# Learning To Implement and Evaluate a Field-Based Teacher Education Program

## By Hugh Munby

#### Introduction

The articles in this issue have told a complex story about a field-based teacher education program, a program that arose from restructuring of an existing program. Part of the story is about the intellectual underpinnings of the restructured program. Another part concerns implementing a pilot program while the former program was still admitting students. Still another describes an approach to evaluating a program, using what we have called a series of loosely coupled studies. The central character in each strand of the story—the restructured teacher education program—was novel at the time these articles were drafted. The studies began when the pilot program did, in the fall of 1996.

It is now the fall of 1998 as I write these concluding words, and it will be 1999 before they are read in the pages of *Teacher Education Quarterly*. Neither the

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restructured program nor the evaluation studies have stood still over the two years. The studies were transformed into papers, the papers revised and presented at conferences, revised again, submitted for publication, and then further revised. And in 1997-1998, a second set of loosely coupled evaluation studies was initiated because the restructured pro-

gram, modified to account for concerns raised in the pilot, was fully implemented in the fall of 1997. Now that the new program has been running for a year, there are data and experience that can be applied to its improvement. So the program accepting teacher education candidates as I write is different from the one that enrolled candidates in fall 1997, and the program enrolling candidates in fall 1999 will present further modulations. As with all evaluation studies, ours became dated when the target moved. Thus the stories offered in this issue of *Teacher Education Quarterly* do not have endings as such, but continuations. This final article is the occasion for me to reflect on how the stories unfolded so that I may describe what we have learned about program implementation and evaluation.

The first story is about the implementation of the full program during 1997-1998. Here the reflection is upon the profundity of change. Specifically, the positive experience of those associated with the pilot may have led us to underestimate the amount of change required by all of us when the full program was implemented. The second story is about context in 1997-1998. Politically motivated job action by Ontario teachers during the fall practicum was unexpected and provided the Faculty of Education with a sharpened sense of how the program relied upon the understanding and good will of colleagues in schools. The third story is about evaluation. The idea of a series of loosely coupled studies was retained for the full implementation (1997-1998). But circumstances demanded that the studies themselves be modified. Despite the rather dreary forecast implicit in these three stories, the evaluations themselves were positive—the fourth story.

# The Profundity of the Change

Early in this issue, our dean (Upitis, 1999) explains how the restructured program differs from its predecessor with its extended practicum, its school-based courses, and its emphasis on learning in, by, and from experience. The changes go considerably further than introducing new components, removing others, and rearranging the remainder. The major changes are the result of recognizing the relevance of a different epistemology in teacher education, an epistemology that acknowledges the distinctiveness of the knowledge of action and its acquisition (Kessels & Korthagen, 1996; Munby & Russell, 1998). It is fair to say that those who were associated with the pilot of the new program understood the fundamental difference or at least were committed to it: faculty who taught in the pilot adapted their own teaching to meet the changes, and teachers in associate schools accepted their expanded role in teacher education generally with enthusiasm.

With committed and informed faculty and school personnel working with a small group of teacher candidates, the pilot program had every chance of success. A consequence of this is that one can lose the sense of how profound the change is and thus of how much change this demands of our teaching. Several meetings and a two-day in-service workshop were held for those not associated with the pilot

program. But these activities could never completely prepare them for the first full year of implementation and for how the differences in the program would affect instruction.

Two examples illustrate how the approach of the restructured program plays out differently in instruction. During the first year of full implementation, we received complaints from associate teachers that our teacher candidates were not as well prepared to write lesson plans as they had been in the previous program. (Presumably, this had been well covered in the past when the first practicum followed six weeks of on-campus coursework.). As always, each story has more than one side. From the perspective of the program's theoretical orientation, lesson planning can be shown to candidates but will not be learned until they attempt it. On this view, the program does not expect our associates to "teach" lesson planning, but to show how they do it and then to encourage candidates to try it, and so on. From the perspective of coursework, there is an expectation that something about lesson planning is introduced in the August orientation week prior to candidates entering their extended practicum placements. From the perspective of learning (and of being realistic), so much happens in the August week orientation that we should not be surprised if candidates are unable to take everything on board. And from the perspective of some of our associates in schools, we at the Faculty of Education are seen to have failed to prepare our candidates appropriately.

As a result, some of our associates undertook to teach lesson planning and resented being put in the position of having to do this. Successful implementation of the restructured program depends not simply upon the cooperation of associate teachers within associate schools. It also depends on the associates' understanding the role of experience in teaching our candidates how to teach. It is far harder to communicate this to staff in over 100 schools than to staff in the 10 schools involved in the pilot.

Similarly, not all instructors at the Faculty of Education were prepared for the differences that the new program might demand of their teaching and of their courses. A personal anecdote makes the point. In the new program, I teach a Program Focus course, "Cooperative Education and Workplace Learning." All Program Focus courses are scheduled for the Winter term, but focus instructors meet briefly with their classes in the August week. I was totally unprepared for the group that returned to me in January because candidates in my group seemed totally transformed by their experience in a way that I could not have predicted. Experience taught me just as it taught them! I had to pedal fast to alter my strategies and to modulate the direction of the course to match their increased professional maturity.

### A Political Context for Implementation

The theoretical background for the new program reflects the view that there is something extraordinarily powerful about experience. A fine example of this is in the context of the first year of the full implementation of the program. The literature on implementation can never convey the power of context quite as strongly as the experience of context itself. Near the middle of the extended practicum and during the period of on-campus weeks, in the fall of 1997, the teachers of Ontario took job action to protest the provincial government's changes to the education system, changes which included increasing the classroom time for secondary school teachers. The two-week withdrawal of services affected us in many ways. First, and simply, candidates who were not on-campus were unable to be teaching in schools. Second, those affected in this way returned for their on-campus weeks with a sense of the political dimensions of the world of work that they had not seen before. Not all of what is learned from, by, and in experience is pleasant. Candidates seemed torn between their sympathies for their associates in schools and their desire to have normalcy return so that schools would be predictable places to work in and to apply for work in the next year.

A third consequence of the job action concerned program modulation. As Rena Upitis (1999) notes, the expectation was that the program would undergo successive refinement and change based on the experiences of the first and later years of its implementation. Consequently, a daylong "retreat" was held for the Faculty of Education in May 1998 to consider necessary changes. Two sets of evaluation data were prepared for this event: one by the student society that had conducted its own survey, and the other by myself on the basis of the exit questionnaire data for the 1997-98 year (discussed below) and the pilot year (Whitehead, et al., 1999). It was interesting to note that little of this research was discussed at the retreat. But there was considerable discussion of the impact of the program on the workload of associate teachers in secondary schools in light of the political struggle revealed in the job action.

Clearly, political context was important to discussions of change. Indeed political context offered a way for voicing some of the negative reactions of faculty to the programs. Upitis (in press) described these as "Waves of unrest." Reflecting on Thomas Hatch's (1998) work, Upitis suggests that his prediction that the early years are the hardest was correct. And she notes that it may take some years before schools and faculty members develop their own constructions of the new program and productive theories of action for the new program. In any event, change of this magnitude has to take account of the wider political context of public education.

## **Evaluation**

As noted above, conditions for the pilot program were near perfect. Committed instructors and willing school principals seemed to guarantee a successful pilot program, with a relatively high degree of satisfaction with the program being expressed. As we have seen in the articles in this volume, there is evidence that satisfaction was not complete: there were several problems in the mechanics of the

new program, and there was concern expressed by our school-based associates that elements of the program would not be successful. At the same time, the candidates' overall satisfaction was remarkably high, with 92 percent of the candidates agreeing with the item "I think Queen's Faculty of Education should retain the new program."

Above, I have reported some of the circumstances attending the first full year of implementation, 1997-1998. Despite the difficulties, which included the infamous ice storm that put Eastern Ontario on hold for a week in early January 1998, the results of program evaluations undertaken by our group in 1997-1998 were remarkably consistent with the results obtained in the pilot year. We continued with the model of several loosely coupled studies but we decreased the number of these, for two reasons. First, evaluations in the pilot year were directed partly at discovering problems in the new program, and our view was that many of the problems relating to running the program had been addressed. Second, and more influential, financial support for continued evaluation was limited. The immediate consequence of this was the decision to limit the number of focus group interviews with candidates, and to use strict random sampling so that each candidate had an equal chance of being invited to participate. Results of these evaluations are reported in detail elsewhere (Lock, Munby, Hutchinson, & Whitehead, in press; Martin, Munby, & Hutchinson, in press), but it is worth rounding out the picture here by reporting some of the general results of the exit questionnaire distributed in April 1998.

Items from the April 1997 Exit Questionnaire were used in the 1997-1998 version, with modification, so that results might be compared. Questionnaires were distributed to Program Focus instructors for administration at the end of the Exit Conferences. Questionnaires (with letters of permission attached) were distributed to all 593 registered candidates through their Program Focus instructors. We received 392 completed questionnaires, and we discarded those with unsigned letters of permission. The number of usable questionnaires was 387—65 percent of the candidates registered in our teacher education program. Candidates were asked to respond "Yes," "Unsure," or "No" to the first 18 items of the questionnaire, and space for written responses to each item was provided. (The qualitative responses were not considered for the current analysis.) Percentages for each response are summarized in Table 1, for the first seven items of the questionnaire.

- Generally, I liked the field-based teacher education program at Queen's.
   Yes: 88.4%
   Not Sure: 8.0%
   No: 2.6%
- I think the extended practicum helped me to become the kind of teacher I want to be.
   Yes: 87.6%
   Not Sure: 7.8%
   No: 4.7%
- 3. The alternate (Feb/Mar) practicum provided me with valuable experiences.

Yes: 88.4% Not Sure: 6.5% No: 4.7%

I feel confident in my abilities to begin a career in teaching.

Yes: 84.0% Not Sure: 14.5% No: 1.0%

5. I would encourage others to enrol in this program.

Yes: 80.6% Not Sure: 15.5% No: 3.1%

- I feel this program enabled me to learn to teach from experience.
   Yes: 90.7% Not Sure: 7.2% No: 1.6%
- 7. This program supported and guided me in learning to reflect on my teaching. Yes: 80.6% Not Sure; 12.9% No: 5.9%

The story of the evaluation of the new program is incomplete without considering the personnel involved. As it happened, two of these were also involved in steering the development of the new program; and I was associated with the new program because some of my research influenced the decision to adopt an extended practicum. Also, I was involved in the evaluation studies because they were a component of the funded research program I co-coordinated with Tom Russell. It might be suggested that it was inappropriate to have the evaluation team peopled by some who were instrumental in the program's development.

Yet it is possible to minimize this potential threat to validity in several ways. The first, of course, is to develop several studies so that opportunities for being deceived by data collection and analysis are small. A second is to target aspects of the program in a way that deliberately seeks bad news. As detailed in another paper, getting the bad news turns out to be good news for the validity of the evaluation study (Lock, et al.). A third approach involves using independent people to gather data-we used independent facilitators in our focus group interviews with candidates. A fourth approach is to involve candidates in planning some of the evaluation. It was candidate input that steered us toward individual interviews in April of 1997 because we understood that some candidates had specific matters they wished to tell us. Fifth, one can attend closely to predictions in the data and look for them in practice. Our interviews with associates contained several predictions that eventually validated our evaluation studies (Martin, Munby, & Hutchinson, in press). Last, one can grit one's teeth and ask the questions with the highest possible risk. For example, in April 1997, one item of the Exit Questionnaire was "Knowing what I know now, I wish I had enrolled in the old program" with which 96 percent of pilot candidates disagreed. High-risk items were included in the April 1998 questionnaire, as shown above. By taking these steps, we are confident that the integrity of the evaluation studies is maintained in the face of the very real and practical issue of finding resources and people to do them.

#### Conclusion

Learning in, by, and from experience is a common feature of these stories in two ways: first, the stories are about a program developed out of principles about learning and experience; and second, the stories are about our experiences with this program and its evaluation. To parallel this, there are two types of success here: the first concerns the introduction of ideas about learning and experience into redesigning a teacher education program, and the second concerns the knowledge we gained about implementation and evaluation from this experience. Both successes attest to

the power of the basic principles of learning and experience that gave impetus to program change at the outset.

Intellectually, we all know that implementing a new program is tough: it will never be enacted quite as intended by its architects but will reflect the constructions of those who teach in it and will be subject to changes in contexts. Yet even as we know all this intellectually, it comes as a surprise to find how the intellectual knowledge is so profoundly changed by the experience of implementation. Similarly, it is one thing to plan evaluation studies and quite another to be in the thick of them and asking serious questions about what they mean. It could be that the difference between the intellectual knowledge and the knowledge gained by experience is so great that it might deter some from adopting new approaches to an enterprise like teacher education and evaluation. But the knowledge gained from the experience is so rich that it is unthinkable that anyone would shrink from taking the risks.

### **Footnote**

 Data obtained by the Education Students' Society showed a high approval for the program similar to that shown in our data.

### References

- Hatch, T. (1998). The differences in theory that matter in the practice of school improvement. American Educational Research Journal, 35, 3-31.
- Kessels, J., & Korthagen, F. (1996). The Relationship between theory and practice: Back to the classics. *Educational Researcher*, 25(3), 17-22.
- Lock, C., Munby, H., Hutchinson, N.H., & Whitehead, L.E. (in press). Getting the news: The good and the bad in a learning approach to evaluation. In R. Upitis (Ed.), Changing pedagogies, changing lives. London, UK: Falmer Press.
- Martin, A.K., Munby, H., & Hutchinson, N.L. (in press). Protests and praise from the field: Focus groups and predictive validity. In R. Upitis (Ed.), *Changing pedagogies, changing lives*. London, UK: Falmer Press.
- Munby, H. (1998, May). Interim evaluation of the teacher education program: A brief internal report on exit questionnaires. Faculty of Education, Queen's University.
- Munby, H., & Russell, T. (1998). Epistemology and context in research on learning to teach science. In B. Fraser & K. Tobin (Eds.), *International handbook of science education* (pp. 643-665). Dordrecht, The Netherlands: Kluwer.
- Upitis, R. (in press). Changing pedagogies: Putting experiences first. In R. Upitis (Ed.), Changing pedagogies, changing lives. London, UK: Falmer Press.
- Upitis, R. (1999). Teacher education reform: Putting experience first. Teacher Education Quarterly, this issue.
- Whitehead, L., Hutchinson, N. L., Munby. H., Lock, C., & Martin, A. (1999). Exit evaluation of the pilot project for a restructured pre-service teacher education program. *Teacher Education Quarterly*, this issue.