

## Coherence and Collaboration in Teacher Education Reform

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Traditional teacher education programs, frequently criticized for ineffectiveness, are changing at several Canadian universities. A range of literature on reform in teacher education suggests that coherence among program elements and collaborative environments are key features of successful reforms. Using a framework of critical analysis, we examined shortcomings of traditional programs and considered some characteristics of alternative approaches, including authorizing prospective teachers' voices and experiences, school-university collaboration, and scaffolded induction into the profession. Without direct attention to coherence in program design and delivery and collaboration among stakeholders, reform efforts seem unlikely to succeed.

L'étude analyse les lacunes des programmes traditionnels de formation à l'enseignement et se penche sur certaines caractéristiques des nouvelles approches, dont la prise en compte des opinions et expériences des enseignants en formation, la collaboration entre l'université et l'école et l'encadrement des nouveaux enseignants durant leur période de probation. La cohérence entre la conception et la prestation des programmes et la collaboration entre les intéressés sont essentiels pour le succès des efforts de réforme.

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Traditional teacher-education programs built on a transmission model often display significant gaps between preparation and practice and between theory and practice, as well as diverse perspectives among faculty members. More successful programs reveal coherence among program elements and an emphasis on collaboration at several levels, including school-university collaboration and scaffolded induction into the profession.

Canadian teacher-education programs are changing, with two-year programs becoming the norm in most provinces. Reforms at a range of Canadian universities tend to occur independently of one another.

- The University of Calgary abolished its B. Ed. programs, moving to a two-year Master of Teaching program that is learner-focused, case-based, field-oriented, and supports self (reflexive) learning (O'Reilly, 2001). Using a Professional Model rather than an Academic Model,

substantial new structures supported the new design, most notably field placement two days per week from the outset of the program to observe rather than to teach, with limited teaching taking place by the end of the first year. The first semester in the second year is field-based; in the final semester students return to the faculty.

- At Queen's University, most school practicum experiences now occur (after three weeks of preparation) in an extended 10-week fall placement, punctuated by two on-campus weeks midway through the practicum. Inquiry is fostered by placing candidates in cohorts within associate schools.
- The program at York University has explored a practicum beginning on the first day of school, with opportunities for reflection and guidance occurring on-campus throughout the fall term.
- The University of British Columbia revised its program with students visiting schools one day each week during the fall term and an extended practicum occurring later.
- The University of Manitoba is developing an inquiry focus for its preservice programs and adopting cohort groupings.
- At OISE/University of Toronto, cohorts are being explored (Beck & Kosnik, 2001).

Each of these developments seeks to reduce gaps between university and school experiences.

Research literature suggests that collaboration and coherence are major principles inherent in successful program reforms, and we explore them in this article. While coherence in program design and delivery and collaboration among partners are desirable, coherence is easily shattered and collaboration is difficult to develop and sustain. Our goal is to stimulate wider discussion of these issues in the context of teacher-education reform.

## METHOD

This article is informed by the authors' respective research interests and shared concerns about the challenges inherent in the design, delivery, and reform of preservice teacher-education programs. Russell's research program has focused on the benefits of early, extended-practicum experiences for preservice candidates. Building on Schön's (1983) work, Munby and Russell (1994) developed the construct of the "authority of experience" that informs the acquisition and use of professional knowledge. Russell (1997) has also pursued instantiating critical reflection in teachers' professional knowledge and practice in his own practice and his students'.

McPherson's (2000) case study of two first-year teachers examined their transition from preservice preparation to earliest teaching. Martin participated in a series of loosely coupled evaluation studies of the Queen's restructured program. Her work focused on collaboration between faculty and field practitioners and on tensions arising from two cultures meeting over a common interest (Martin, Munby, & Hutchinson, 1999; Martin, Munby, & Hutchinson, 2000).

While the Queen's experience of dramatic program reform (Upitis, 2000) has tempered our optimism about systemic change, it has not dampened our resolve to enable prospective teachers to look at their own learning and teaching through critical lenses. Simultaneously, we work to apply that same lens to our own practice and learn from our experience. Our experiences are wedded, for better or worse, to our institution. As we struggled to make sense of stumbling blocks encountered as restructuring proceeded, we found that we required a broader backdrop against which questions about program reform and program delivery could be explored.

This article reflects our effort to create that backdrop using a frame of critical analysis. Segall (2002) succinctly captures a vital distinction: while criticism ends discussion by delivering a verdict, critique attempts to open up dialogue and discourse. Critical analysis can provoke, challenge, and discomfit. Our research methodology involves critical analysis imposed by questions arising from our own teaching and research experiences. Taking these questions to the teacher-education literature reveals coherence and collaboration as two major focal points for understanding both traditional and recently reformed teacher-education programs.

We consider some of the criticisms frequently directed at teacher education that point to some of the inherent difficulties in reform efforts. We argue that unless familiar assumptions, beliefs, and practices are exposed, questioned, and reframed, attempts at significant change will fall short of their goals. We begin by considering features of traditional teacher-education programs before extending the analysis to characteristics of successful reforms.

#### CRITIQUE OF TRADITIONAL TEACHER-EDUCATION PROGRAMS

Despite decades of reform movements, teacher-education programs continue to be criticized for ignoring the voices and needs of teacher candidates, providing and promoting an unrealistic view of teaching, and perpetuating the transmission model of teaching as telling (Cochran-Smith, 2001; Korthagen, 2001). The tenacity of traditional teacher-education

programs is explained by the complex interplay of rival interests: "The snail's pace of change in teacher education is due in part to the numerous stakeholders involved in the formal — and informal — governance of teacher education. . . . In many ways everybody is in charge of teacher education, yet nobody is" (Tom, 1997, p. 7).

When change does occur, it can appear to be piecemeal and disconnected. Fullan (1999) saw overload, fragmentation, and incoherence as a typical state in an educational world where policies are passed independently: "[I]nnovations are introduced before previous ones are adequately implemented, [and] the sheer presence of problems and multiple unconnected solutions are [*sic*] overwhelming" (p. 27). Although Fullan was characterizing schools and school systems, his description applies equally to teacher education, where programs are often subjected to seemingly endless tinkering.

This wholesale adopting of innovations counters the "snail's pace" view of change, consisting instead of an unending series of fads, where "single ideas [are] laid on top of old structures. Such ideas are poorly assimilated and quickly rejected" (Darling-Hammond, 1997, p. 22). Because "schools chew up and spit out undigested reforms on a regular basis," there is a "sense that whatever the innovation, 'this too will pass' — and that it probably should" (Darling-Hammond, 1997, p. 22). Similarly pursuing a "chew up and spit out" metaphor, Griffin (1999) catalogued teacher-education models such as the technique-driven competency movement, the counseling or interpersonal-relations perspective, the "try this" apprenticeship model, and the "think about this" theoretical approach. He contended that few have withstood the test of time and experience. Thus we see a tension between the view that the task has too many heads and too many masters to begin to serve them all and the view that reform is a merry-go-round of ill-conceived attempts.

Criticisms leveled at traditional preparation programs refer to both an ineffective process (how learning occurs) and an ineffective product (what is learned). These criticisms of ineffectiveness are described under the headings of the gap between preparation and practice, the gap between theory and practice, and gaps among faculty members in a teacher-education program.

### *The Gap Between Preparation and Practice*

Although courses have been described as "vapid, impractical, segmented, and directionless" (Tom, 1997, p. 13), traditional programs do have graduates who report feeling prepared for first-year teaching (Kagan, 1992;

McPherson, 2000). However, the illusion of adequate preparation to teach is often shattered when personal experiences of daily teaching inevitably reveal the inadequacies of preservice preparation. The complexity of teaching “quickly challenges the optimism, energy, and idealism of newcomers to the current educational landscape” (Squire, 2000, p. 30). Often this realization comes, as it did with one beginning teacher, in the first few minutes with her first class: “I almost quit my job on [the first day of school]! I will remember that day for the rest of my life. It was so horrible that I almost threw up in class. I felt so overwhelmed, no one knew I was there” (McPherson, 2000, p. 67). This unfortunate initiation into the teaching profession is familiar to many new teachers, creating a survival phase that is accepted in staffroom folklore as “the way we learn to teach” (Calderhead, 1989, p. 49).

When initial idealism and unchallenged images of self-as-teacher meet the daily demands of students, curriculum, and the social culture of the school, beginners often report an inability to cope with many essential elements of the job, including time and classroom management, evaluation, long-range planning, and parent-teacher and peer relationships. One first-year teacher said, “I slowly began to acknowledge that I was qualified only on paper. In spite of the training I had received, I was only at the beginning of a long process of developing skills as a teacher” (LeMaistre, 2000, p. 85). The overwhelming requirements of the profession that one initially felt prepared to enter can generate self-doubt as beginning teachers scramble to understand the requirements of the teacher’s role (Carré, 1993; McPherson, 2000).

The frustrations of being forced to spend the first months of one’s professional life in survival mode can prompt some beginners to dismiss their university courses as “irrelevant, superficial, and even useless” (Olson & Osborne, 1991, p. 341). Zeichner and Tabachnick (1981) described how educational conceptions developed during preservice programs are “washed out” when new teachers are confronted with the daily demands of classroom teaching. This gap between preparation and practice perpetuates the belief that the real business of learning to teach occurs with one’s own students, far from the university’s apparently impractical, theoretical approach to the realities of the classroom (Shapson & Smith, 1999). Consequently, many teachers “believe that they acquired their most important insights on the job and that they could provide an apprenticeship situation which would be more valuable to novice teachers than the instruction provided by professors” (Tom, 1997, p. 59). When teachers later take student teachers into their classrooms, this perception of professional learning can affect teacher candidates in two ways:

- It can perpetuate the divide between theory and practice, between teacher educators and field practitioners.
- It can generate an unrealistic sense of preparedness among beginners who successfully imitate the observable actions of a more experienced teacher without developing a deeper, personal understanding of what it means to teach.

Even an extended practicum within a traditional program, working in schools and with students for months, is not necessarily adequate preparation for the many and diverse responsibilities of full-time teaching. "Exposure does not constitute experience" (McPherson, 2000, p. 91). Practicum situations are created that typically result in candidates being left to "intuit the pedagogical principles underlying effective classroom practice" (Ethell & McMeniman, 2000, p. 87). Unless beginning teachers are challenged to question their images and understanding of their role as classroom teachers, they fail to see past the actions of teaching to the pedagogical foundations that inform the ability to think like a teacher.

When the actual task of teaching one's own class begins, most beginning teachers seem to hit the wall known as the first-year phenomenon, a time of disillusionment, failure, and shattered idealism. Huberman (1993) described this as the survival stage when new teachers experience "reality shock" characterized by "continuous trial and error, self-absorption, [and] the distance between ideals and the daily realities of the classroom" (p. 244). At this point the preservice program is held accountable and widely criticized.

At the core of such criticism is the expectation, by teacher candidates and employers alike, that a full-blown teacher emerges from a preservice program. Beginners are often expected to perform as well as 10-year veterans, sometimes in more difficult teaching assignments than their more experienced colleagues (Calderhead, 1989). Traditional teacher-education programs do little to acknowledge the important effects of experience on professional growth. The inability of traditional programs to prepare beginning teachers with more than an imitative understanding of their role emerges, in large part, from the lack of explicit connections between the actions of teachers and the pedagogical theories that inform practice.

### *The Gap Between Theory and Practice*

Housego (1994) identified the equivalence of a structural fault line separating teacher educators within traditional programs and teachers in the field, leading to a systemic lack of collaboration. She contended that teacher educators often advance research-based rigour as the fundamental

basis of initial teacher education. Therefore they “may be loath to endorse feedback from program graduates to guide their work” (p. 371). However, practising teachers (and preservice candidates) press for practicality. Perhaps the most enduring and detrimental consequence of the ensuing separation of practice from theory is the attitude developed towards educational theory. Beginning teachers’ perceptions of the role of formal theory in their daily teaching range from “if only I had time to think about it” to “the theory learned in training is impossible to put into practice” (Carré, 1993, p. 201).

Similarly, an oft-repeated refrain by teacher candidates is that university courses contain too much theory and real learning takes place in real classrooms during practicum experiences. Consider the responses of two participants in Segall’s (2002) revealing ethnographic study of the perspectives of six teacher candidates in a social studies methods course at a western Canadian university:

Mary: We learned so much more in the short practicum than we did in the whole semester at [the university].... The first semester of this program is just all theory and we need to get more practical. Until we get more practical in the program, the theory will still just be a washout. (p. 155)

Jack: [N]o real learning, I think, takes place until you get into your practicum.... [Instead of] just getting bombarded with all this theory [at the university], I think we should spend more time in the schools so we can apply that theory and so it can become more relevant.... I mean, you need to learn by experience. (p. 155)

Such perceptions influence candidates’ views of what is worthwhile in their university coursework. The courses that focus on what a teacher needs *to do* as opposed to what a teacher needs *to know* take precedence. The litmus test is whether a course is directly applicable to teaching. Thus methods courses and a course on classroom management, instructional planning, and assessment ranked highest on these student teachers’ “relevancy list.” Other courses, like educational psychology, seemed peripheral to actual teaching experiences. Yet these same students later refined their views as they reflected on their experiences as first-year teachers. “I can now make a strong connection to the relevance of these courses, especially in terms of ‘troubled teens.’ . . . At least the ed. psych. courses made one cognizant of the potential for problems with students” (Segall, 2002, p. 22).

Two points arise:

- Preservice candidates flag their most significant and salient courses as those that are about the business of delivering content. After all, they

have spent years being acculturated.

We've seen what teaching is like. We've had 16 years of it, at least, up to this point. Now we want to know how to do it. [We say to ourselves,] "How am I going to control a class of 32 kids and make them learn what I'm asked to make them learn?" So I think we are working with the model of teaching, that, at some level, we're not really actively thinking about. We're working with this model of teachers that we have had in the past [and we say:] "I'm going to do what they did. All I need to know are the tools they used to do that." (Segall, 2002, p. 158)

- Unless and until traditional programs move beyond a narrow instrumentalist approach that emphasizes the "how to," the "what works," and the mastering of the "best" teaching methods (Aronowitz & Giroux, 1985, cited in Segall, 2002, p. 13), prospective teachers will not be able to recognize or challenge their assumptions, talk to their school experiences, consider alternatives, and contextualize theory within practice and practice within theory.

A decade ago Goodlad (1990) pointed to the irony of teacher-education programs repeating the very practices that they criticized, thereby perpetuating the gap between theory and practice. "We found little intellectual wave-making in the programs we studied. The very listening, responding to questions, and participating in teacher-directed discussions that go on in schools . . . characterized almost all of most teacher education programs" (p. 265). Teachers' own school experiences determined their teaching practices. Goodlad continued,

In general, students in teacher education programs did not see teaching as "deliberate action"; they did not think in terms of the ability to use knowledge to inform their actions. "Instead, they seemed to be trying to squirrel away as many specific solutions and techniques as possible against the challenges to come" [Barnes, 1989, p. 19]. The rush to cram it all into the limited time available in teacher education programs appeared to abort the emergence of sustained inquiry and reflection. (p. 265)

Segall's (2002) study a decade later raised similar concerns about knowledge acquisition and knowledge use: "[T]he kind of educative process provided in teacher education will determine whether the understandings student teachers arrive with are also those with which they depart" (p. 165). For education to be more and do more "than it does, teacher preparation cannot assume that either will materialize by providing preservice students educative experiences that reproduce what most teacher education programs believe must be changed in public education" (p. 165).



*Negotiating the Theory-Practice Divide*

Helpful in negotiating this theory-practice divide is Korthagen and Kessells' (1999) comparison of *episteme* (propositional knowledge built on scientific understanding) and *phronesis* (practical wisdom arising out of specific experiences that are complex or ambiguous). Propositional knowledge, the traditional province of the academy, is transmitted. Procedural knowledge, embedded in practice, is developed by deconstructing that practice. Korthagen (2001) argued that theory is attached to both forms of knowledge, yet they are qualitatively different. Where *Theory* (capitalized) is conceptual knowledge (formal academic theory) that is generalized across situations, *theory* (not capitalized) is perceptual knowledge that is particular, personally relevant, and tied to action. Beginning with the concrete experiences of student teachers, *theory* can be interwoven using a circular model of Action, Looking back, Awareness of essential aspects, Creating alternative action(s), and Trial (ALACT).

While candidates are encouraged and guided in using *theory* as a conceptual stepping-stone to understanding and incorporating *Theory* into their practice, most beginners are unable to bridge the gap between the two because they remain stuck in an either/or, practical/impractical mind set. An early inability to understand and integrate theory into practice sets the foundation for the enduring impression unintentionally fostered by traditional programs that "real" teaching is not informed by the university's theoretical coursework and "real" teachers live, work, and learn in classrooms, not in faculties of education.

Segall's (2002) study provides perhaps our clearest account of the depth of the challenge associated with the gap between theory and practice. He set teacher-education programs a complex challenge that has considerable appeal to those who seek coherence as an essential program value. The challenge lies in making theory and pedagogy speak to each other in a dialectical fashion; otherwise "theory becomes no more than a body of (someone else's) knowledge students are required to learn" (p. 157). To realize this dialectic, theory needs to become reflexive, rather than remaining abstract, and turn back on itself (Barthes, 1981, cited in Segall, 2002, p. 157). Segall contends that, if teacher education is to have any kind of transformative impact on student teachers' existing understandings, then the relationship between what prospective teachers learn and how they come to learn it must be interrogated and implicated. Without this kind of backtalk, prospective teachers will not be able to imagine alternatives, let alone enact them in their own practice.

The gap between theory and practice is familiar and longstanding in teacher education and is rooted, in part, in the dominant epistemology of the university, namely propositional knowledge informed by rigorous research. This is helpful in contributing to understanding some of the divisions among faculty members within a given teacher-education program.

#### *Gaps Among Faculty Members Within a Teacher-Education Program*

Pluralism is an expected and potentially positive aspect of the university community, where a range of disciplines and professions must co-exist. Beyond offering a collection of courses, a teacher-education program assumes the “existence of some explicit, unifying framework of theoretically sound and research-supported conceptions of teaching and learning” (Kagan, 1990, p. 49). Members of a faculty of education rarely agree completely, nor would one want them to, on the fundamental premises of a preservice program. However, without opportunities for ongoing dialogue, contention and division can fracture collaboration and undermine coherence.

The publish-or-perish environment of the university, rewarding faculty members for giving primary attention to research, often results in relegating program development, co-ordination, and teaching to the status of poor relations. This focus on selective research interests further distances faculty from one another (and from the field) and perpetuates the production of educational research driven by narrow focus and career advancement. Attending to one’s own best interests does not lead to the internal cohesion needed to sustain effective new teacher-education practices.

Preservice teachers are aware of, and affected by, inconsistencies within their program and dramatically different approaches to teaching and learning on the part of faculty. As a result, they often report experiencing programming that appears fragmented and insubstantial: “Nothing was connected”; “A whole lot of work to keep us busy until we actually go out to the school and learn stuff” (Segall, 2002, p. 40). Compounding this is the perception that faculty members do not talk to one another. As one preservice teacher reported: “They did rubrics in every single class, and a lot of the information was contradictory. We did lesson plans in every single class. It was very repetitious. We did cooperative learning in every class. . . . It would be nice if the professors talked to each other about what they were doing” (Russell & McPherson, 2000, p. 5).

In the absence of a model of collegiality and collaboration in their

preservice program, beginning teachers are ill-prepared to actively participate in “critical collegueship” where they could “engage in open and constructively critical discussions about what they do, or reflect on new ideas, practices, and policies that influence teaching” (Lord, 1994, p. 193). After spending the first few months of her teaching career in isolation, one novice teacher expressed her frustration with her preservice professors: “They don’t tell you how to establish bonds with other teachers and the *importance* of making those connections” (McPherson, 2000, p. 87).

Calls for reform and tinkering with existing programs are not enough. The lack of a unified and collaborative approach to teacher education perpetuates a default model based on “technical rationality” where practice is “instrumental, . . . adjusting technical means to ends that are clear, fixed, and internally consistent. . . . Instrumental practice becomes professional when it is based on the science or systematic knowledge produced by the schools of higher learning” (Schön, 1995, p. 29). The transmission model — teaching as telling—supports this and reinforces the message that teaching is not ultimately grounded in learning from one’s own experiences. Further, this model silences teacher candidates’ voices and lends no warrant to the authority of their experiences.

#### SUCCESSFUL TEACHER-EDUCATION PROGRAMS

Teacher educators who have moved away from the traditional transmission model have begun to transform the face of teacher education (see Cochran-Smith, 2001; Vavrus, 2001). Successful restructured programs are set in a “framework of theoretically sound and research-supported conceptions of teaching and learning” (Kagan, 1990, p. 49). They also take into account the “natural emotional reactions of human beings to the threat of losing certainty, predictability or stability” (Korthagen, 2001, p. 4).

Innovative program design and delivery often proceed from the premise that thinking like a teacher is a process that must be taught explicitly and developed over time, not a process that switches on automatically when students enter a preservice program. Candidates must first comprehend and question the learning-to-teach process from within their own limited and personal perspectives developed over years of observing teachers. While the details of innovative programs differ, similarities include:

- taking candidates’ experiences and concerns as central in discussions that enable them to study their own fledgling practice as they work to see the theory involved in practical decisions,
- creating collaborative environments (within student cohorts, between

school boards and faculties, within university departments, and among teacher educators, trained mentors, and candidates) that model inquiry with and within communities of practice, and

- making explicit what teachers actually do and think in the course of planning, implementing, and evaluating their teaching.

### *The Authority of Experience*

Innovative approaches to teacher education involve faculty members listening to and valuing teacher candidates' histories and experiences to prepare them for the transition from student to student teacher to first-year teacher. These teacher educators do not impose an external finished product in assembly-line fashion; instead, they enter into an interactive process that facilitates personal and professional understanding and growth (Korthagen, 2001; Moore & Looper, 1997).

Zeichner (1995) argued strongly that critical awareness must "grow out of" students' experiences; that their own issues and practices must become the starting place for inquiry (p. 17). He described the process as "inside-out" and "grounded in personal experience" (p. 18). Candidates' experiences are then imbued with authority and their voices acknowledged and validated. Zeichner charted his own course towards instantiating critical analysis and the challenges attached, including making more transparent the inherent dilemmas of practice. Extending the notion of voice, he argued that teacher educators must let their students in on the complexity of teaching and let them hear "our deliberations 'up front' [about] the inevitable contradictions and tensions" that accompany learning from experience (p. 21).

If students are to be actively engaged in their own knowledge construction, their voices must be heard (Cook-Sather, 2002). This can provoke a "conceptualization of teaching, learning, and the ways we study them as more collaborative processes" (p. 3).

### *School-University Collaboration in an Innovative Program*

Collaboration permeates many innovative programs. The initial success of a field-based project in Texas provides one illustration (Wilmore, 1996). A school-based instructional leadership team, including teacher educators, principal, mentor teachers, and a small cohort of candidates, focused on integrating learning and teaching "to directly tie theory to practice" (p. 59). The one-year program was solely field-based with candidates in

schools daily. University faculty taught all courses as seminars at selected public school sites. Additionally, faculty modelled teaching within the mentor teacher's classroom, "putting [their] teaching on the chopping block — not the mentor teacher" (p. 59). Prior to observing their professor's lesson, candidates were led through the strategies and rationale behind the lesson. They then observed, debriefed, and put similar strategies into practice. The mentor teachers were selected experts who volunteered to be prepared for the role. Because of the demands placed on mentors, a team of faculty and mentors interviewed candidates prior to placement. The opportunity to receive year-long, guided practice in different classroom settings enabled beginners "to avoid many of the obstacles encountered by graduates of traditional programs" (Wilmore, 1996, p. 62). This successful project was expanded to become the only format for teacher education at the University of Texas (Arlington). Not all restructured programs take collaboration to this level, but successful ones do explicitly provide multiple opportunities for collaborative enterprise.

*From "Drop and Run" to Carefully Planned New Teacher Induction*

From a variety of perspectives, the traditional "drop-and-run" view (where whatever was learned in a seemingly irrelevant program is quickly left behind once real classroom teaching begins) of the transition from preservice program to first classroom teaching requires careful rethinking. In both Canada and the United States, some jurisdictions have established deliberate induction practices, addressing how experience informs practice. Just as restructured preservice programs attend to a candidate's beliefs, understandings, and experiences within a collaborative setting, so successful induction programs set expectations and assign teaching responsibilities collaboratively in accordance with a novice's level of experience and pedagogical knowledge. Mentored teachers report a smoother entrance into the profession. Moving quickly beyond survival mode, they integrate reflective practice into their teaching, reporting higher morale and a stronger commitment to teaching. They exhibit lower stress levels and are less likely to leave the profession after the first year or revert to default teaching practices in future years (LeMaistre, 2000; Scott, 1999; Wiener, 1999).

In the most successful situations, mentors are trained and compensated for their time, with the cost often recovered in subsequent years in a lower teacher drop-out rate and reduced recruitment costs (Evertson & Smithey, 2000; Feiman-Nemser, 2001). While the presence of mentors can positively

affect a novice's initial encounters with classroom life, full-scale induction programs move beyond the concept of surviving to thriving in the first years of teaching. Grimmett (1998) described one successful internship program:

Teachers spend their first year of teaching as an intern (a position with reduced pay and workload that is analogous to architects' and lawyers' articling or medical practitioners' residency) and are required to conduct research into the dilemmas of practice they encounter on entering full time the social and political context of schools. (p. 262)

During induction, the research component maintains a link between novice teachers and their professional program. Jambor, Patterson, and Jones (1997) reported similar success with a program in Alabama in which new teachers were given a reduced salary (but full benefits) and treated as interns learning on the job. In this program, administrators used the reserved monies to fund mentor programs and support collaborative opportunities among university, school district, and the business community. Results from this program indicate only 10% attrition from the profession, in contrast to the U.S. national average of 40%.

By taking seriously the learning needs and potential of beginners, these programs lay the foundation for developing proactive practitioners who can become engaged in and gain control of teaching-learning situations, share in policy-making decisions, conduct reflective and self-renewing practice, and collaborate with colleagues. Providing beginners with supported induction experiences is a critical first step if such programs are to move beyond the concerns of the novice to understand the moral, social, and ethical issues inherent in their interactions with students and to develop high expectations for student achievement and their own professional growth (Zeichner, 1996). There is little hope for future professional development if the beginner takes early flight or becomes socialized into the teaching profession as one who works in isolated and unreflective practice.

## CONCLUSION

Traditional models of teacher education appear to reinforce and perpetuate many degrees of separation: between preparation and practice, between theory and practice, and among faculty. When the transition from teacher education to full-time teaching responsibility occurs, graduates often feel unprepared and blame the program. When a transmission model remains at the heart of a program, change is ornamental rather than fundamental.

Tinkering with existing programs without examining their foundations appears to produce little significant change in graduates' perceptions of their program's efficacy, reinforcing a model of training rather than education. Notable for their relative absence are the voices of candidates.

We have argued that the ways in which traditional teacher-education programs are designed, structured, and presented can unwittingly perpetuate the very gaps they seek to eliminate. The issues are familiar: the relationship between coursework and practicum experiences, the dissonance between an epistemology of knowledge and an epistemology of practice, the gap in education classes between what is taught and how it is taught, the tension between academic rigour and relevance, the level of support for self-directed and reflective learning, and the extent of genuine partnerships between schools and universities. Despite the familiarity of the issues, solutions to address and redress them remain elusive.

Challenges to the successful restructuring of preservice teacher-education programs include the following:

- Schools and universities are organizations built on a conservative epistemology. They demonstrate a complex interaction of existing practices and diverse assumptions about the nature and purpose of teaching and learning. As such, they do not change easily. Reform of preservice teacher education is widely sought but rarely achieved.
- Without exposing and exploring the dialectic between theory and pedagogy and experiencing teaching as transformation, challenges to the status quo of teaching as transmission will be unsuccessful.
- When policymakers impose external standards and requirements for testing and reporting, like teacher tests for certification and provincial tests to measure student performance on standardized curricula, they run the risk of removing from schools and education faculties what little incentive remains for development of meaningful internal standards for quality in teaching and teacher education.

Schön (1983) described the varied topography of professional practice in terms of the "high, hard ground" of technical rationality and the "swampy lowland" that defies technical solution (p. 42). Using the lens of critical analysis, Segall (2002) advocated reading teacher education as "messy text" (p. 170), thereby opening up discourse rather than shutting it down. Working in the "swampy lowland" with "messy text" flies in the face of positivism and technical rationality. This requires reordering what is taught and how, as well as reframing what constitutes knowledge. This is unsettling. Our experience with dramatic program reform and

restructuring showed us that even when something like coherence in program design and delivery was achieved, stakeholders' varying views and vested interests can erode, even shatter, that confidence.

Coherence within a program and collaboration at many levels are emerging as key focal points when considering why traditional programs have remained entrenched and where successful reforms diverge from tradition. Attending to the voices of those learning to teach can be a promising way to assess the quality of preservice preparation and to enable prospective teachers to attend to the voices of their students. The ultimate focus must always be on the quality of learning for each school's students, and this focus can become central when teachers experience coherence and collaboration in their preparation and in their daily professional lives.

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