

RADICAL PROGRAM CHANGE IN PRESERVICE TEACHER EDUCATION: WHAT AND HOW WE LEARN FROM PERSONAL AND INSTITUTIONAL EXPERIENCE

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INTRODUCTION

This paper offers a selective and personal interpretation of what we know and how we know it as teacher educators, with special attention to the need and prospects for significant change. This account is influenced by my longstanding interest in how preservice teachers learn from experience and relate that experiential learning to what they learn in education classes. This account draws on Schön's (1983) contrast between the epistemology of technical rationality (on which most schooling is based) and the epistemology of reflection-in-action. The data for the argument are my personal account and interpretations of events and personal experiences when my own faculty of education made a radical program change in preservice teacher education.

During almost 25 years of work in preservice teacher education, four books have provided fundamental perspectives for my work and for my own efforts to learn from the professional experiences of teacher education: Sarason (1971), Barnes (1976), Schön (1983), and Baird and Northfield (1992). Sarason directed me to the patterns embedded within the school-and-university culture, Barnes placed teaching on a continuum from transmission to interpretation, Schön argued that professional learning requires its own epistemology, quite different from that of the school, while Baird and Northfield documented how teachers learned from the experience of changing their teaching. As I have drawn on these perspectives as they became available, I have also made particular efforts to listen to my students as they were learning to teach. This included paying particular attention to what we commonly refer to as "bridging the gap between theory and practice."

Schön's (1983) alternative epistemology of professional knowledge-in-action has figured prominently in my own research since 1984. Today, more than 15 years after his work was published, it remains my personal conclusion that research in teacher education has largely ignored the fundamental implications of Schön's work. Publications as recent as Berliner's (2000) personal response to those who criticize teacher education indicate clearly that teacher education research and practices are still fundamentally grounded in the traditional epistemology of the school and university, and that teacher educators rarely speak of their own learning from experiences of teaching and research.

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DATA: PERSONAL EXPERIENCE OF RADICAL PROGRAM CHANGE

For its entire history from 1968 to 1997, the Faculty of Education at Queen's University offered an eight-month post-degree preservice teacher education program on a familiar and traditional model: 19 weeks of university classes, interspersed with nine weeks of practice teaching in blocks of two or three weeks' duration. Following a pilot project in 1996-1997, radical change occurred in 1997-1998: After a week's orientation, candidates were in schools, in cohorts, from the first day of school in September to the close of school in December, with a two-week return to the university near the midpoint of this "early extended teaching experience." Weeks of university classes in the period January to April were punctuated by a three-week "alternate practicum" in a non-school educational setting. The new program structure concluded with four additional weeks of teaching in May in a school of the candidate's own choosing. The most radical feature of the change was a much longer practicum that began on the opening day of the school year. Those learning to teach were seen as teachers, not as transient late arrivals, and those learning to teach were immediately focused on and supported in their own learning from experience.

This description glosses over many important details to go straight to the point: Most of the teacher candidates, who had been well supported as they learned from experience, seemed quite positive about the program's structure. Perhaps their major criticism was the inability of the classes that followed the early extended experience to "deliver the stuff" that their extensive experiences led them to expect. Yet before the four-week teaching block in May was complete, a faculty retreat had concluded that it was essential to limit the program to eight months and to return to a structure that began with classes at the university. The radically changed structure persisted for a second year (1998-1999) only because that retreat came too late to alter the structure for the following year.

I have described these experiences in some detail in recent papers (Russell, 1999, 2000). It is important to stress that I make no claim that my colleagues at Queen's share or even recognize my interpretation of the personal and institutional experiences of radical program change; here I speak only of my own interpretations. I drew from the experience the following generalizations, either as new insights or as statements with new and more complex meanings grounded in the experience of change.

- When teachers experience radical change without support, they often experience "pedagogical pain" and naturally seek to reduce that pain. (We had provided strong support for those learning to teach, but we neglected to provide support for faculty who had to adapt their teaching to individuals with extensive experience.)
- The voices of those who are actually learning count for very little in assessing the effects of radical program change.
- "Teaching is telling," and every teacher (and teacher educator) has a "default teaching style" (Finkel, 2000, p. 160) unknowingly constructed from and sustained by hundreds of images of teachers past, teachers whose approach is best characterized as "transmission" (Barnes, 1976).
- "Teaching is telling" is the epistemological essence of the university and the school. We teach that which can be shown to be true, and experience is largely irrelevant and at times inconvenient in the teaching-learning process.

“Technical rationality” (Schön, 1983) is the centerpiece of school and university alike, even in professional programs.

- Program structures convey messages to learners that may be even stronger than those conveyed more explicitly by individual teachers, and the school and university have a “default” program structure that creates a rigidity of time and place that makes experience “inconvenient.”
- Compounding the familiar curriculum-foundations split in teacher education, most teacher educators’ first loyalty is to a subject rather than to teacher education itself. Many teacher educators seem far more attentive to the premises of their subject than to those of teacher education.

When the radical new structure of our teacher education program put experience at the forefront, it legitimized learning from experience in ways that were as powerful as they were threatening. A few candidates criticized this sink-or-swim approach, falling back on the default assumption that they were blank slates and needed first to be told how to teach. Over time, as we debated revisions to the radical change (but not the underlying assumptions and premises), I came to realize that shifting the epistemology for those learning to teach may be the most powerful way of enabling them to see the value of a similar shift for children (to constructivism, if you like). Some of my colleagues seemed to recognize this in the reverse way, returning university classes to the front of the program’s structure. This served to reduce their pedagogical pain and to reassert the familiar default epistemology of teaching as telling and the familiar default program structure of telling first and experiencing later.

RELATED LITERATURE: QUESTIONING TRADITIONAL ASSUMPTIONS

A report from the National Academy of Education (1999) contains several novel statements related to the understandings I have developed from the personal and institutional experiences of radical program change. The following quotation, the first of three from the report, rejects teaching practitioners in ways that we know are inappropriate for the teaching of children.

For the most part we have treated the intersection of research and practice as one in which researchers transmit the products of research to practitioners. This situation is ironic, for we know that the transmission model does not work for the education of children. Why, then, do we think that it should work for the education of practitioners? (National Academy of Education, 1999, p. 31)

Later in the same report, the contributors reject an implicit premise of preservice teacher education that new teachers can and should be trained fully before they begin practice (and learn from experience). Because they see clearly the communal norms for teachers in schools, teacher educators often act as though they are capable of protecting new teachers from those norms.

We do understand that the norms of communities of professional practice can stymie efforts to educate teachers to teach differently. The assumption that professionals get trained for their work before they start, and then just do what they have been trained to do, is false. People always learn in their activity, however it is arranged. But their learning does not necessarily develop the complex abilities needed for effective practice. Instead, people can develop

strategies of coping superficially with the requirements of work without personal engagement in the activity. For example, teachers can learn in practice *not* to expect all students to achieve high standards. We must figure out how to organize practice to produce the more desirable outcome of high expectations for all and the sense of efficacy that accompanies it. (National Academy of Education, 1999, p. 75)

Finally, the report alludes to the familiar epistemology of schooling, which it sets within the default model of learning to teach. This view is rejected as inaccurate and inadequate.

The simple model of learning to teach that has dominated both the design of teacher education and the conduct of research on teacher change is that knowledge goes in during teacher education and professional development and then comes out to be used in classrooms. Conventional schooling, from kindergarten through [university], teaches us that knowledge is lodged in textbooks, experts, and people with more experience. It comes in the form of rules, definitions, and facts that are to be remembered, practiced, and applied. Being a good learner means learning the rules well and applying them appropriately.

Such assumptions about learning are at odds with what we know about the role of knowledge in the activities of teaching. We reject the notion that being able to teach competently transfers easily from one context to another. . . Constructing knowledge in the context in which it needs to be used is an essential aspect of teaching, and one must be attentive to the consequences of action and prepared to make speedy shifts of direction. When an appreciation for this kind of deliberate action is absent, the connection between knowing and doing is truncated to the “application of theory to practice” or the enactment of learned technical skills. It is not professional development. (National Academy of Education, 1999, p. 77)

In the bright light of my personal experiences of program change, these three quotations were as refreshing as they were welcome. Perhaps I was not alone in adopting the perspectives that seemed to offer the most productive interpretations of those experiences of change. HOW we teach teachers seems to be both the heart of the matter and the invisible issue.

A PERSONAL AND EXPERIENCE-BASED VIEW OF WHAT WE KNOW AND HOW WE KNOW IT IN TEACHER EDUCATION

Those who work in teacher education programs know, from experience, the complexities of an enterprise that the rest of our culture takes to be somewhere between the trivial and the straightforward. After all, “anyone can teach” and “teaching looks easy.” As I suggest below, perhaps these myths persist because those in their early years of experience rarely find an audience of interested listeners and because teachers at all levels rarely engage their students in discussions of teaching and learning.

Seven case studies from the American Association of Colleges of Teacher Education (Darling-Hammond, L., 2000a, 2000b, 2000c) are reviewed by Vavrus (in press), who

identifies the following as key factors in successful teacher education programs: collaboration, coherent program vision, developmental and multicultural orientations, and strong relationships with local schools. Collaboration, shared vision, and strong relationships with schools certainly were simultaneously the goals and the failures of radical program change at Queen's University's Faculty of Education.

In the following table I present a selective summary of what we know but rarely seem able to enact within the program structures of preservice teacher education. The point of selecting and asserting these is to call attention to the gaps in most teacher education programs between what we know and what we do.

WHAT WE KNOW	HOW WE KNOW IT
The practicum is the most important single element of a pre-service teacher education program.	Virtually every student teacher
All teachers, including teacher educators, have a "default" teaching style of "Teaching as Telling."	Finkel (2000)
Pre-service teacher candidates have high expectations for the practicality of their education courses.	Labaree (1998)
Pre-service candidates can immediately sense contradictions between what is taught and how it is taught in an education course.	Reports from teacher candidates
Education courses may fail to meet expectations both for "degree value" and "practical value."	Labaree (1998)
Research <i>by</i> teachers studying their own practices (action research) has lower status and produces less valuable "knowledge" than formal research <i>on</i> teachers and students.	Richardson (1994)
Exposure <i>to</i> an educational idea does not constitute experience <i>of</i> that idea.	McPherson (2000)
Teacher education programs have "default" educational structures that inadvertently contradict messages embedded in individual courses.	Personal experience
For most teacher educators, a subject area (language, mathematics, sociology, philosophy) has higher priority than teacher education itself.	Personal experience
Pre-service teacher education candidates are not seen as good judges of the quality of the preparation they receive for teaching.	McPherson (2000), Upitis (2000)
Teacher education programs may unwittingly generate such high expectations for good teaching and improving today's schools that they set candidates up for failure.	Bullough, Knowles, & Crowe, 1991)
Learning to teach demands an ability to "learn from experience," yet teacher educators generally fail to understand how this process differs from "learning a subject."	Personal experience
Access to teacher thinking can have significant positive impact on those learning to teach.	Ethell (2000)

Teacher education tends to ignore the integration of theory and practice.	Korthagen et al. (2001)
Experience precedes understanding.	Loughran & Russell (1997)
Teacher educators are no better at judging or changing their personal teaching practices than are the pre-service candidates they teach.	Personal experience

As the American Educational Research Association itself illustrates only too well, we have a massive educational research enterprise that may have become more an end in itself than a means to the end of improving educational practice. The standard message of preservice teacher education programs seems to go something like this:

You are the hope of the future, and we expect you to change what others have not been able to change. Thus we will tell you how to be teachers who do not transmit knowledge but who instead provide experiences from which students can construct meaningful knowledge. Please forgive us if we teach by telling and if we do not pay much attention to what you learn from experience.

Teacher education programs are situated in university contexts where the traditional epistemology of “truth” is the pervasive organizing principle. Schön (1983) characterized this epistemology as “technical rationality” and later argued that there was little hope of progress until universities begin to accept alternative epistemologies (Schön, 1995).

**“EXPERIENCE PRECEDES UNDERSTANDING” (Loughran & Russell, 1997), and
“EXPOSURE DOES NOT CONSTITUTE EXPERIENCE” (McPherson, 2000, p. 91)**

At this point I face the obvious epistemological problem: On paper I can describe personal experiences and expose readers to possible tensions and shortcomings within teacher education, but readers cannot have those experiences themselves. My personal understanding and interpretation of the issues raised to this point are driven in large part by my experiences of radical program change. Exposure to these views is no substitute for experiences that are guided by these perspectives. As in all professional learning, one must experience attempts to change in order to fully understand the reasons for and implications of those changes.

Primary/elementary, secondary, tertiary and professional education are, at their core, grounded in transmissive teaching approaches in which, as Sarason (1971) described them, the relationship of teacher to learner is that of asker to answerer. The teacher, who already knows the answer, seeks that answer from the learner. The predominance of transmissive approaches in schooling helps to explain why virtually every beginning teacher has a “default” teaching style of “teaching as telling” (Finkel, 2000, p. 160). While the early, primary years of schooling may provide a range of first-hand experiences for children’s learning, graduates of high school and university have come to understand (implicitly, but not, of course, explicitly) that most learning does not flow from or relate directly to personal experiences.

If exposure does not constitute experience, and if experience precedes understanding, then substantial indeed are the challenges of moving beyond default teaching styles, of creating alternatives to default program structures, and of shifting our fundamental

way of knowing with respect to teachers' professional learning and development (Munby, Russell, & Martin, in press).

METACOGNITION: ONE WAY FORWARD?

I see little potential for fundamental restructuring of professional education for teaching (Korthagen et al., 2001) until teachers everywhere (including teacher educators) begin to include in their teaching, as a regular characteristic, what Baird and Northfield (1992) in the Project for Enhancing Effective Learning (PEEL) call metacognition—purposeful conversations about teaching and learning intended to enable students to understand and exert some measure of direction for their own learning. Such conversations could serve the valuable function of reminding teachers of the importance of engaging students in, rather than transmitting, the curriculum set out by the state.

One of the first responses by those who are uncomfortable with critiques of transmissive teaching involves their concern that all telling is being rejected from the teaching-learning context. This parallels the discomfort every teacher feels when attempting to enhance or move beyond those default teaching styles that come naturally and with little deliberate effort. Lest I be misunderstood, in any ongoing teaching-learning relationship between teacher and students, there will always be many appropriate places for teaching as transmission and telling. This would certainly be the case when teacher and students are in regular and deliberate conversation that allows both to identify publicly the limits of telling and that reminds all of the importance of the many appropriate places for learning from experience in teaching and learning.

There are many reasons for suggesting that change will not and cannot occur until the teaching-learning process is infused with open conversations about learning. Culturally, learning is seen as simple and straightforward, largely because most people have little explicit understanding of how they or anyone else learns. If learning is simple, the same must be true of teaching. Virtually every new teacher I have known has been drawn to teaching with a goal of making classrooms places where students do more *thinking* and *understanding*, and less rote memorization. Virtually every teacher educator I have known advocates new teachers being more thoughtful (and “reflective”) about their teaching, yet new teachers often demand that certain topics be “covered” because they are consistent with the simple view of learning that they bring to preservice teacher education. Somehow, in the classrooms of our schools and universities, including our teacher education classrooms, the big picture is lost and replacing memorization with thinking and understanding disappears from view. I see only one way to break the cycle, and that is in our school classrooms, where future teachers currently fail to develop an understanding of how they learn, long before they consider becoming teachers themselves. If we want to understand more about student difficulties with learning, why should we not ask (and listen to) our students? Yet often they are the last to be asked or the first to be ruled as inappropriate contributors. Certainly, teacher education programs must contribute, but they cannot do the job on their own. It is the successful attention to metacognition in the PEEL project over a period dating back to 1985 that gives me a small measure of hope and encouragement. If thinking and understanding are our goals, for students at all levels and for new teachers in particular, then every teacher

must enrich the teaching process by explicitly helping students become better learners by better understanding their own learning. Inevitably, such efforts will at some point begin to address the differences between learning by being told and learning from experience.

I see little prospect for positive movement beyond the stereotypic experiences of learning to teach until teacher educators themselves understand, through personal experience, the significance of learning from experience in the context of teaching. As Sara son (1996) reiterates, and as my personal and organizational experiences of program change at Queen's illustrate, *until conditions for learning by students and teachers change in tandem, there is little reason to think that teacher education will pay more than lip service to reflective practice and an epistemology of learning from experience.*

EPISTEMOLOGY AND PROGRAM CHANGE

In this paper I have struggled to write clearly about what I have learned from some of the most powerful events and experiences of my quarter-century career in preservice teacher education. We appear to know, from research, a great deal about teachers' knowledge and how it develops, yet our preservice programs persist with practices that conform to the structures of the default epistemology of the university. Here I have tried to extract and label elements that define the broad and taken-for-granted superstructure within which teacher education occurs. Stepping out of one structure and constructing a new one "in action" is complex beyond words and beyond most teacher educators' experiences.

After intense personal experiences of change, including immersion in organizational change that is still far from complete, I see far more clearly the conservatism of our schools and universities with respect to the professional education of new teachers. *We who teach in programs of teacher education seem quite unable and unwilling to recognize or let go of our default assumptions and traditions, and we are more than reluctant to allow ourselves to understand, through the risks of personal experience of alternatives, just how experience can contribute to learning to teach.*

If we cannot engage those we teach in meaningful and open discussions of their learning experiences in a preservice program and in the many years of schooling that precede it, then we cannot and will not see significant changes in how teachers are taught to teach or in how children are taught in schools. *Radical program change at Queen's fell far short of its goals and quickly reverted to less radical features because we did not know how to learn epistemologically from our personal and organizational experiences.*

REFERENCES

- Baird, J. & Northfield, J. (1992). *Learning from the PEEL experience*. Melbourne: Monash University Printer.
- Barnes (1976). *From communication to curriculum*. Harmondsworth, UK: Penguin. [2nd ed., 1992, Portsmouth, NH: Boynton/Cook.]
- Berliner, D. (2000). A personal response to those who bash teacher education. *Journal of Teacher Education*, 51 (5), 358-371.
- Bullough Jr., R.V., Knowles, J.G., and Crow, N.A. (1991). *Emerging as a teacher*. New York: Routledge, Chapman, and Hall, Inc.
- Ethell, R.G. & McMeniman, M. (2000). Unlocking the knowledge in action of expert practitioners. *Journal of Teacher Education*, 51 (2), 87-101.
- Finkel, D. L. (2000). *Teaching with your mouth shut*. Portsmouth, NH: Boynton/Cook.
- Korthagen, F. (2001). *Linking practice with theory: The pedagogy of realistic teacher education*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Labaree, D.F. (1998, Nov.). Educational researchers: Living with a lesser form of knowledge. *Educational Researcher*, 27 (8), 4-12.
- Loughran, J., & Russell, T. (1997). Meeting student teachers on their own terms: Experience precedes understanding. In V. Richardson (Ed.), *Constructivist teacher education: Building a world of new understandings* (pp. 164-181). London: Falmer Press.
- McPherson, S.J. (2000). *From practicum to practice: Two beginning teachers' perceptions of the quality of their preservice preparation*. (Unpublished master's thesis). Kingston, Ontario: Queen's University Faculty of Education. .
- Munby, H., Russell, T., & Martin, A. (in press). Teachers' knowledge and how it develops. In V. Richardson (Ed.), *Handbook of research on teaching (4th ed.)*, Washington, DC: American Educational Research Association
- National Academy of Education. (1999). *Recommendations regarding research priorities: An advisory report to the National Educational Research Policy and Priorities Board*. New York: Author. Retrieved April 23, 2001, from the World Wide Web: <http://www.nae.nya.edu/pubs/reportfinal399.doc>.
- Richardson, V. (1994, June/July). Conducting research on practice. *Educational Researcher*, 23 (5), 5-10.
- Russell, T. (1999). The challenge of change in teaching and teacher education. In J.R. Baird (Ed.), *Reflecting, Teaching, Learning. Perspectives on educational improvement* (pp. 219-238). Cheltenham, Victoria: Hawker Brownlow Education.
- Russell, T. (2000). *Moving beyond 'default' teaching styles and programme structures: The rise, fall, and marginal persistence of reflective practice in pre-service teacher education in the period 1984-2000*. Paper presented at "Making a Difference through Reflective Practices: Values and Actions" [the First Carfax International Conference on Reflective Practice], University College, Worcester, UK.
- Russell, T., & McPherson, S. (2001, May). *Indicators of success in teacher education: A review and analysis of recent research*. Paper presented at the 2001 Pan-Canadian Education Research Agenda Symposium, Québec, May 22-23.
- Sarason (1971). *Revisiting "The culture of the school and the problem of change*. New York: Teachers College Press.
- Sarason (1971). *The culture of the school and the problem of change*. Boston: Allyn & Bacon.
- Schön, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. A. (1995, Nov./Dec.). Knowing-in-action: The new scholarship requires a new epistemology. *Change*, 27, 27-34.
- Upitis, R. B. (Ed.) (2000). *Who will teach: A case study of teacher education reform*. San Francisco: Caddo Gap Press.
- Vavrus, M. (in press). Successful teacher education program in the era of reform: An essay review of *Studies of excellence in teacher education*. *Teaching and Teacher Education*.