowledge production becomes complicated when teaching is understood as problematic because it is inevitable that a simple

linear cause and effect model cannot offer 'the solution' to questions about practice – yet that may well be what drives the initial hopes and expectations of students of teaching. However, when researching practice is the basis for informing production of knowledge about practice, real opportunities emerge that are responsive to the problematic nature of teaching and begin to illustrate new ways of understanding what it might mean to be informed about, and to develop, expertise. Central to a pedagogy of teacher education is inquiry into pedagogic experiences in order to see into, and better understand, the complexity of teaching and how that influences the nature of learning.

In order to open up for scrutiny the nature of teaching *and* learning, teacher education practices must be serious sites of inquiry. That means that how a teacher educator creates conditions for learning about teaching, what those conditions are and how they influence (or not) understandings of practice, must be central to how knowledge production is not only developed and understood, but also enacted. If that is the case, then the documenting, analyzing, learning from and use of such knowledge and practice in teacher education offers a window into scholarship. Embedding such an expectation in teacher education is what is needed to advance a scholarly agenda:

> I believe it is important for those of us who say we want to prepare teachers who are reflective practitioners to make more visible to our students our deliberations about our own work. They can then see 'up front' how a teacher experiences the inevitable contradictions and tensions of the work and goes about trying to learn from his or her teaching experience. … We all know that both teaching and teacher education are much more complex than they are often made out to be. We ought to let our stories about our work as teacher educators appear to others to be as complex as they really are. (Zeichner 1995, pp. 20–21)

What is difficult for students of teaching (and teacher educators) is that to learn simultaneously as observers and participants, in and through their shared pedagogic experiences, is challenging. One response to that challenge is through Mason's (2002, 2009) conceptualization of 'noticing'. Mason suggests that a situation may not *really* be seen until it is seen differently, and doing so can be very difficult when participating in roles that are continually changing, i.e., teacher, learner, participant and observer. The difficulty of the situation is further exacerbated when considering the differing perspectives of experts and novices (all shaped by needs, expectations, wants, etc.). Mason captures the essence of this argument when he explains that:

> To notice an opportunity to act requires three things: being present and sensitive to the moment, having reason to act, and having a different act come to mind. Consequently, one important aspect of being professional is noticing possible acts to try out in the future … A second important aspect is working on becoming more articulate and more precise about reasons for acting. The mark of an expert is that they are sensitised to notice things which novices overlook. They have finer discernment. They make things look easy, because they have a refined sensitivity to professional situations and a rich collection of responses on which to draw. Among other things, experts are aware of their actions … (Mason 2002, p. 1)

When a teacher educator is able to: create conditions for learning about teaching in which the competing learning agendas are able to be recognized, managed and

negotiated; model how, as an expert pedagogue, those challenges are managed and responded to in action; and, use the shared pedagogic experiences of students of teaching and teacher educators together as the site for inquiry, development and refinement of knowledge *and* practice of teaching, the scholarship of teacher education, genuinely stands out. In adopting such a teacher education stance, the problematic nature of practice is clear, accessible and explicit, and the professional learning as a result of thoughtful inquiry is able to be used to shape and inform not only what is done, but also how and why, thus giving insights into pedagogic understandings that go well beyond teaching as telling and learning as listening.

Such scholarship in teacher education needs to not only be captured and portrayed, it needs to be a driving force for conceptualizing the nature of teacher education itself. If that were the case then teacher education might be more able to develop professionals who could see beyond teaching as telling and learning as listening; professionals who really can lead educational change and make a difference through the quality of the teaching and learning fostered as a result of their professional endeavours.

16.4 Conclusion

This chapter set out to illustrate that to understand scholarship in teacher education, teaching itself needs to be much better understood and valued. In order for that to be the case, there is a need to recognise and respond to the complexity of practice in ways that acknowledge the sophisticated knowledge, skills and ability that underpin expertise in teaching. Quality is derived of better aligning teaching intents with learning outcomes and that requires teachers to be inquirers into the pedagogic experiences they create for, and with, their students; the same must apply in teacher education.

The knowledge which underpins practice is a key to accessing the nature of quality in teaching and learning. Teacher education should rightly be the beginning point in making teachers' professional knowledge of practice clear, articulable, useable and meaningful in, and for, the work of teaching. In so doing, scholarship in teacher education then is not only able to be recognized, but more importantly, enacted.

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