This paper examines the impact of a compulsory action research project requirement on a teacher education program restructured to provide preservice teacher candidates with an early extended practicum. Thirteen students doing preservice teaching in two high schools in Ontario, Canada, participated. Findings from the action research projects show that preservice teacher candidates can be introduced to teacher research in ways that are likely to affect their professional judgment as their careers unfold. Introducing teacher research is enhanced by an extended period of teaching practice (8 weeks or more) in one school. Introducing teacher research is also enhanced by a strong introduction to and support for an action research project. The introduction to teacher research is also enhanced by strong support for the transition from learning by being told to learning from personal experience. (SLD)
Introducing Preservice Teachers to Teacher Research

Tom Russell

This paper is prepared for the: Annual Meeting of the American Educational Research Association in New Orleans April 2000
Introduction

This paper examines the impact of a compulsory action research project requirement on a teacher education program re-structured to provide preservice teacher candidates with an early extended practicum. The following points are developed:

1. Preservice teacher candidates can be introduced to teacher research, in ways that are likely to affect their professional development significantly as their careers unfold.

2. Introducing teacher research effectively is enhanced by an extended period of teaching practice (eight weeks or more) in one school.

3. Introducing teacher research effectively is enhanced by a strong introduction to and support for an action research project.

4. Introducing teacher research effectively is enhanced by strong support for the transition from learning by being told (as in lectures) to learning from personal experience.

Data to illustrate these points are provided in the form of a table summarizing the action research projects carried out and reported by selected candidates and a table reporting comments on the action research project by a random selection of candidates.

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1 The research reported here was supported by the Social Sciences and Humanities Research Council of Canada as part of the 1999-2002 study, “Understanding Programme Change in Teacher Education: Sharing the Authority of Experience.”
The Setting and Participants

The Faculty of Education at Queen’s University introduced a significant change to its preservice teacher education program in 1997-1998 (Upitis, 2000). Candidates’ teaching experience was moved to the beginning of the program in an extended period of time in one school, and candidates were placed in schools in cohorts supervised by a Faculty Liaison. In the first two years (1997-1999), a one-week orientation on campus preceded candidates being in school on the opening day in September and staying in school until the holiday period in December, with the exception of a two-week return to Queen’s in October or November. In the second two-year period (1999-2001), the initial time on campus has been extended to three weeks and candidates begin their practicum placement as the schools are entering their fifth week of instruction. They continue to return to campus for two weeks during the practicum.

The preservice teacher education program at Queen’s University is comparable to a “fifth-year” program, although there are several concurrent tracks that admit candidates to the program in their first or third year of their undergraduate studies. Candidates who complete the program are awarded a B.Ed. degree that requires a B.A. or B.Sc. degree, and they are recommended to the Ontario College of Teachers² for certification. Prior to 1997, teaching placements were for periods of two or three weeks, with about 60% of the time in schools occurring after about 70% of the on-campus time. (The concurrent candidates who were admitted in their first or third year had a four-month placement at the very end of the program, after completing all courses on campus.)

This dramatic change to the structure of the program did bring many challenges and adjustments, both for faculty and for teachers in the associate schools that receive the cohorts of candidates (Russell, 1998; Russell, 1999). While candidates have offered many valuable

² http://www.oct.on.ca
suggestions for improvement, they are positive about the early extended practicum that is a distinctive feature of the program. We quickly learned that the Faculty Liaison role is not just time-intensive but also crucial to the success of the cohort in a school. Meeting the complex communication demands of the role is never to be taken for granted.

My own teaching assignment has included the role of Faculty Liaison in each of the first three years (1997-2000), with from 13 to 26 candidates assigned to two or three secondary schools. The initial on-campus classes for PROF190/191 are intended to prepare candidates for lesson planning and classroom management. A combination of additional classes and visits to schools serves to introduce and support candidates in the design, conduct, and reporting of an action research project.

In personal terms, the Faculty Liaison role has been the most challenging and satisfying role I have been assigned over 23 years' work in preservice teacher education. It is almost impossible for me to spend as much time as I would like with each teacher candidate. Working with candidates in a full range of subjects, from English, drama and physical education through social studies and mathematics to the sciences (where I am personally most comfortable) has broadened my perspective while challenging me to prove my own value as an observer of and commentator on lessons. The opportunity to get to know a few schools in depth rather than visiting science candidates in a wide range of schools has been very satisfying, yet the more schools get to know me, the more I am challenged to show that I can “deliver the goods” in terms of relevant comments and suggestions for improving teaching.

**Introducing New Teachers to Teacher Research: The Action Research Project**

My personal approach to introducing and supporting action research by preservice teachers begins with the simple premise that it can be done and that it should be considered a
normal and on-going part of a teacher's professional activities. I provide each candidate with a copy of the extensive guide developed by one of my colleagues (Welch, 1998)\(^3\). I also show the candidates assigned to me a videotape from the Action Research Laboratory at Highland Park High School in which Joe Senese provides a clear account of the basic features for supporting teachers in action research. In each of the last three years, I have had no difficulties and few complaints. Many candidates have prepared what I consider to be outstanding accounts of their work, and one candidate has had his report published (Bullock, 1999)\(^4\).

Naturally, there are many questions about action research and most candidates give some indication of disbelief, simply because their experiences as students have given them no indication whatsoever that the professional activities of a teacher might include systematic inquiry into personal classroom practices. My most effective strategy for initiating the reframing that teacher research requires is to stress the importance of "backtalk"—simple comments collected from students in a few minutes at the end of a lesson. I find that most new teachers are "hooked" after their first experience that shows them that students can and will make insightful and constructive comments about their learning experiences and their preferences for how they are taught.

To summarize, I introduced action research in positive and realistic terms, I provided examples and a strategy for beginning, and I responded quickly to requests from individuals as their practicum unfolded. The return to campus for two weeks in November provided a space in which each candidate could finalize plans for collecting data. To illustrate and support for my conclusions about introducing new teachers to teacher research, I draw on my most recent examples.

\(^3\) http://educ.queensu.ca/~prof191/arguide.htm
\(^4\) http://www.unipissing.ca/oar/vol-2-99-20/V221.htm
experiences in the Fall Term of 1999, when I worked as Faculty Liaison with 13 candidates in two schools.

**Data from Two Recent Cohorts**

The two schools, City Catholic Secondary School (CCSS) and Rural High School (RHS), provided qualitatively different but equally valuable opportunities for seven and six candidates respectively to move through initial shock and increasing comfort to substantial success in nine weeks of teaching. Each candidate had two teaching subjects, and a few were fortunate enough to teach both subjects through their placement. Some shifted to their second subject after six weeks in school and a two-week return to the Queen’s campus. A few taught only one subject and gained experience in their second subject in a final three-week practicum in April 2000, in their Fall Term school or, if no arrangements could be made there, in a second school.

CCSS has a large student body drawn largely from urban and suburban homes; a central staff room with coffee and microwave facilities provided a convenient setting for candidates to interact with teachers and with visitor; like myself at any time through the day. Candidates tended to commute individually or in pairs, and they had a range of after-school commitments including parental responsibilities and athletic activities. In contrast, RHS has about one-third as many students as CCSS, and all the students live in rural settings and travel to and from school by bus. The central staff room tended to be empty except during lunch. Four of the six candidates commuted together from Kingston each day, with the extended conversations in the car providing a rich supplement to their individual classroom experiences.

In many respects, the schools differ even more beneath the surface than they differ in the superficial contrasts just noted. When participating teachers were surveyed in 1998 about their views on having candidates arrive on the opening day of school, all but one teacher at
CCSS expressed preference for arrival four to six weeks into the school year, while all the teachers at RHS indicated a preference for candidates’ participation on the opening day. By virtue of the size of CCSS, the cohort of teacher candidates is a marginal addition to the total teaching staff, while adding the same number of candidates to the staff at RHS increases the number of teachers by about 20% and the positive impact on running the school is immediately apparent to all.

Perhaps the most important point to make is that teacher research is not a significant feature at either school. Most candidates appear to carry out their action research projects on their own. Experienced teachers may contribute through discussion of issues and offering of specific suggestions, but I have never had the sense that experienced teachers are developing an interest in teacher research by having teacher candidates conduct action research projects in their classrooms.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Focus</th>
<th>Candidates’ comments on the action research experience</th>
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</thead>
<tbody>
<tr>
<td>Geography</td>
<td>Helping at-risk students complete homework</td>
<td>“Action research has been an educational experience for me because it has set me on a path to finding self-awareness as a teacher.”</td>
</tr>
<tr>
<td>Physical Education</td>
<td>Encouraging lifelong fitness and well-being</td>
<td>“Regardless of the topic, it is critical that action research continues to be employed as a tool in improving our profession and our educational system.”</td>
</tr>
<tr>
<td>English</td>
<td>The effects of allowing students more ownership of their learning</td>
<td>“I found this research personally and professionally rewarding. I will work toward keeping in touch with my educational philosophy and maintain my understanding of the importance of teaching students the skills so they can teach themselves for a lifetime.”</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Changing teaching style to enable students to connect more personally with the topic</td>
<td>“I have achieved a much deeper insight into my own teaching practice. . . . The research also led to a more detailed reading of educational material such as the articles I used for this project. This type of professional development will prove invaluable in the long run.”</td>
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<tr>
<td>Physical Education</td>
<td>Reducing inappropriate behaviors and maintaining students’ interest</td>
<td>“Because we are in schools for a short period of time and have many other responsibilities, the action research assignment is very challenging. . . . [The project] has enhanced my view that there is always something for teachers to learn in the classroom.”</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Test the effectiveness of different techniques for gaining and maintaining students' attention and focus for duration of class</td>
<td>&quot;The real value came at the end of the day when I had the chance to talk over how the class went with my associate. It helps to have someone else in the class observing things from a different perspective. This combination of reflection and experience helped in the formulation of the various techniques presented in this paper.&quot;</td>
</tr>
<tr>
<td>Science</td>
<td>Motivating students to take responsibility for their own learning and develop a positive attitude to learning</td>
<td>&quot;This project allowed me to monitor my teaching and the classroom environment and to detect and better areas that needed improvement. I learned to incorporate these practices into my daily teaching routines.&quot;</td>
</tr>
<tr>
<td>History</td>
<td>Alternative assessment processes that go beyond numerical scores on tests and projects</td>
<td>&quot;The constant feedback to the students, whether written or verbal, was often exhausting. . . . Awareness of these issues only occurred as a result of this action research project. It is through this project that I was able to develop a critical consciousness of the issues surrounding me as an educator.&quot;</td>
</tr>
<tr>
<td>Geography</td>
<td>Finding teaching strategies that will enable students in the Applied stream to master content intended solely for the Academic stream</td>
<td>&quot;I have learned that although the new curriculum divides students into two streams and each stream has a name, these are in the end only names. The trouble with labels is that they institute preconceived perceptions about ability, attitude and aspirations. A teacher's job involves pushing students to achieve to the best of their abilities. No two students are alike and all have different ways of processing information, but the teaching strategy can make all the difference in the student's learning.&quot;</td>
</tr>
<tr>
<td>Science</td>
<td>Making smooth transitions in lessons to reduce management problems</td>
<td>&quot;Discussing classroom management issues with other teachers may be one of the most important things I can do to help me through my own management struggles. Having had the opportunity to actively reflect on my management approaches, I can only conclude that there are no answers to classroom management, which is a never-ending learning process for teachers.&quot;</td>
</tr>
<tr>
<td>English</td>
<td>Meeting individual needs in a large class of students with special needs</td>
<td>&quot;During my practicum and in the course of conducting my action research, I became more aware of how I was teaching. I learned that the more instructional strategies I used in the classroom, the more effective my teaching would be. I also came to the conclusion that the strategies I use to reach students with learning difficulties would likely benefit all learners in the class.&quot;</td>
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<tr>
<td>Music</td>
<td>Helping students focus on their own learning while playing in a band</td>
<td>&quot;When students realize that they are actually making progress, it helps build up their self-esteem about music. With their limited musical experience they do not feel confident in what they are playing. Having the students track their own progress lets them see that they have accomplished something and improves their opinion of themselves.&quot;</td>
</tr>
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Table 1. Subject area, focus of inquiry, and final comments from teacher candidates in two schools.
The entries in the “Focus” column show the broad range of action research topics that candidates developed from personal experience. The entries in the “Candidates’ comments” column tend to be positive, and positive comments are a “natural” way for individuals to conclude a report on a major compulsory activity. Many suggest that teacher research generated greater awareness of what was happening in the classroom and that this was valued.

Data from a Random Selection of Teacher Candidates

An invitation to speak on a panel at the fourth Act-Reflect-Revise Conference in Brantford, Ontario in mid-February, 2000 prompted me to seek comments from candidates other than those in the two cohorts for which I had been Faculty Liaison. In the Winter Term, two weeks after the due date for action research reports, I and two other liaisons invited members of classes we were teaching to provide comments about the impact of the action research project. I sensed that I would be happier with any comments I might make at the conference if I could share the perspectives of our candidates. The following comments provide further insight into the impact on beginning teachers of a compulsory introduction to teacher research.

<table>
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<th>Comment</th>
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<tr>
<td>I gained a lot from the actual in-classroom research. It provided a very good model for solving a problem that I had in the classroom. I didn't find the write-up nearly as valuable. It felt more like I was just rushing to get something written.</td>
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<tr>
<td>I feel the Action Research project was one of the best projects I did. Even though I had been thinking a lot about my ideas of teaching, this project forced me to write my thoughts on paper. The ideas then became much clearer to me and my thoughts progressed even further.</td>
</tr>
<tr>
<td>The project helped me to focus on a problem that I had observed and started me on the road of professional development.</td>
</tr>
<tr>
<td>As teaching candidates we are asked to look deeper than the surface of the classroom. We are asked to search for methods of improvement that all teachers should practice.</td>
</tr>
<tr>
<td>Coming from a science background, I found it difficult to measure the results so qualitatively and write a report. It seemed so biased.</td>
</tr>
</tbody>
</table>

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I think every good teacher conducts action research on a daily basis, whether this is done consciously or not. I feel as though the formal aspects of the project forced me to think deeper about my own questions, which is good. Action research is very beneficial in tracking your own progress as a teacher, helping to make improvements in your teaching abilities.

Action research is different for each teacher candidate. I myself did not get very much out of writing it but I am aware that some did find the process very valuable.

Although action research requires extra effort and time that teachers may feel they do not have, it is one of the best ways to learn how to maximize the teaching-learning environment.

Most worthwhile assignment in teacher’s college.

Action research will help each of us grow as teachers. One thing that I found hard was to conduct this project through the beginning stages of teaching. But we had to be introduced to it now or a lot of us wouldn’t have experienced its effectiveness.

My action research project was the best assignment I could have done here, once the balance between freedom and structure had been achieved, making a project assignment out of improving my teaching with the structure I needed to do the job.

Table 2. Comments from randomly selected teacher candidates two weeks after completing the report of their action research project.

Several of the themes are quite familiar to teacher educators. Some candidates question the value of writing a report, and one (with a science background) seems to have had difficulties with the qualitative and subjective nature of action research. While some note the extra challenge that action research added to their earliest efforts to learn to teach, others see through to the potential long-term value.

Teacher Research, Reflective Practice and Journal Writing

As I was reading and providing comments on the reports by the 13 candidates I worked with in 1999-2000, I developed an unexpected insight into what I have long seen as an endemic problem in preservice teacher education. How many times have those learning to teach complained about being asked to “reflect” or being required to keep yet another journal during a preservice program? In one action research report, the candidate explained that he
had started keeping a journal to gather data for his report and found himself amazed by the value of the journal. In a second report, the candidate explained that the journal he was required to keep had taken on considerable value as a source of data for the comparisons he wished to make in his action research project. Several experienced teachers made similar comments on the power of journal-keeping in an M.Ed. course on teacher research. My insight, perhaps not new to others, is one that I hope to explore: Does teacher research generally and an action research project in particular provide the experiential context to support journal writing and reflective practice?

Implications for Preservice Teacher Education

I do not draw the conclusion that introducing new teachers to teacher research during their initial training for the profession will surely set them on a lifelong course of inquiry into their personal classroom practices. But I do conclude that the introduction to teacher research in the preservice program at Queen's has been successful and positive. It seems likely that they will continue to do teacher research if they find themselves in a school where the professional development climate supports inquiry. Certainly Highland Park High School (Senese, 2000), Geneva High School (Smith, 2000), and schools associated with PEEL (Mitchell, 2000) are settings in which these candidates would find support for continuing action research. Interestingly, when I first met Joe Senese in 1998, he was asking the question, "Are there any universities preparing teachers to enter a school with an Action Research Laboratory?" I was delighted to be able to respond positively.

When the Queen's University teacher education program made the shift to an early extended practicum, one of the most frequent concerns was expressed in a familiar but unfortunate question: "**Won't the early extended experience expose new teachers to**
undesirable practices that they could resist if they had a more extensive on-campus introduction to good teaching?" Over the last three years I have learned that one's response to this question correlates strongly with one's willingness to accept teacher research as a legitimate form of professional inquiry and with one's willingness to permit, encourage, and support teacher candidates in learning from personal experience of teaching (Russell, 1999). I describe the familiar question as unfortunate because it sets up an extremely problematic contrast between schools and universities. Universities thrive on very high opinions of their members and activities, but I have no evidence that universities are shrines of good teaching practices while schools are not. I am unable to understand how we can create essential and productive partnerships between schools and universities if those of us who teach in preservice programs see schools as settings in which teacher candidates are contaminated by practices of which we do not approve.

To conclude, I revisit my opening points:

1. **Preservice teacher candidates can be introduced to teacher research, in ways that are likely to affect their professional development significantly as their careers unfold.**

   The comments in Tables 1 and 2 suggest that something significant has happened to most of the candidates as a result of the required action research project. In the future, if these individuals are invited to participate in teacher research, it seems probable that they will respond positively and with interest. This attitude is not one I would expect from those who graduated from our previous structure, in which "theory" tended to precede "practice."

2. **Introducing teacher research effectively is enhanced by an extended period of teaching practice (eight weeks or more) in one school.**
Is meaningful teacher research possible in a period of time shorter than eight weeks? My work with experienced teachers in an M.Ed. course suggests that it is not possible. In 1997-1999, candidates had 12 weeks available in which to develop and conduct an action research project. Now that the time has been reduced to 9 weeks in 1999-2001, candidates report spontaneously that the time pressures are significant.

3. Introducing teacher research effectively is enhanced by a strong introduction to and support for an action research project.

Not at all surprisingly, it appears that when someone in the Faculty Liaison role does not make regular school visits or respond quickly to telephone and e-mail messages, the university-mandated requirements of the program tend to suffer. It takes time to develop an understanding of teacher research and action research. Because this activity views research quite differently from familiar connotations of "research," it takes no more than one or two inadvertent remarks to undercut the intentions and potential of teacher research. Active and positive support seems to be the only way forward.

4. Introducing teacher research effectively is enhanced by strong support for the transition from learning by being told (as in lectures) to learning from personal experience.

One of the most unusual features of research carried out in one's own classroom is how very different that research is from our most common understandings of "research" as an objective search for "the truth." If preservice teachers have little out-of-school experience and associate learning with being told by teachers, then it is essential to actively support them in discovering the alternative view of research available within "teacher research."
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