Abstract
In this second of four articles discussing the introduction of action research to a class of pre-service teachers, Julian and Dianne state the purpose and context of our work, and revisit in detail the intense discussions we had prior to undertaking our two-tiered action research adventure. Specifically, we elaborate on the beliefs, values and philosophy that motivated our undertaking; we then survey three models of action research and address our reasons for ultimately selecting one of those models.

The Purpose and Context
As classroom teachers and as teacher educators, we have been driven to explore how we can make a positive difference to our students’ learning. We concur with Sagor’s (1992) claim that “schools are about student learning and that learning occurs primarily through the efforts and talents of teachers” (p. 1). Thus, in our roles as instructors of pre-service teachers, we think it is vitally important that we foster in beginning teachers the skills and attitudes needed to develop into self-directed teacher-learners and teacher-leaders. As Katzenmeyer & Moller (2001) argue, “When teachers see themselves as leaders, they discover the potential to influence student learning through their own actions” (p. 32). Building on the work of other teacher educators (e.g. Bullough & Gitlin, 1995), we used action research as a means to promote reflection, inquiry, and a sense of efficacy in pre-service teachers. Simultaneously, we sought to improve our own practice as teachers of teachers through thoughtful discussion and action. Working together, we intentionally designed a two-tiered action research activity that would enrich the practicum teaching experiences of pre-service teachers and encourage our own growth as teacher-educators.

Julian was an experienced university instructor who engaged in several action research projects as a classroom teacher. Dianne was a doctoral student, working with Julian as a teaching assistant; she had been active in the action research community for a number of years.

Julian was responsible for instructing the Teacher Education Seminar (TES), a foundational course for pre-service teachers that addresses general principles of learning and teaching. His class consisted of thirty-two pre-service teachers, who were cohorted for three foundational courses; this organizational arrangement became important, as it allowed us to take an interdisciplinary approach to the action research project. We worked with the educational psychology instructor, Dr. Joanne Foster, integrating our two courses to enhance meaningful connections between theory and practice, and to model interdisciplinary teaching.

Our project was facilitated by the fact our students spent fourteen pre-practicum days observing and assisting in the schools of their first practice teaching session. These days became very significant, as they gave our student teachers the opportunity to observe the school context, become comfortable in the setting, imagine a project that would be feasible in the situation and gather baseline data. In a nine-month program, already packed with a heavy workload, our interdisciplinary approach and the pre-practicum days were critical to the degree of success we ultimately experienced.

Our Beliefs and Values: The Significance of Making Connections
We were enthusiastic about introducing action research into our program for a number of reasons. The TES Course was designed to make connections. Engaging in action research would further this goal, as
practitioner research strengthens many links: theory and practice; pre-service learning and in-service teaching; and teaching practice, inquiry and reflection.

**Theory and Practice**

Thoughtful people have noted the North American tendency to separate mind and body (e.g. Emerson, 1965; Campbell, 1986; Miller, 1996). The Holmes Group (1986) identified this tension in education as the divide between educational theory and classroom practice. Since that time, many teacher educators and educational researchers have focused on reforming teacher education programs. Making connections between theory and practice has proved elusive, as researchers have come to realize the complex set of skills teachers require to reflect critically on their practice in order to address the needs of students in schools (Darling-Hammond & McLaughlin, 1995). To this point, Julian’s strategy had been to bridge the disconnection by employing reflective practice. Although he felt reasonably successful, the urge to advance the learning of his pre-service teachers and improve his own teaching practice encouraged him to search for other ways to promote teacher inquiry and research into practice. Dianne concurred with Julian’s thoughts. Her own experience as a teacher-researcher had resulted in improved and pleasurable learning and teaching for her students and herself, and had forged connections with a wider educational community. In all, the theoretical framework of action research, with its emphasis on reflection and inquiry for the purpose of taking positive action, appeared to offer a way to narrow the theory-practice gap. We hoped that the experience of being an action researcher would reinforce for these pre-service teachers the realization that they had the power to improve their teaching practice; by using the theoretical framework of action research, they could consciously make positive changes in curriculum, learning environment, and their relationship to students.

As Julian considered possibilities for incorporating action research into a crowded curriculum for pre-service teachers in Secondary Program 1, he was intrigued by the possibility of designing an interdisciplinary assignment. Our common experiences as teachers fostered a belief that building interdisciplinary connections into our teacher education course would enhance meaningful knowledge connections for our pre-service teachers in the present, and possibly, through example, influence the way they chose to teach in the future. As well, Julian had long been interested in strengthening the partnerships among the instructors for his cohort of pre-service teachers, while simultaneously modeling instructor collaboration. When the educational psychology instructor, Dr. Joanne Foster, expressed an interest in collaboration, Julian proposed that the pre-service cohort take part in an interdisciplinary action research project. As the action research questions identified by our student teachers could be subsumed under the topics discussed in the educational psychology course, the theoretical aspect would be based in this course; the TES instructors would facilitate the research project in both the university and practicum settings. Julian and Dianne were excited by the opportunity to bridge the theory-practice gap, model collaboration, and introduce action research without unduly increasing the overall workload of pre-service teachers.

**Pre-service and In-service Teaching**

The gap between pre-service education classes and the reality of teaching in schools troubles teachers and teacher educators alike. Providing pre-service teachers with action research frameworks and methodologies, combined with opportunities to apply them to their practice, is one way of bridging this gap. Numerous studies have indicated that action research can improve the teaching of pre-service and in-service teachers (Kemmis & McTaggert, 2000; Cochran-Smith & Lytle, 1999; Sagor, 1997). Chant, Heafner and Bennett (2004) explicitly link the development of action research skills to improved teaching during field practica. The authors’ well-thought out research process had such impact that their participant pre-service teachers “did not view themselves as student teachers, but more as professionals undergoing a professional project” (p. 33). When it came time for these people to be interviewed for teaching positions, “principals were interviewing pre-service candidates who were already acting as agents for change” (p. 36); they were teacher-leaders. Bullough and Gitlin (1995) note that, while first and second year teachers are often too busy coming to grips with professional demands to extend themselves in new ventures, they do recall and implement strategies learned in teacher education programs as they become more experienced teachers.

Katzenmeyer and Moller (2001) endorse action research as an approach to developing self-confidence and leadership abilities within teacher education programs. Creighton (1997) concurs, adding that until leadership competencies are addressed in teacher education programs, we will continue to try to
improve schools by changing the way they are governed, and little effect will be realized. It is also crucial that practicing teachers continue to research their practices, either through in-service courses or self-directed learning, in order to enhance their practice and become leaders in their schools. This literature, which confirmed our experiences as classroom teachers, guided us as we made action research a priority in our program.

**Teacher Practice, Inquiry and Reflection**

Traditionally, teacher-practitioners have been objects of study, rather than themselves becoming researchers of education and theory makers. Sagor (1992) notes, “In all the professions except teaching, practitioners are also expected to interact with, and contribute to, the development of their profession’s knowledge base (p. 3). He adds that, until this approach changes, teachers will remain cast as subordinate workers rather than dynamic professionals. We share an emancipatory orientation towards educational research and teacher development (Kemmis & McTaggert, 2000). Our belief in the singular ability of teachers to research their own practice and draw forth their findings and their implicit wisdom in the form of educational theory gives meaning to our daily work, as it encourages us to strive for improvement in education through initiatives such as action research.

Cochran-Smith (2000) discusses the concept of teacher knowledge that is generated locally when teachers employ systematic inquiry in their schools and classrooms. The goal of inquiry projects is “for all teachers to question their own assumptions and practices, to make all knowledge problematic but also generative” (p. 16), and “to collect school and classroom data in order to provide richer learning opportunities for students” (p. 17). Evaluating outcomes takes into account, “how teachers construct local knowledge, how they make their pedagogical reasoning and decision making strategies public and open to critique, and how they construct and wrestle with multiple perspectives” (p. 20). In these ways – through generating knowledge, learning and outcomes – teacher and researcher become one.

Dianne’s thesis research focuses on professional growth that teachers themselves find meaningful. Her study reveals that all four of her participants grew professionally by connecting theory, practice, inquiry and reflection. In all cases, the theory and the research process enriched the teacher’s practice and the learning milieu of her participants’ students (Stevens, in progress). Indeed, since teacher-researchers (Zeichner & Noffke, 2001) can contribute significantly to student learning, it is worthwhile introducing them to action research frameworks and methodologies in their initial teacher education programs.

**Selecting a Model of Action Research**

The definition and the steps of action research that we used are fairly well established. (See Article #1, *Introducing Pre-Service Teachers to Action Research*). However, researchers may vary the application of core principles in a way that best suits their project, thus creating variations. We investigated three such perspectives as we explored the way we envisioned our action research project unfolding, before making our choice.

**Action Research Partnerships: Teachers and University Researchers**

Ross, Rolheiser and Hogaboam-Gray (1999) initiated a complex action research model in which they, as university researchers, collaborated with five experienced teachers to enable these teachers to research thirteen other exemplary teachers around the issue of evaluating students involved in co-operative learning (Ross, p. 255). The purpose of the inquiry was to improve the evaluation skills of the five teacher-researchers. Underlying this model is the belief that, "The key to professional growth is inquiry" (p. 255). In this example, the definition of collaborative action research is "systematic inquiry into teacher practice that is conducted by a team of teachers and university researchers working as equal partners" (p. 256). Status equality exists because each partner has a distinctive body of knowledge that is complementary and non-overlapping. The researchers sought to empower the five experienced teachers by demonstrating research skills, providing readings, acknowledging their primacy in classroom practice, and bringing resources and time to the project (p. 260). The five teachers then engaged in research with thirteen other teachers around methods of evaluating learning that results from co-operative learning strategies.
**Action Research as Critical Pedagogy**

A very different model developed by Stephen Kemmis and Robin McTaggart (1988) focuses on social change. These authors insist that action research must be a collective inquiry, undertaken by participants in social situations to improve the *rationality and justice* of their own practices. They see school communities, "consisting of teachers, parents, students, administrators, [working] together to manage the process of improvement" (p. 5) by engaging in a cyclical spiral of steps: develop a plan, act to implement, observe the effects, and reflect as a basis for further planning. The two authors encourage listeners to “question the relationship between the actual and possible in education” (p. 30), and thus to become critical. They subscribe to contestation theories of reproduction, which optimistically suggest that, through critical reflection, open debate, action, and struggle, schools and society can be reshaped in transcendent forms (p. 2-4, 6). Their criteria for success involve changes in language and discourse, activities and practices, social relationships and organizations (p. 41). The process is social, and a matter of collective and collaborative effort (p. 45). Kroll (1990), an English teacher in a college classroom, is an example of this model. In his literature and composition course, focused on the Vietnam War, Kroll seeks to develop students’ attitudes around issues of knowledge and moral action, thus fostering social change. Simultaneously, as researcher, he investigates these changing attitudes as reflected in students’ journal writing and conversations. The roles of teacher and researcher blend in knowledge construction, a move toward teacher emancipation and garnering professional respect that simultaneously assists student learning.

**Action Research as Teacher Empowerment**

Richard Sagor proposes, given that schools are about student learning and that learning occurs primarily through the efforts and talents of teachers, school reform should focus on nurturing and developing the teaching profession (Sagor, 1992, p. 1). He sees action research as the strategy offering the greatest potential for positive school change because it has the potential to empower teachers by simultaneously ending isolation, enabling knowledge creation, and fostering self-regulation (1997). Sagor advocates teacher collaboration in action research projects because "schools with organizational cultures that support inquiry, learning and data-based decision making" are more satisfying workplaces, and more productive organizations (1997, p. 174). However, he acknowledges, “Most teachers who have undertaken action research have worked alone” (1992, p. 9). Our pre-service teachers would fit this category, as they are not in one location for sufficient time to establish a collaborative action research community. Listening with our "emancipatory ears", we hear Sagor talking about restructuring traditional roles and power hierarchies within the school system, but in a tone somewhat to the right of Kemmis and McTaggart.

**Discussing the Differences**

As we assessed each model, all three had the potential to be effective, create community, and provide educational value. We needed to look further, focusing on our specific situation. The first model was attractive. Our situation of teacher educator working with pre-service teachers parallels the Ross, Rolheiser and Hoagboam-Gray (1999) approach of professors working with teachers; as well, the model would invest authority in us as "knowledgeable". However, we were aware that we would not be in a position to support our students in their first years of teaching. Thus, the study of Ross, et. al.(1999), while effective in its context, was not an optimal fit for our study. We wanted pre-service teachers to understand their ability to independently identify significant issues in their teaching context and to feel empowered to work towards positive change. This involves a specific way of thinking, in which teachers see themselves as capable professionals able to self-direct their own professional growth through meta-cognitive reflection and inquiry.

The second model, advocated by Kemmis and McTaggart (1988), insists action research must be a group endeavor of staff, directed at critical change. While we favour peer collaboration as a wonderful support in any situation, we acknowledged our pre-service teachers have a limited time in their practicum setting, and are viewed as transients by the in-service staff. It was unlikely they would be able to carry out a collaborative action research project, nor is a beginning teacher well positioned to engage in critical practice.

In the third model, defined by Sagor (1992), action research is teacher-initiated and teacher-directed, with the end goal of improving practice and, in this way, improving schools. While Sagor regards community-building as valuable, he acknowledges that individual teachers frequently undertake action
research alone, based on an issue they have identified within their teaching context. The degree of individual autonomy offered by this model was consistent with our commitment to empower pre-service teachers and suited to their probable practice teaching situations. Finally, although we are attracted to the coherence offered by the other two models, Sagor’s approach offered us greater flexibility as we experimented with action research. Thus, we selected the model described by Sagor (1992) as best suited to our situation and the needs of our students.

Having carefully delineated our beliefs and values, and evaluatively explored various action research models from the perspective of our context, we were prepared to design our own model of a two-tiered action research project (See Article # 1, Introducing Pre-Service Teachers to Action Research). The process we have described in this paper was crucial to our design of an action research unit for pre-service teachers. In the other papers in this four-part series, we describe and assess the plan in light of the research data and offer recommendations for future study and practice.

References


Biographical Note:

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