Implementing and Assessing the Power of Conversation in the Teaching of Action Research

By Allan Feldman

During the past ten years, action research has increasingly become a part of preservice and inservice teacher education. There has been a number of reasons for this. First, action research is seen as a way to improve what teachers do. It can focus on the improvement of teachers' technical skills or more reflective practice (Gore & Zeichner, 1991). Through action research teachers can generate new knowledge to share with their peers and to add to a knowledge base on teaching (Borg, Gall, & Gall, 1993). It can also incorporate an emancipatory stance that leads to teacher empowerment (Carr & Kemmis, 1986). Second, teachers can engage in action research to facilitate school change (Calhoun, 1994), within the context of a reform

effort (Watkins & Lusi, 1989), or through direct social action (McTaggert, 1994).

Allan Feldman is an assistant professor in the Secondary Teacher Education Program at the School of Education, University of Massachusetts, Amherst, Massachusetts.

Practicing teachers in large numbers throughout the United States, and in many other parts of the world, have, either on their own or through encouragement and with help from others, begun to engage in research on their own practices. In addition, action research has increasingly become a part of preservice teacher education programs. In these programs, student teachers are expected to conduct some form of research on their field experiences. While there are numerous examples of teachers' published action research reports, and of research done on how teachers do action research, there are few examples of research done on the teaching of action research. In this article I describe a study that has done just that.

In this article I describe and analyze the implementation of techniques that I developed to utilize the power of conversation in the teaching of action research. I begin by describing the theory that frames the study, which includes a model of action research as *enhanced normal practice* (Feldman, 1996), and the role of collaborative, sustained conversation as a form of research (Feldman, 1997; Hollingsworth, 1994). In the sections that follow, I describe the actions that I took as the instructor of the course to shape the role that conversation played and report on the results of this "intervention." I then describe my research methods, analyze the data, and turn to the findings. I end the article by looking at this study to see how it relates to the model of action research as enhanced normal practice, and the implications for teacher education.

Models of Action Research

In the context of the action research course, and in my public advocacy of action research, I use Lawrence Stenhouse's definition of research as a self-reflexive process that is systematic, critical inquiry made public (1975). I identify the goals of action research as the improvement of practice and an improved understanding of the educational situation in which the practice is immersed. Defined in this way, action research can be seen as a methodology, an orientation towards doing research, rather than a particular set of quantitative or qualitative methods (Harding, 1989). With this definition of action research, methods follow from the orientation of the question, dilemma, or dissonance that guides the research. It allows for a variety of theoretical perspectives to frame the inquiry and analysis. The limitations to action research are imposed from the outside, such as from positivistic research orientations that require methods designed to minimize bias. Those methods can interfere with or prevent the reflexive nature of action research.

Because this definition of action research allows for a variety of methods for enactment, it is important to make explicit the models that are discussed and encouraged in my university course. At this time in the United States there are at least three schools of action, or teacher, research. The first derives from the work of Steven Corey (1953). The second has been introduced to the United States from the United Kingdom where it developed under the leadership of Stenhouse (1975) and John Elliott (1991), among others. The third is an outgrowth of the work of the various Writing Projects (BAWP, 1979) and other centers such as the Prospect School (Carini, 1978) that have encouraged teachers of writing to look critically at their own practice to improve it and to share what they have learned with other practitioners. The students enrolled in my university course were most influenced

by the latter two schools of teacher research through my perspective and the readings selected for the course (e.g., Altrichter, Posch, & Somekh, 1993; Cochran-Smith & Lytle, 1993).

While the students in the course were exposed to writings from these two schools, they were also influenced by a model for the enactment of action research called enhanced normal practice (Feldman, 1996). In enhanced normal practice, teachers engage collaboratively in action research through three mechanisms: anecdote-telling, the trying out of ideas, and systematic inquiry. Before I describe the mechanisms, it is important for me to define what I mean by "collaborative." I am referring to a group of teachers—or other practitioners—who form a group within which they work together to engage in action research on their individual practices. When the teachers gather together, they share stories of practice. One teacher may tell an anecdote, the others listen. The listeners respond with their own anecdotes, with questions that ask for details, or with questions that take a critical turn and explore the nature of teaching and learning in schools in the context of the anecdote told. This is not a transmission model; rather it is a conversational exchange in a particular situation that relies on the teachers' expertise and experiences-what John Searle calls the Background, "the set of skills, habits, abilities, etc., against which intentional states function" (1984, 68). I return to this later when I examine the role of conversation as a form of research.

As might be expected, ideas about practice are exchanged and generated in the anecdote-telling process. The teachers go back to their classrooms and try out these ideas. They then return to the group with new anecdotes that describe how these ideas were enacted and how the students responded to them. Again, the other teachers in the collaborative group respond to the anecdotes with their stories and with new questions. In this way, through both the taking of actions and through conversation, the goals are an improvement of practice and better understanding of the teachers' educational situations.

The third mechanism of enhanced normal practice, systematic inquiry, is what many mean by "action research." It relies heavily on the collection and analysis of data in the modes of operation of the university. In the model of enhanced normal practice, systematic inquiry begins as the result of the uncovering of dilemmas or dissonances in practice that can only be resolved through a more detailed, systematic look at the practice situation.

The model of action research as enhanced normal practice is based on a theoretical perspective that depends on two distinctions—the first between knowledge and understanding and the second between context and situation (Feldman, 1993)—and on the ways that knowledge and understanding grow through conversation (Feldman, 1997). While research often leads to propositional knowledge, a product of human activity that is codifiable and can act as a commodity, the model of action research of enhanced normal practice also recognizes the construction of understanding through meaning making, both individually and in collaborative

groups, as legitimate outcomes of participation in the research process. This recognition is dependent on the postulate that human action is best understood by thinking about people as beings immersed in situations, rather than as actors in context (Heidegger, 1962). By conceptualizing being, acting, knowing, and understanding in this way, conversation becomes a viable method for doing research (Feldman, 1997), and action research can be seen to be constituted by, in part, not only conversation among people, but also between people and situations (Feldman, 1994a).

Curriculum as Conversation

Before I turn to an examination of conversation as research, I want to distinguish what I mean by this from what Arthur Applebee has called "curriculum as conversation" (Applebee, 1996). Applebee's work grows out of research on the teaching and learning of the school subject of English and its relationships with the academic disciplines that include English and American literature, grammar, composition, literary analysis, and so on. In his studies of what happens in English classes in U.S. schools, he saw a focus on what he has called knowledge-out-ofcontext rather than knowledge-in-action. Knowledge-out-of-context is what most often counts as knowledge in schools. It can be put into lists, compendia, and is seen as being "out there" to be delivered to students by teachers. Knowledge-in-action, on the other hand, is the basis for living traditions of practice and scholarship. It is what people know and do as they participate, for example, in the academic disciplines. Applebee argues in Curriculum as Conversation (1996) that knowledge-in-action arises through participation in the ongoing conversations about the things that matter in the living traditions that make up the disciplines of study. He further argues that if one's goal is for students to learn knowledge-in-action, curriculum must become

the development of culturally significant domains for conversation, and instruction becomes a matter of helping students to participate in conversations within those domains. (Applebee, 1996, p. 3)

Applebee's social constructivist perspective on learning, teaching, and curriculum leads to the conclusion that teaching should consist primarily of opportunities for structured conversations. Since one of my goals for my action research course is for my students to enter into the living tradition of self-reflective critical inquiry into one's own practice, and since I find Applebee's argument compelling, it follows that my course should have a significant conversational component to it. This is, in fact, why a major thrust of my instructional practice is to engender the types of conversations that serve as a form of apprenticeship as legitimate peripheral participation (Lave & Wegner, 1991) into action research.

Conversation as Research

Learning how to do action research is not the same as doing action research.

That is why conversation has a dual role in the course. The first, as I have argued above, is to do what Applebee urges us to do: to construct the domains for conversation that leads students to learn the knowledge-in-action of the living tradition of action research. The second role is as a form of research.

The model of action research as enhanced normal practice is dependent on the creation of what Sandra Hollingsworth has called sustained conversations (1994) and what I have called long and serious conversations (Feldman, 1997). In a related paper, I argue and demonstrate that conversation can be a legitimate form of research (Feldman, 1997). In that paper I argue that conversation can serve as research because it promotes the exchange of knowledge and the generation of understanding through dialectical meaning-making processes. By the exchange of knowledge and understanding I do not mean the transmission of thoughts, knowledge, or feelings (Reddy, 1979). Rather, each participant in a conversation makes meaning of the words, gestures, and expressions of the others through listening, watching, reflecting, questioning, and responding (Wertsch, 1991).

Conversations can be a legitimate form of research because they promote the exchange of knowledge and the generation of understanding, and can be configured to be critical inquiry processes. They are inquiry processes when the participants enter into conversations for the purposes of exchanging and generating knowledge and understanding, and when people enter into them to make defensible decisions about goals or actions. In this latter case, the participants are engaging in a form of practical reasoning, such as Aristotelian phronsis (Irwin, 1985).

Conversations can be critical inquiry processes because they are hermeneutic (Gadamer, 1992). In conversations, the participants move between the conversational situation, their immediate understanding, and a more global understanding of what is being said, listened to, reflected upon, and responded to. In this way conversations are analogous to the hermeneutic circle and textual interpretations—conversation leads to new understanding and the new understanding shapes the conversation. It follows then, returning to Stenhouse's definition of research, that conversations, which can be mechanisms for critical inquiry, become a research method by being systematized through the anecdote-telling mechanism of collaborative action research. From this it can be seen that the model of sustainable action research (Feldman and Atkin, 1995) as enhanced normal practice relies heavily on the use of conversation as research. In the next section, I describe some of the ways in which I promoted the use of conversation in a graduate course in action research for teachers.

Promoting Conversation in the Action Research Class

At this time, I have taught the action research class three times. Each time there have been approximately 20 students, with a good mix of men and women. Most of the students are practicing teachers who are enrolled in masters or doctoral degree

programs on a part-time basis. The others include principals, guidance counselors, and specialists in reading, computers, special education, and students from the programs in international education and family therapy and counseling psychology. Because of the large number of part-time graduate students in the School of Education at the University of Massachusetts at Amherst, most courses are offered on a once-per-week basis for 14 weeks, and offered after school is let out. The action research course has met each year in the 7:00 to 9:30 p.m. time slot. Many of the students are on campus once per week—they may be enrolled in a class that meets from 4:00 to 6:30 p.m. and then in a second at the later time slot. These students have had a very long day: They are up early to begin teaching by 8:00 a.m. Almost immediately after school, they drive as much as two hours to arrive at the University by 4:00 p.m. for their first class. With little break, just enough time to eat a sandwich or grab a snack from a machine, they are in my classroom at 7:00 p.m. to begin to investigate their own practice.

I have begun the course by assuming that much of the research would take place outside of class time, and that the course would be structured as a graduate seminar, with weekly readings and a mix of activities to promote discussion about the readings. I had asked a colleague (Susan Noffke) for a copy of the syllabus for her action research course, and saw that it contained the requirement that students prepare a short speech early in the semester about a research topic. I decided to incorporate these starting point speeches into the course. In addition, I felt that it was important for students to keep a journal, what I call a research notebook,2 and for them to share their notes, observations, reflections, and so on with one another. I adapted a technique that I had seen another colleague (Gary Lichtenstein) use. I asked my students to form small groups that would meet outside regular class time. In these research notebook response groups they would share their research notebooks, read each others' entries, and respond to them in writing in the notebooks. I decided to use this technique as a way to model or mimic the collaborative action research groups that play a central role in enhanced normal practice. I had also set aside some time at the end of the semester for students to present their research to one another.

Overall there were two large categories of verbal exchanges: those among the students and those between the students and the instructor. There were 11 types of verbal exchanges among the students. Three times during each semester the students made oral presentations about their research projects and received feedback from their peers: starting point speeches, interim reports, and final reports. Two methods were used to analyze data conversation in small groups: In data workshops, students presented their data and discussed with their peers how they would analyze it and what possible meanings it may have. In the analytic discourse (Altrichter et. al., 1993), students took turns in each group holding the floor, uninterrupted while the others listened, to describe their research and any problems or successes they were having with it. The listeners then had the opportunity to ask

questions of the presenter. Students interacted outside of the class in research notebook response groups and through electronic mail (e-mail). Students also talked with one another during class as part of whole class discussions, collaborative group work, and through the use of the jig saw, a method of sharing and critiquing knowledge gained through a reading of the research literature. In addition, each of the research notebook response groups made a presentation about how their group is structured.

I interacted verbally with the students is a variety of ways. I took part in all class discussions, and was an active participant in groups during presentations of reports, the data workshops, and the analytic discourse. I also provided written comments to the starting point speeches, and interim and final reports. In addition, I met with students during my office hours and conversed with them through email.

Methods of This Study

Did the students find these conversations useful? If so, for what reasons? Did they engage in conversations that helped them to do action research to improve their practice and to come to better understandings of their educational situations? The methods that I used to answer these questions were quite straightforward. I kept a research notebook, similar to the one used by the students, in which I wrote notes of class occurrences, plans for the class meetings, reflections on classes, and hypotheses about why things were happening as they were. I collected the students' work: their written starting point speeches, their interim reports, and their final reports. I also kept copies of my responses to their written work. During Year Two, I audiotaped the starting point speeches, the research notebook response group presentations and students' final oral reports. In each year I collected course evaluations from the students, and in Year Two and Year Three I received written comments (response cards) about the class from the students immediately following many of the sessions. I have saved all email communication between the students and myself. In addition, during Year Two, one student, Marsha Alibrandi, who served as my research assistant, kept her own notes about the structure of the class and aided in this analysis. In particular she was interested in whether or how the class moved towards a democratic ideal.

I analyzed the data by reading through it several times to identify categories with which to describe it. I determined the categories by deriving them inductively from the data, following the methods of the development of grounded theory (Strauss & Corbin, 1990). Simply put, I read through the data looking for comments that students made about the types of verbal exchanges that occurred in the class and noted whether they were positive or negative comments, and what importance the students gave to the activities. I then reread the data and coded it to the emergent categories. Following the work of Matthew Miles and Michael Huberman (1984), I used summarizing tables to display the results of the coding (see Tables 1, 2, and

3). It is important for me to note that these tables are *not* simply frequency tables. While they display how often different categories of student comments about the use of conversation appeared in the data, their primary function is to gather together the types of comments to make them more accessible than narrative alone to readers' interpretations and critique.

Discussion of Data

It is evident from the data summarized in the tables that the students found the techniques for promoting conversation useful as they engaged in action research. The vast majority of comments about the techniques were positive. This may be due to students' reluctance to publicly criticize a course. There are indications that that was not the case. I will return to this latter.

The reasons that students gave for finding conversations useful can be grouped into three larger areas: learning how to do research (Table 1), the development of communities of practice (Table 2), and achieving the goals of action research (Table 3). In the first area, students found the conversations useful for the selection and clarification of starting points for research, and for deciding on appropriate data collection and analysis methods. In the second, students stated that the techniques for promoting conversation encouraged greater equity in the class, provided opportunities for the sharing of ideas, and for general support of one another in the class and in their practice. The result was a growth of community that was built upon diversity in the group in some cases, and shared experiences in others. Finally, the students stated that the techniques helped them to recognize what was problematic in their practice, and that they were helped to understand their practice better and to decide what actions to take to improve their practice.

It is clear from the data that the students found the research notebook response groups an important forum for the discussion of issues in each of these areas. However, the preponderance of data that refer to the response groups should not be taken as an absolute measure of worth in comparison with the other techniques for the promotion of conversation. Much of the data about the response groups had as its source the presentations made by each group about how they structured and used their time together. While discussions of the use of other techniques did occur in the class, none were focused on in the same way as the response groups.

Data workshops also appeared in each of the three areas, but with a greater occurrence in outcomes. This is not surprising since data workshops came in the latter part of the course.

Most of the data on the use of email came from the exchanges that I had with the students. I did not have access to the exchanges between students because of the structure of the University's computer system. During much of the course the email exchange between the students and me focused on research methods. Students sought clarification and feedback on their choice of starting points and on the

Table 1
The Importance of Conversation for Learning about Research Methods

Coding Category	Type of Verbal Exchange	Frequency of Occurrence
Deciding on data collection and analysis (DCA)	Data Workshop	1
	E-Mail	7
	Response Groups	12
	Small Group Discussions	1
	Whole Class Discussions	1
Selection and clarification of starting points (SSP)	Data Workshop	2
	E-Mail	3
	Response Groups	7
	Starting Point Speeches	3

Table 2
The Importance of Conversation
for the Development of Communities of Practice

Coding Category	Types of Verbal Exchange	Frequency of Occurrence
Diversity in group (DIG)	Data Workshops	2
	Response Groups	3
	Small Group Discussions	2
	Starting Point Speeches	1
Growth	Data Workshops	1
of community (GC)	Response Groups	4
General support (GS)	E-Mail	2
	Response Groups	19
	Whole Class Discussions	1
Equity (EQ)	Interim Reports	1
	Response Groups	1
	Small Group Discussions	1
Importance that the group members were different from school colleagues (DCS)	Response Groups	1
Importance that the group members were from the same school (NDG)	Response Groups	2
Sharing of ideas (S1)	Response Groups	4

Table 3

The Importance of Conversation for Achieving the Goals of Action Research

Coding Category	Type of Verbal Exchange	Frequency of Occurrence
Deciding on what actions to take to improve their practice (DIP)	Analytic Discourse	1
	Data Workshops	2
	Response Groups	6
Recognizing what is problematic in their practice (RPP)	Analytic Discourse	1
	Data Workshops	ī
	Interim Report	ĵ.
	Response Group	4
Coming to understand	Data Workshops	2
their own practice	E-Mail	1
better (UPB)	Final Reports	1
	Interim Reports	1
	Response Groups	10
	Small Group Discussions	1
	Starting Point Speeches	2

research methods that they were choosing to use. In the last few weeks of the course the exchanges focused on ending—when final reports would be handed in, questions about grades, and questions about what was to come next, e.g., independent studies and dissertations using action research and possibilities of presenting their research at conferences.

As I have stated already, there were very few negative comments about the use of these techniques. While this could be due to the reluctance of students to make public critiques of instructors or their courses, the students did have opportunities to make their comments anonymously. At the end of nearly half the class sessions in Year Two, I solicited anonymous feedback on the particular class sessions, and at the end of each semester I collected anonymous course evaluation forms. Two negative themes emerged. The first was that there was too much emphasis in the course on theoretical aspects of teacher research. This is not surprising from a student body that is composed entirely of practitioners. The second theme was how the whole class discussions acted against democratic processes in the class by allowing for inequity in participation.³

The research notebook response groups became sites for the development of what may be called *community*. Jean Lave and Etienne Wegner (1991) have defined a community of practice as "a set of relations among persons, activity, and world, over time, and in relation to other tangential and overlapping communities of practice (p. 98)." They then argue that communities of practice are necessary for the

existence of knowledge because they provide "the interpretive support necessary for making sense of its heritage" (p. 98).

For many of the students in the course the research notebook response groups became communities of practice in which learning, and the generation of knowledge and understanding, took place. The support from others and the development of equitable relationships that were devoid of hierarchy aided in the growth of community that resulted in sharing of ideas about research, outcomes of the research, and about group processes. The notebook response groups, because they were places in which democratic conversations took place, were the sites of the processes that I have called enhanced normal practice. As a result, they were a primary location for the generation of knowledge and understanding.

As it turned out, the nature of the students' private and work lives made it difficult for some to set up and maintain these groups. Their once per week schedules at the University left little time for them to meet as small groups outside of class sessions. However, this was accomplished in a variety of creative ways, such as by meeting before or after the class, using email and conference calls, and in Year One three students car-pooled and therefore spent two hours a week together outside of class. There were also groups in which the dynamics between members impeded the development of community. For example, there was a group that lost two of its members early on. The result was a highly inequitable relationship between the two remaining participants—a very experienced practitioner (more than 25 years of practice) and an undergraduate from a neighboring college.

From the above, it appears that this intervention into my own practice as an instructor of a university course in action research was successful. Several of the techniques that I used to promote conversation appeared to be useful, especially the use of the research notebook response groups and the data workshops. The students found them useful for shaping research questions and designs, for the promotion of communities of practice, and for encouraging the outcomes of engagement in action research—the recognition of what is problematic in practice, new understandings of practice, and help in deciding what actions to take to improve practice.

However, in at least one aspect, the use of conversation was not as successful as I hoped it would be—it did not extend far into the students' practices as teachers. This may best be seen by thinking of the students as having two different but interrelated practices. In their schools they practice as teachers and administrators, and in the University they practice as students. It appears that the conversational techniques were most useful for improving the latter practice—their work within the situation of the action research course. A revisit to my data confirms this—most of the comments about the use of the conversational techniques referred to how they helped the students to do their action research projects. While it is true that these projects were focused on their school practice, it was in the context of the action research course, and the students were at least as concerned with the completion of the projects for grades and credit as they were for the improvement of their practice

as teachers and administrators.

Interestingly enough, I have found the same dichotomy in myself. As I wrote this article, I found myself referring to a post hoc set of methods that I used to analyze data that I collected during the first three years in which I taught the course in action research. In rereading what I wrote, I realized that what I had described bore little resemblance to the ways that I had shaped the course as I taught it during those two semesters. Therefore what you read here is a report of the part of enhanced normal practice that I call systematic inquiry rather than a report of my engagement in anecdote-telling or of the trying out of ideas.

What has happened in writing this article is that I allowed one of the practices that I engage in to take precedence over the other. These two practices are as an educational researcher and as a university instructor. Each of these practices is situated. As an instructor, my practice has been a part of the situation constituted by the three courses in action research that I have taught. In the case of the study reported on here, my practice as an educational researcher has been part of the situation shaped by my inquiry into the educational situation that includes my practice as an instructor. And so this article, and the study that it describes, is more closely connected to my practice as an educational researcher than as an instructor.

Conclusions and Implications

I began this article by describing the model of action research that I call enhanced normal practice, and by summarizing my argument that collaborative sustained conversation can be a legitimate form of research. I then described and examined the ways that I incorporated conversation as a form of research into a graduate-level course for teachers on action research. At this point, what can I say that I have learned from this study of the teaching of action research? First, as I wrote this article, I discovered that by writing it in the role of an educational researcher, I have left unexamined those aspects of enhanced normal practice that I call anecdote-telling and the trying out of ideas. Second, just as I saw happening with my students, I have focused on what I have called the need to know (Feldman, 1994a) that the teacher education practices that I used in the course had the effects that I desired. I have found just that: For the most part, the students found the techniques that I use to encourage conversation to be an important part of their selection and clarification of starting points for research; deciding on their data collection and analysis methods; recognizing what is problematic in their practice; coming to understand that practice better; and in deciding on what actions to take to improve their practice.

I have also found that for the students, the formation of, and the participation in, caring groups of peers was one of the most important outcomes of the course. Students who had felt isolated in the teacher education program now felt surrounded by new colleagues and friends. This appears to be just the type of collegial group

that teachers are being encouraged to form to effect educational reform. However, these communities were short-lived due to the transitory nature of the student population. Only one group continued to meet—one comprised of doctoral students—and all but two of those students left the university before the start of the next academic year.

It should be apparent from this article that this study of the teaching of a university course in action research has been an action research study in itself, what Elliott has called, "second-order action research" (1991). In researching my own practice I have explored the influences of my educational theories about the use of conversation, and the instructional practices that I employ. In addition, I identified two parallel dilemmas. The first was one that exists as a result of my students having two practices: school teacher and graduate student. The dilemma is that even though their action research was focused on their professional practice, they did it as part of their work as graduate students. As a result their communities of practice disbanded so that they did not have the collaborative groups with which to continue anecdote-telling and the trying out of ideas, and without the incentive of course credit and a grade, they ceased systematic inquiry.⁵

The second dilemma exists in my own situation. As an educational researcher in the university, I look at research from a particular vantage point. When I tried to apply those methods to the study of my own practice as an instructor, I found them somewhat unsatisfying. There is that other "study" that I engaged in but have not reported on here, the study that involved the use of anecdote-telling and the trying out of ideas. I have begun to think of it as the occurrent study to distinguish it from the one that was done post hoc and reported on here. It is the occurrent study that was immersed in my practice as a university instructor and which can be found in a narrative of my intentions, actions, and reflections on those actions. It also existed in conversations that I had with colleagues, friends, and students about the goings on in the class and how they related to my intentions. And so it appears that just as my students' action research remained distinct from their practice as teachers because of its location in the situation of the university course in action research, my study of the teaching of action research has remained distinct from my practice as a teacher educator because of its location in the situation that is defined by the norms of educational research.

There is at least one other factor that may have led to the second dilemma and the ascendancy of the post hoc study over the occurent study in my work. While I had many conversations with colleagues, friends, and students about this course, my community of practice is not as immediate in space and time as my students' notebook response groups. That is, while I engage in these conversations, they occur on an ad hoc and occasional basis, across distances that are bridged through e-mail and yearly gatherings at the American Educational Research Association and similar meetings. Again, the norms of my practice as an educational researcher do not seem to support systematic and critical study of my teaching practice.

This suggests that to resolve the first dilemma requires action on the second—that if we as university or college teacher educators are to help bridge the gap between theory and practice for teachers, we need to find ways to bridge the gaps that exist between our roles as educational researchers and as instructors. One way to begin to do this is to establish the equivalent of research notebook response groups in our colleges that would serve as local communities of practice in which the generation of knowledge and understanding about our teaching practices can occur and be legitimized.

Notes

- The number of recent publications in action research is significant. They include collections of teachers' writings (e.g., Hammersly, 1986; Goswami & Stillman, 1987; Bissex & Bullock, 1987) and examples of research on the doing of action research (e.g., Action in Teacher Education, v16, n4).
- 2. I use the label "research notebook" rather than "journal" to distinguish the semi-public document used for research purposes (the research notebook) from a personal diary.
- This was also made clear in an analysis done by Marsha Alibrandi of turn taking in one of the whole class sessions.
- 4. These were themes addressed in a study of the action research done on graduate students' roles in teacher education programs that emerged from the course in Year One (Feldman *et. al.*, in press).
- 5. It is important to note that teachers often engage in these activities as an informal part of their practice. Many teachers have told me that they "never teach the same way twice" and that they engage in the "monitor and adjust" of normal practice. It is the enhancement of normal practice that I teach and encourage through the course in action research that does not appear to continue once the semester is over.

References

- Altrichter, H., Posch, P. & Somekh, B. (1993). Teachers investigate their work: An introduction to the methods of action research. New York: Routledge.
- Applebee, A. (1996). Curriculum as conversation: Transforming traditions of teaching and learning. Chicago, IL: University of Chicago Press.
- BAWP. (1979). Bay Area Writing Project/California Writing Project/National Writing Project: An overview. Berkeley, CA: University of California. ED184123.
- Bissex, G. & Bullock, R. (1987). Seeing for ourselves: case-study research by teachers of writing. Portsmouth, NH: Heinemann.
- Borg, W., Gall, J., & Gall, M. (1993). Applying educational research, a practical guide (3rd edition). New York: Longman.
- Calhoun, E. (1994). How to use action research in the self-renewing school Alexandria, VA: Association for Supervision and Curriculum Development.
- Carini, P. (1978). Documentary Processes. Paper presented at the Annual Meeting, American Educational Research Association, Toronto, Canada, March 27-31. ED151339.
- Carr, W. & Kemmis, S. (1986). Becoming critical: Education, Knowledge and Action Research. London, United Kingdom: Falmer Press.

- Cochran-Smith, M. & Lytle, S. (1993). Inside/Outside: Teacher research and knowledge. New York: Teachers College Press.
- Corey, S. (1953). Action research to improve school practices. New York: Teachers College Press
- Elliott, J. (1991). Action research for educational change. Philadelphia, PA: Open University Press.
- Feldman, A. (1993). Varieties of wisdom in the practice of teachers. Paper presented at the Spencer Hall Invitational Conference on Understanding Teacher Development in Context, London, Ontario, October.
- Feldman, A. (1994a). Erzberger's dilemma: Validity in action research and science teachers' need to know. Science education, 78(1), 83-101.
- Feldman, A. (1994b). Long and serious conversations with teachers as research. Paper presented at the Sixth Annual Conference on Ethnographic and Qualitative Research in Education, Amherst, MA, June 3-5.
- Feldman, A. (1996). Enhanced normal practice: Mechanisms for the generation and sharing of knowledge and understanding in collaborative action research. *Journal of research in science teaching*, 33(5), 513-540.
- Feldman, A. (1997). The role of conversation in collaborative action research. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago, IL, March 24-28.
- Feldman, A., Alibrandi, M., Capifali, E., Floyd, D., Gabriel, J., Henriques, B., Hitchens, F., Lucey, J. & Mera, M. (In Press). Looking at Ourselves Look at Ourselves: An Action Research Self- Study of Doctoral Students' Roles in Teacher Education Programs. Teacher Education Quarterly.
- Feldman, A. & Atkin, J. (1995). Embedding action research in professional practice. In S. Noffke and R. Stevenson (Eds.), Educational action research: becoming practically critical. New York: Teachers College Press.
- Gadamer, H. (1992). Truth and method, Second revised edition. NY: Crossroad.
- Gore, J. & Zeichner, K. (1991). Action Research and Reflective Teaching in Preservice Teacher Education: A Case Study from the United States. *Teaching and Teacher Education*, 7(2), 119-136.
- Goswami, D. & Stillman, P. (1987). Reclaiming the classroom: teacher research as an agency for change. Upper Montclair, NJ: Boynton/Cook.
- Hammersley, M. (1986). Case studies in classroom research: a reader. Philadelphia, PA: Open University Press.
- Harding, S. (1989). Is there a feminist method? In N. Tuana (Ed.), Feminism and science, 18-32. Bloomington, IN: Indiana University Press.
- Heidegger, M. (1962). Being and time. San Francisco, CA: Harper San Francisco.
- Hollingsworth, S. (1994). Teacher research and urban literacy education: Lessons and conversations in a feminist key. New York: Teachers College Press.
- Irwin, T. (1985). Aristotle's Nichomachean Ethics. Indianapolis, IN: Hackett Publishing Company.
- Lave, J. & Wegner, E. (1991). Situated learning: Legitimate peripheral participation.

 Cambridge, United Kingdom: Cambridge University Press.
- McTaggart, R. (1994). Participatory action research: Issues in theory and practice. Educational Action Research, 2(3), 313-337.

- Miles, M. & Huberman, M. (1984). Qualitative data analysis: A sourcebook for new methods. Newbury Park, CA: Sage Publications.
- Reddy, M. (1979). The conduit metaphor: A case of frame conflict in our language about language. In A. Ortony (Ed.), *Metaphor and thought*. Cambridge, United Kingdom; Cambridge University Press.
- Searle, J. (1984). Minds, brains and science. Cambridge, MA: Harvard University Press. Stenhouse, L. (1975). An introduction to curriculum research and development. London, United Kingdom: Heinemann.
- Strauss, A. & Corbin, J. (1990). Basics of qualitative research: Grounded theory procedures and techniques. Newbury Park, CA. Sage Publications.
- Watkins, J. & Lusi, S. (1989). Facing the Essential Tensions: Restructuring from Where You Are. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, CA, March 27-31.
- Wertsch, J. (1991). Voices of the mind: A sociocultural approach to mediated action. Cambridge, MA: Harvard University Press.