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# Improving the Quality of Teaching and Learning: Lessons Learned as a Teacher Educator

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## Abstract

Using self-study methodology, this paper offers 15 lessons learned over 3 decades as a teacher educator. Set in the context of recent teacher education literature, the lessons are offered with a view to improving the quality of teaching and learning in teacher education classrooms as well as in school classrooms, thereby contributing to the sustainability of the activities of teaching and teacher education and to the quality of learning in both contexts.

**Keywords:** Teaching, learning, self-study, sustainability, learning from experience, thinking pedagogically

Many individuals who move from a successful teaching career into pre-service teacher education do so with visions of improving the quality of teaching and learning in the classrooms of those who will become teachers. Recent studies (Bullock, 2009a; Dinkelman, Margolis & Sikkenga, 2006a, 2006b; Ritter, 2009) indicate that the move from successful teacher to successful teacher educator is more complex than commonly assumed, as teaching people to teach a subject requires different skills and perspectives than learning that subject. Despite the rhetoric of change and the ongoing quest for improvement in the quality of teaching and learning in schools and in universities (Bain, 2004), teacher education program structures seem to be remarkably stable and similar across state and national boundaries. Returning to the secondary school classroom 20 years ago dramatically altered my perspectives on teacher education (Russell, 1995) and set me on course to contribute to the self-study of teacher education practices (Loughran, Hamilton, LaBoskey, & Russell, 2004).

Data for this paper are drawn from self-studies of my own practices in a method course and in practicum supervision that led to significant improvements in formal evaluations and personal satisfaction. From these data I have extracted insights that were far from obvious to me when I began teaching people to teach. Under four main headings, this paper presents 15 lessons learned as a teacher educator and discusses them in the context of recent teacher education literature (Darling-Hammond, 2006; Heibert, Morris, Berk, & Jansen, 2007; Loughran, 2006). The four headings are *principles of teaching and learning*, the importance of *individual relationships*, the importance of *listening to others and self*, and the *challenges embedded in our system of education*. Initial teacher education is often criticised both internally (by our students) and externally (by schools and politicians). A sustainable teacher education profession needs to work to meet and reduce those familiar criticisms and the following lessons are offered as a contribution to that goal.

## Principles of Teaching and Learning

1. Learning to think pedagogically is at the core of learning to teach, just as learning to think mathematically is at the core of learning mathematics.
2. Teachers new and old are unlikely to adopt new teaching procedures unless they have experienced those procedures themselves and analysed the effects on their own learning.
3. Principles of good learning are essentially the same for adults and for children. Crucial elements include engaging and challenging experiences, developing metacognition and addressing explicitly what students already know.

4. Reflective practice involves much more than everyday meanings of the word *reflection*. Teacher educators need to teach people how to reflect and model their own reflective practices explicitly.

### *Lesson 1*

As a teacher educator, it is easy to assume that a method course should focus on ensuring that those learning to teach understand fully and accurately the content of the curriculum they will teach. It is also easy to assume that recommended or best practices will be adopted by new teachers once they have been made aware of those practices, typically by reading about them and being told. It took many years of listening to those learning to teach and reviewing my own practices as a teacher educator to realise that the central focus of a pre-service teacher education program should be on developing the ability to *think pedagogically*. Teachers teach subject matter to their students; teacher educators must teach their students what it means to think like a teacher. While this always involves working with the subject matter of the curriculum and various disciplined perspectives on education itself, analysing the relationship between teaching and learning in disciplined ways does not come naturally. Developing the ability to think pedagogically must begin in pre-service teacher education, to initiate a perspective that will develop over a career. Books such as Loughran's (2010) *What Expert Teachers Do* provide excellent support for encouraging new teachers to think pedagogically.

### *Lesson 2*

Most teacher educators are aware of Lortie's (1975) concept of the *apprenticeship of observation*, which entered the literature just before I began my work as a teacher educator in 1977. The phrase has a certain initial plausibility, as we have all observed our own teachers through countless hours of schooling. Because pre-service teachers have little or no experience of teaching, it is easy to assume that they are empty vessels waiting to be filled with the wisdom of our own teaching experiences. After far too many years, and thanks to the growing attention to the importance of working with what children already know, I began to understand that telling people new ways to teach has minimal impact on how they teach. Only by experiencing new pedagogical approaches personally and then analysing those experiences systematically can we begin to overcome the tendencies of all teachers and teacher educators to teach as they were taught.

### *Lesson 3*

The literature of adult education often seems distinct from the literature of primary and secondary education, yet virtually every principle of adult education seems to contain important messages applicable to how we teaching in primary and secondary schools. Learning seems most likely to occur when the teaching that students experience challenges and engages them, considers what they already know in order to develop more complete understandings, and helps them to understand *how* they are learning. In this UN Decade of Education for Sustainable Development (2005-2014), the importance of the quality of learning in school classrooms and teacher education classrooms is increasingly obvious: 'Education for sustainable development aims to help people to develop the attitudes, skills and knowledge to make informed decisions for the benefit of themselves and others, now and in the future, and to act upon these decisions' (<http://www.unesco.org/en/esd/>, ¶1). 'Sustainable development is seeking to meet the needs of the present without compromising those of future generations. We have to learn our way out of current social and environmental problems and learn to live sustainably' (<http://www.unesco.org/en/esd/>, ¶3).

#### *Lesson 4*

My understanding of the concept of *reflective practice* (Schön, 1983) was driven by opportunities to hear Schön lecture in 1984 and 1987. His lectures inspired me to build my research agenda on the idea of reflective practice and to focus my research on teacher education generally rather than on science education. Reflective practice goes well beyond everyday meanings of *reflection* and focuses on learning from professional experience. Before we can teach others the meaning of reflective practice, it is essential to understand reflection from the perspective of our own professional learning from experience as teacher educators.

#### **The Importance of Individual Relationships**

5. The professional relationship between teacher candidate and teacher educator is crucial to the teacher educator's influence on how a teacher candidate will teach.
6. Each teacher candidate takes a unique set of messages from the shared experiences of an education course. The single most important influence on what candidates take away is the tacit knowledge of teaching and learning that they bring from their many years watching their own teachers.
7. Continuing the teacher educator-teacher candidate relationship into the early years of teaching can be productive for individuals who are willing to write about their early teaching experiences.

#### *Lesson 5*

Bain's (2004) discussion of how the best university teachers treat their students led me to renew my attention to the importance of my professional relationship with each person I teach. In September, 2009, I did something I had never done before: I invited each student to meet with me for 20 minutes between the first and second class. My greatest shock was arriving at that second class and realising how different it felt from the first, because I knew each person's name and something about her or him. That early initial meeting paid rich dividends throughout the course.

#### *Lesson 6*

Bullock's (2009b) study of the learning experiences of five candidates in my physics method course in 2007-2008 forced me to abandon the easy assumption that, if all students experienced the same classes, then they all left with roughly the same messages and understandings. Data from four focus groups and 20 individual interviews, conducted at intervals during an 8-month preservice program, forced me to realise that each individual arrives with a unique set of assumptions about teaching and learning and leaves with a similarly unique set of understandings in response to the learning experiences that I create in my classes.

#### *Lesson 7*

Teacher education had a long history of asking student teachers to keep journals of their experiences; journals were replaced by reflections when reflective practice entered our vocabulary. Students in my classes vary enormously in their willingness to write, but those who do write seem to benefit from new insights and from creating a record of their development as a teacher. A student who took a teaching position outside Canada began writing in a blog that we had created to record practicum experiences. By the end of the first year of teaching, more than 50,000 words had been entered. This remarkable correspondence showed me the importance of extending to all students an invitation to share experiences in

the early years of teaching, particularly if a productive professional relationship has been established during the pre-service program.

### **The Importance of Listening to Others and Self**

8. Listening to teacher candidates' experiences of education courses and practicum teaching is crucial to teaching them effectively.

9. Self-study of personal teaching practices, or action research, is the only way to know how one is influencing one's students and thus is central to improving one's teaching.

10. Writing about one's teaching and learning is a powerful way to document and understand one's development as a teacher or teacher educator.

#### *Lesson 8*

Those who begin a teacher education course have spent many years in schools. As Lortie (1975) concluded, they know a great deal about what teachers do and what students do and do not do in response to teachers' practices. If it is important to build on what students already know and if each individual is unique, then strategies for listening are crucial. We say that we learn from experience, but we also know that not all experience is educative in a positive way.

#### *Lesson 9*

I was fortunate to be a founding member (1993) of the Self-Study of Teacher Education Practices special interest group within the American Educational Research Association and a co-editor of the *International Handbook of Self-Study of Teaching and Teacher Education Practices* (Loughran, Hamilton, LaBoskey, & Russell, 2004). My bias for the use of this research methodology by teacher educators is strong. It is too easy and natural to make assumptions about our teacher education practices that are inaccurate and misleading. Self-study is a powerful way of listening to ourselves and our students to assess our practices on the basis of evidence.

#### *Lesson 10*

Building on Lesson 7, writing about our teaching is a powerful strategy for recording and interpreting experiences as a teacher educator or as a new teacher. Many seem to find writing difficult, often for lack of time. My most successful personal experience of writing about my teaching occurred in the second year that I took myself back to the secondary school physics classroom (Russell, 1995). In the first year, there really was no time, as I struggled to learn the details of a new textbook and to recall the challenges students faced studying physics for the first time. In the second year, daily writing proved to be a powerful way to plan the next day's lesson while also maintaining a trail of highs and lows that I could revisit. Self-study also calls for writing about how we teach and how our students respond.

### **Challenges Embedded in our System of Education**

11. Sending teacher candidates to schools for practicum experiences and sending faculty to observe them does not establish partnership or collaboration with schools.

12. Despite rhetoric to the contrary, the practicum is not a setting for experimentation and risk-taking. The more appropriate setting is the teacher education classroom, where the teacher educator can explicitly demonstrate experimentation and risk-taking.

13. Teacher education tends to pay greater attention to the content of the school curriculum than to pedagogy, yet how teachers teach is at the heart of the changes many teacher educators would like to see in schools.

14. Many teacher educators seem unaware of or inattentive to research in teacher education.

15. If teachers at all levels of schooling do not share their pedagogical thinking and encourage students to explore the nature of learning, then we will continue to produce members of society, including politicians, who fail to understand the complexities of teaching and learning.

#### *Lesson 11*

This lesson may be self-evident but it still seems important to state it. We have a long history of schools and teacher education institutions criticising each other without understanding the contextual factors that make it difficult to understand each other. Universities are seen as theoretical and idealistic, while schools are seen as reluctant to adopt best practices. The practicum is a critical element of any teacher education course and school-university cooperation is essential, but partnership and collaboration require much more than requesting and providing practicum places. LeCornu and Ewing (2008) provide helpful insights on this topic.

#### *Lesson 12*

The idea that one first ‘learns’ an idea in a classroom and then attempts to put it into practice is so familiar that it is difficult to realise how many elements of a teacher education program embody that perspective. My growing attention to the ways in which experience has authority (Munby & Russell, 1994) in the development of professional knowledge have moved me to the view that little educational theory can have engaging and productive meaning prior to teaching in a classroom. The practicum can quickly become a place to please the experienced teacher to whom one is assigned, not a place to take risks with novel practices. Heibert et al. (2007) suggest perspectives to help the practicum experience develop the ability to think pedagogically.

#### *Lesson 13*

Lesson 1 stresses learning to think pedagogically as a central feature of the coherence we try to develop across the many subjects in a teacher education program. New teachers face the dual challenge of understanding the content they are expected to teach as they also try to develop and refine their teaching practices in order to engage and challenge students. I believe that most teachers find that it is only by teaching topics several times that they come to fully understand what they are teaching. In the absence of a focus on learning to think pedagogically, it is only too easy to focus on curriculum content rather than on the complexities of mastering and judging the value of new pedagogical approaches.

#### *Lesson 14*

Most teacher educators are appointed not for expertise in teacher education generally but for expertise in one of the numerous sub-fields of education. Many teacher educators seem to complete Ph.D. study without even an introduction to research on teacher education. My own colleagues seem to find it difficult to come together to discuss issues associated with how one learns to teach, perhaps because of a stronger loyalty to a field within education. This lack of attention to broad teacher education issues makes it difficult to build and maintain a coherent teacher education program.

#### *Lesson 15*

Recalling Lortie (1975), it is important to recognise that every adult who has attended school has developed expectations for how teachers should and should not teach. This point helps to explain why parents are often displeased to hear about teachers attempting unfamiliar approaches to learning. Perhaps because our own teachers never explained how and why they

were teaching us in particular ways, teaching tends to be seen as an easy activity that requires little prior thought or subsequent analysis. Loughran (2006) argues for the importance of making pedagogy explicit within teacher education. Until metacognitive strategies become part of everyday teaching and teacher education, we are ensuring the stability of teaching and learning practices that are so often criticised as inadequate.

These lessons from personal experience suggest talking points for both new and experienced teacher educators who are concerned to improve their own teacher education practices, with a view to improving the quality of teacher candidates' professional learning and the quality of their subsequent teaching and their students' learning. These are lessons learned from the self-study of personal experience as a teacher educator. As such, their full meaning may be realised only in relation to firsthand experiences as a teacher educator, and thus they are not intended as advice for those about to begin a career in teacher education. They may be more useful as a framework for reviewing the development, over time, of one's own professional knowledge as a teacher educator.

The activity of developing lessons learned from many years of professional experience has been a powerful learning experience in its own right. Once the individual lessons were formulated, grouping them into four broad categories generated by induction the four domains that deserve our continuous attention: principles of teaching and learning, the importance of individual relationships, the importance of listening to others and self, and the challenges embedded in our system of education. All 15 lessons are offered in the spirit of encouraging sustainability by helping to improve the quality of teaching and learning in teacher education programs and, as a consequence, the quality of learning of all students in their school classrooms.

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