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ABSTRACT

This investigation paired four university secondary education student teachers with four experienced English teachers. As the students did their practice teaching, they conducted joint classroom research with their cooperating teachers. Their relationships over the course of the semester were documented and analyzed using a qualitative case-study design. The investigation found that the intersection of roles as a university researcher, facilitator, colleague, and teacher researcher put her in a unique position to become part of the teacher research group, which evolved into a support group that continues 3 years after the formal research project has ended. Analysis of the common themes that emerged in the formal project indicates that it was easier for the teachers to collaborate with one another than it was for the teachers to collaborate with the student teachers, largely because of differing experiences and divergent perspectives about the research task and the meaning of the teaching community. The support group that grew from the project did not include the student teachers. Teacher participants describe a renewed sense of professionalism as they continue to conduct inquiry. (Contains 38 references.) (SLD)

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COLLABORATIVE TEACHER RESEARCH:  
COOPERATING TEACHER, STUDENT TEACHER, AND UNIVERSITY FACULTY  
WORKING TOGETHER

by

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New Orleans

This investigation paired four university secondary student teachers with four experienced English teachers. As the student teachers did their practice teaching, they conducted joint classroom research with their cooperating teachers. Their relationships over the course of the semester were documented and analyzed using a qualitative case study design. Ultimately, our relationship as a group emerged from this beginning focus on the novice and veteran teachers. As the university researcher, I designed the study and collected data, but I was also a facilitator, colleague and teacher researcher. This intersection of roles put me in a unique situation to become part of the teacher research group myself, a support group which continues three years after the formal research project has concluded.

Teacher-research has become a significant way for teachers to understand how teaching and learning occurs in their classrooms. With teachers as classroom researchers, a new vision emerges, a perspective of "teaching more as a learning process rather than a daily routine or performance" (Mohr, 1987, p. 101). Every lesson is a process of knowing; the teacher's daily activity is inquiry (Britton, 1983). By conducting research, teachers have a point of departure from which to explore and excavate a deeper understanding of how learning takes place. Knowledge becomes a process, one of inquiry.

Teacher research groups are well established in many parts of the country and veteran teachers are supporting one another as they explore how to conduct classroom research (Asher, 1987; Bissex and Bullock, 1987; Cochran-Smith and Lytle, 1993; Goswami

and Stillman, 1987; Kelsay, 1991; Mohr and MacLean, 1987; Schecter and Ramirez, 1991). University teacher education programs are beginning to develop inquiry-oriented curricula (Clemson, Arends, Young and Mauro, 1989; Clift, Veal, Johnson and Holland, 1990; Cochran-Smith, 1990 & 1991; Hillocks, 1990; Ross, 1988; Rudduck, 1985; Schon, 1987; Zeichner, 1983). However, coursework alone is insufficient in providing such an orientation for beginning teachers. Preservice teachers need the opportunity to learn from teacher models who are conducting research in their own classrooms.

The cooperating teacher's influence on the student teacher has been shown to be consequential (Feiman-Nemser & Buchmann, 1985; Floden & Clark, 1988; Tabachnick, Popkewitz, & Zeichner, 1980; Zeichner, 1980), and thereby guiding the beginning teacher's attitudes and beliefs. If future teachers are to develop a "problematic attitude" (Zeichner, 1983, p. 7), an underlying philosophy focused on teachers involved in classroom inquiry should drive the teacher education program. It will require university researchers "link up" collaboratively with school faculty to explore teaching and learning together. If the university and the schools are both focused on guiding teachers toward discovery and thinking which leads to growth, they could lessen the chance of being at "cross-purposes" (Feiman-Nemser & Buchman, 1985, p. 62). Then beginning teachers enter the profession having experienced theory and practice intertwined (Houser, 1990) as the two academies share their expertise.

Teacher education programs can be avenues to collaborative arenas. Goodlad (1990) calls on teachers to be the "link" in teacher education, guiding preservice teachers as they seek to understand how students learn and how teachers teach. The student teacher glimpses what it means to belong to a school community as a teacher rather than as a student. The cooperating teachers who serve as mentors for those beginning teachers model that role. As teachers become "reflective practitioners" (Schon, 1983) and "students of teaching" (Cruickshank, 1987), they model an inquiry-oriented approach (Zeichner, 1983) to teaching. The student teachers of inquiring teachers are introduced to ways of exploring their own classrooms, examining the process of learning.

The significance of this research study is in describing what that experience became for a group of cooperating teachers, their student teachers, and a university researcher. Understanding that experience could help teacher educators collaborate with classroom teachers to provide a more effective teacher education model, one aligned with the reality of practice.

As university researchers and classroom teachers work together investigating learning and teaching, their collaboration becomes a way for teachers to explore answers to the uncertainty which is inherent in teaching (Floden & Clark, 1988). Goodlad (1990) encourages universities to offer courses focusing on critical thinking skills and developing an attitude toward

change, challenging teachers to "inquire into the nature of teaching" (1990, p. 59). To build on this base, classroom teachers and university faculty can inquire together, working as "co-learners and co-participants" (Kantor, 1990, p. 64). Typically university research is "theory-driven" and classroom teaching "practice driven" (Kantor, 1990, p. 65). In a collaborative approach, researcher and teacher can consider things in the other's terms and "challenge assumptions...about who has what to say to whom" (Kantor, 1990, p. 66).

Bolster (1983) suggests researchers and teachers operate from a "different set of assumptions about how to conceptualize the teaching process" (p. 295). Teachers work with the everyday world of the classroom operating as "situational decision makers" (Bolster, 1983, p. 296) while researchers seek to establish the universal which can be replicated. Bolster calls on the two to begin to operate together in order to use both perspectives to better understand the complexity of how teaching and learning ensue.

Clift, Veal, Johnson, and Holland (1990) found "university faculty and reflective practitioners working with the university's teacher education program can prepare students to monitor their own learning processes and to identify gaps in their knowledge" (p. 60). The preservice teachers learned to inquire into their own teaching, and the collaboration between school and university opened channels of communication aimed at meaningful growth in education.

Cochran-Smith (1991) identified the need for cooperating teachers who were acting as professional models for student teachers to bring an "inquiry-centered perspective to their roles" (p. 29). Cooperating teachers, university supervisors, and student teachers participated in questioning through a "process of self-critical and systematic inquiry about teaching, learning, and schooling" (p. 6). With everyone's voices included, an encompassing perspective unfolded from both the views of those who work inside the school (teachers and student teachers) and those who work outside (university supervisors). As Cochran-Smith (1991) suggested, a gap is often created between what is learned at the university and what is experienced at the school. Collaborative inquiry actively engages both communities.

#### PARTICIPANTS AND DESIGN

In this study, four experienced secondary English teachers acted as cooperating mentors for a group of four student teachers while they taught and researched together in their classrooms. The teachers were from a large suburban upper-middle class high school in a major southwestern city. The student teachers were from a large state university in the same city who had applied to student teach in secondary English during fall semester. The research design was a qualitative case study in which the participants were asked to describe their experiences through taped conversations, group seminars, team meetings, reflective papers and journals. The transcriptions of those descriptions were analyzed for common themes about the phenomenon, the emerging relationships (Erickson,

1986; Barritt, Beekman, Bleeker, & Mulderij, 1985). Classroom observations were also transcribed to search for further details as experiences occurred.

The strength of the phenomenological description lay in the specific details told from the participants' views of teaching and researching in their classroom "life-worlds" (Luckmann, 1978). How the student teachers and teachers made meaning of their specific "worlds" was probed, as they perceived it and as it was lived. Observations of their teaching together and their collaborating outside the classroom supported by their own personal interpretations of their experiences served to illustrate a vivid picture of their developing relationships.

I, too, was one of the participants. In Giorgi's discussion (1985) of the "subject-experimenter relationship" (p. 76) he describes the experimenter as more than "another variable to be controlled" (p. 78). As a member of the group, in the role of facilitator for the teacher's group and teacher educator for the student teacher group, I was an active collaborator. We were engaged in the experience together.

From a phenomenological perspective, meanings made about situations come from the people experiencing those circumstances. The meanings varied depending on who was experiencing the encounter. In order to uncover the unique understandings of each individual relationship between the teacher and the student teacher, I engaged in dialogue with them in order to comprehend their interpretation of the experience. Yet, my involvement in the



dialogue created another perspective of the same situation. Explication of my words and actions during our individual and group meetings was necessary. "The experimental situation is a social situation" (Giorgi, 1985, p. 78), and I was a participant in the "experimental situation" during this research. In a sense, my role was also one of teacher researcher by being the facilitator of the teacher group and instructor in the student teaching group (Mohr & MacLean, 1987).

#### PROCEDURES

An introductory three-day workshop for the teachers took place several weeks before the opening of the school year. This provided time for the concept of teacher-research to be explored and discussion generated about the ideas the teachers had for their own classroom inquiry. I facilitated the group, providing readings which were examples of teacher research. We all started journals and verbally shared our ideas which became a way for us to begin collaborating. Mohr and MacLean (1987) found such support groups important to each teacher's research development, as the groups' discussion about their readings and experiences generated new ideas and collegial support.

This was followed by weekly meetings throughout the semester which I facilitated with teachers and student teachers in order for us to share our research progress and collaborate our efforts. Three times during the semester I audio-taped interviews with the teachers and student teachers and made regular observations in their classrooms.

## METHODS OF COLLECTING DATA

## Types of Data

The collected data consisted of:

1. field notes from observations made during seminars and teaming meetings
2. field notes from classroom observations
3. journals and reflective papers
4. transcripts of three audio-taped conversations.

In the three scheduled conversations:

1. Each participant spoke of his/her preconceptions in the beginning interview.
2. The teachers and student teachers had the opportunity to describe their experiences at mid-point in the semester.
3. Then they discussed their overall perspectives of the entire semester in the final interview.

All the participants detailed their own experiences as they envisioned them, reflecting first from the "internal-self perspective" (Deegan, 1981, p. 234). Then they described what they saw their team partners experience, the "external-self perspective" (Deegan, 1981, p. 234). This was extended to what they thought their cooperating teacher or student teacher might be feeling or thinking about the relationship or experience, "internal-other perspective" (Deegan, 1981, p. 234). Their descriptions provided clearer vision of the experience and relationship developing between team partners because they looked both inward at their own

meaning in addition to projecting their vision of the others' thinking.

In order to understand their perspectives of the situations, it was necessary for us to enter into dialogue with one another. We exchanged our "respective meanings" (Giorgi, 1985, p. 78) through our interviews. "Through dialogue, the interview becomes a joint reflection on a phenomenon" (Weber, 1986, p. 56). The transcriptions of conversations, both interviews and meetings, revealed data about their relationships and my role in the study as a participant.

#### ANALYSIS

In order to locate the themes, details were framed in "meaning units...a part of the description whose phrases require each other to stand as a distinguishable moment" (Wertz, 1985). Meaning units are the "smallest data pieces" (Tesch, 1987, p. 232), and the meanings of those units are the themes.

One of my goals was to identify the progression of relationships over the semester. Comparisons of the themes from all the participants identified common themes they shared at intervals during the semester: beginning, middle and end. Tesch (1987) refers to these common traits as the "phenomenon's constituents" (p. 233). This constituted the phase of the research which Giorgi (1985) identifies as the "search for essences" (p. 43); the theme reveals the "essence" of the experience.

By identifying the salient constituents (themes), links could be made and "patterns" within each participant's description

emerged. Erickson (1986) identifies these as "patterns of generalization" (p. 148). This made it possible to investigate common themes among team participants. Erickson (1986) refers to this as "pattern analysis" (p. 148) which test those linkages that make the largest

possible number of connections to items of data in the corpus. When one pulls on the top string, one wants as many subsidiary strings as possible to be attached to data. The strongest assertions are those that have the most strings attached to them, across the widest possible range of sources and kinds of data. (p. 148)

Pattern analysis probed the shared themes to identify possible "key linkages" among the four teams during each of the three periods of the semester.

#### COMMON THEMES

Five common themes emerged as the semester progressed:

1. The needs and goals of the teachers and student teachers determined the nature and quality of their research experience. The veteran teachers anticipated that teacher research would be a way to grow in their profession. At the onset of the semester, the student teachers saw it as just another assignment, but their perceptions changed as they found benefits from reflecting and sharing knowledge with the teachers and each other.

2. The research was incentive for collaboration among all the

participants. The teachers and student teachers collaborated on their individual classroom inquiry projects. The teachers shared with one another, as did the student teachers. Similarly, the teachers and the university researchers entered into collaboration, as they worked together to draw conclusions about the whole project.

3. Classroom inquiry brought the teachers and student teachers together in dialogue about their students and learning, dialogue which questioned and produced hypotheses. Their discourse became a vehicle for transmitting and sharing professional knowledge, both what they experienced first-hand and the literature they investigated.

4. The sharing nature of conducting joint classroom research led to several side effects. First, open communication was attainable among members of the two peer groups, experienced teachers and student teachers, as it also evolved between the teachers and student teachers in the individual teams. Secondly, the participants built a sense of professionalism as they worked together and investigated the research of others.

5. Conducting classroom research led to teachers and student teachers developing their own theories and generating further questions, ones which were ready to be explored from the stance of teacher-researcher.

#### DISCUSSION OF RESULTS

It was easier for the teachers to collaborate with one another and with me than it was for the teachers to collaborate

with the student teachers. The teachers and student teachers had different perceptions of what it meant to do classroom inquiry. The inquiry topic began as an interest of the teachers in two of the cases. This limited the feeling of ownership the two student teachers had for the research in the beginning. Therefore, the research belonged to the teachers and the student teachers were helping to collect data, participating at the level of research assistants. The type of "team" which formed was influenced by the feeling of joint ownership or lack of it, and this ownership began with who identified the question to be investigated.

Another divergent perception was that the teaching community meant different things to the two groups, novice and veteran. The cooperating teachers envisioned classroom research as a way to strengthen the larger community. Ms. Lewis (cooperating teacher) described teacher research as a way to change education from the bottom up. However, the student teachers focused more on developing a real world experience in the classroom community; they needed acceptance within the smaller world. Mark (student teacher) expected to build his "bag of tricks" by observing and applying what he saw experienced teachers do. His focus was on success in the classroom. Ms. Lampert (cooperating teacher) and Linda (student teacher) both described a goal they had to become part of a "network" community, but Linda felt she had to be accepted into the teaching community by first developing her own ideas in her own classroom. The student teachers concentrated more on the smaller world of the classroom and their acceptance

there. Perhaps such affirmation is necessary before one is able to reach beyond the immediate classroom and collaborate in the larger professional community.

The teachers anticipated some renewal from doing research and working with student teachers, renewal which would enlarge their community. The student teachers wanted knowledge from their cooperating teachers, knowledge which would earn them acceptance into the classroom community. The research remained a secondary issue to them while it was a primary motivating force for the teachers.

Collaboration manifested itself between team members and among peers. Peer groups remained separated to some extent; the student teachers turned to one another for support, and the teachers shared more openly with their colleagues than with the student teachers. The teachers all described doing the research to learn more about the teaching of writing, not to focus on research specifically. They were united in their interest to investigate the teaching of writing.

Kelsay (1991) described the support a teacher researcher group found from sharing their research and how their work together helped them gain focus. Mohr and MacLean (1987) reported similar findings with their teacher researchers. This held true for this study's teachers; as Ms. Lampert wrote about the "high" she felt from the praise her teacher colleagues gave her when she read from her research presentation. Ms. Lewis expressed appreciation for the help the other teachers freely

provided. She described the teacher's job as typically "lonely," and how this type of support helped decrease that detachment. Schecter and Ramirez (1991) revealed how the teachers in their teacher research group found support which helped fight "teacher isolation" (p. 6). This appeared to hold true in this present study as well.

The student teachers had similar needs as they shared their experiences with their peers. They gained support by voicing their concerns about learning to teach and manage a classroom. Hearing echoes from their fellow student teachers helped them feel less unskillful. Mark explained how such conversation helped him realize the other student teachers had similar experiences; it was strengthening to feel he was "not off base completely." Another student teacher, Kim, described how it was "reassuring" to see everyone had comparable "problems."

As time went by, members of both groups began to communicate more about the research in joint team meetings. The student teachers related feeling more confident and accepted in their classrooms, so they were able to address the research in addition to their teaching. By the last month of the semester, they all took a more active role in the research projects and in discussing them with the veteran teachers.

Cooperating teachers inherently have more experience than their counterparts; therefore, the content of their professional reflection differs from that of the student teachers. It is possible that this diversity in perspective kept all the teams in



this study at some degree of distance as they tried to collaborate. It could also be why the members of the different peer groups felt more comfortable collaborating with their peers.

Ms. Lampert (cooperating teacher) and Linda (her student teacher) were the only team to describe collaboration throughout the semester as they experimented not only with conducting teacher research but also as they tried a new teaching strategy, the workshop approach to teaching writing, for the first time. Both were new to these approaches. It is possible that their shared inexperience made it easier to collaborate; together they learned about teaching and research.

Side effects from doing classroom inquiry began to emerge. Ms. Simms (cooperating teacher) described how "channels of communication" opened between the teachers and me as they gained access to a "university type." Ms. Lampert described all of us as "joint learners." The student teachers looked on as the teachers supported one another. Even though the student teachers lacked complete ownership in the classroom research, they viewed the teachers' collaboration and enjoyed their own with their peers. The teacher research opened a new kind of classroom reality for the student teachers, one rich in collegial communication--an exchange in which they participated more freely as they gained experience.

#### A DICHOTOMY OF ROLES

My differing roles affected what collaboration I had with the participants and on what occasions. The teachers and I

learned together as "colearners and coparticipants" (Kantor, 1990). One of my roles in the present study was to facilitate the meetings for the teachers but not dictate agendas. They needed details about what it meant to be a teacher researcher (Mohr and MacLean, 1987), but I remained conscious of their need to develop their own focus for inquiry (Asher, 1987; Kelsay, 1991; Mohr and MacLean, 1987). From the onset, I expected the teachers would "find inquiry as a way to learn from their students and each other" (from my journal several days before our first meeting, August 2nd), but I anticipated they could "become frustrated with trying to define a question and possibly become overwhelmed by the sheer volume of this data" (August 2nd journal). My first goal was to help alleviate their anxieties by providing examples of other teachers' classroom research, so they could see possible avenues for themselves and realize their own potential.

As the semester evolved, they focused on their individual projects and needed less general information. When they needed ideas, I tried to help with suggestions. Often I acted as a motivator, offering support and direction. Ms. Lewis reflected back at her own motivation and understanding: "I can't imagine getting started on inquiry without the support I had this year, both from you and from the group." Communication evolved from sharing and brainstorming ideas.

I asked for their help when I wondered about the meaning of their comments or when I needed encouragement with my own

research. Odell (1987) spoke of the difficulty of doing research in isolation, and this was true for me as well. This group of teachers listened to my dilemmas and spurred me on passed the obstacles. In some ways, that feeling of sharing our research created a more open and trusting relationship, one in which they willing told me the negative aspects, those things they knew I did not want to hear. One example was Ms. Douglas. The teacher research was not her first priority, and she was honest about it. She participated in my study but grew to view the classroom inquiry as a project which took too much of her time. Ultimately, her student teacher, Kim, had major ownership of it. After the formal project was completed, Ms. Douglas was the only one to drop out of the group which has now continued for three years.

Our collaboration has continued but not with the student teachers. My clinical supervisor role was that of a teacher, and it is as if they have moved on like many classes I have each year. The student teachers described me as the provider of information: "You have given me the most direct knowledge," and "You've given me specific ideas that I have taken back into the classroom." Our collaboration as researchers did not manifest it as it did with the teachers.

For the student teachers, I remained a university professor for whom they were completing assignments. But the teachers and the student teachers were able to develop more of a partnership. By the end of the semester, teachers and student teachers

referred to one another as "mentors" and "friends," people from whom they received support. Ms. Simms (cooperating teacher) depicted this semester's work with a student teacher as different from those of the past; it was more like "two teachers" working together. Mark (student teacher) described plans to return to his "mentor" for advice and a continued friendship in the future. Terry (student teacher) also anticipated missing her "mentor and friend" because she would no longer have someone who "is really going to care."

As they developed working relationships, whether it was teacher/teacher or student teacher/teacher, their collaboration gave them time to exchange reflections and build new insights. Ms. Lampert referred to their work as "professional," as they collaborated in a more "objective" way after reading current literature and analyzing their own classrooms. Communication among participants added to their feelings of achievement. They involved themselves in "professional" activities (Ms. Lampert), such as researchers might do. Sharing their observations and progress brought them into professional dialogue with other teachers. Plus, updating their knowledge through reading current educational research fed their interest. Rudduck (1985) calls for teachers to use research as a "means of sharpening their professional curiosity and insight of teachers...generat[ing] excitement" (p. 283). The teachers discussed their progress, but they also shared what they read and discussed the impact of the literature on their own research. They were able to

"construct their professional knowledge within the world of the classroom and the school, where they play their professional roles" (Kelsay, 1991, p. 20). They closely observed their own classroom communities; they became partners in building professional knowledge.

#### THE SUPPORT GROUP CONTINUES

The teachers and I continue to meet monthly taking on new projects each year. We prepared presentations for state conventions and one for a national conference. We have spoken to different groups of university and school faculty and students. Our collaboration extended itself to writing when we wrote a collaborative article about work together. One teacher and I united as a team presenting teacher research workshops as consultants.

Our monthly meetings are occasions for us to share our personal lives as well as the work we continue to do in our classrooms. One teacher continues to keep a daily journal while another takes on questions each year and updates us with her new findings and projects. While our meetings continue, what we share and how we continue to work looks differently depending on our interest. We have jointly decided it is important to have a project on which we can focus. This gives us a goal and direction. Yet, even when there is no project, we continue to meet, share, and offer one another views into our new understandings about teaching and learning. I am no longer viewed as the leader of the group; we share that role depending

on the project or who is needing the most feedback. Over three years we have come to depend on each other for support.

#### IMPLICATIONS

These teachers and other teacher research groups like them described a rejuvenation, but the question remains as to whether they will continue to approach their classrooms from an inquiry stance. The participants in this study experienced much support from the other members of their group, and this support helped them gain new insights, but it also gave them strength and encouragement. It becomes important to investigate how to form such support groups without administrators, politicians, and universities dictating content to the teachers. More research will need to be conducted, experimenting with different configurations for setting up collaborate support groups.

The teachers and the university researcher in this study established a collegial relationship, learning from one another. The teachers and the student teachers collaborated, but each case differed as to the degree of joint ownership they were able to establish. It is likely that the person setting the agenda or defining the inquiry question retained more ownership, leaving the other partner to play a more supportive role, in this instance, the student teacher. How to obtain full "joint ownership," or whether it is even possible, remains an open question. The cooperating teacher possesses the understood position of classroom ownership as the one designated with responsibility to the students and for the teaching,

accentuating the inherent inequality existing between teacher and novice. As teacher educators, veteran cooperating teachers are expected to transmit their expertise to beginning teachers which again amplifies the distinct diversity between their roles. The possibility for "joint ownership" is made more difficult by these intrinsic role differences.

The implications from this case study analysis suggest that the apprenticeship portion of teacher education can be restructured toward an inquiry orientated model. Educational research was not detached from the classroom; it took place within the community it impacted. The student teachers' orientation to educational research was firsthand, and the teachers experienced research as meaningful to their practice. By guiding prospective teachers to a stance which allows them to explore possibilities rather than providing them with prescribed methods, teachers now and in the future can "shape" (Schecter & Ramirez, 1991, p. 10) the profession.

In addition to preservice education, implications emerged for the designs of graduate education as well as district inservice programs. The veteran teachers encountered new knowledge as they "REsearched" [sic] (Berthoff, 1987) their classrooms and shared their fresh vision with each other. In a sense, they experienced a type of inservice education from their own discoveries and their collaboration with colleagues. As veteran teachers return to college for further education, an inquiry-oriented focus could aide them in finding links between

traditional educational research and their own classroom research, as one informs the other. Similarly, inservice education need not be located outside the school community in district meeting rooms. Teachers collaborating with one another and utilizing current research could provide them with opportunities to discover and inform each other. The potential for growth becomes even greater as they share their expertise with university researchers. Rather than teachers depending on the university to provide information, they can unite with educational researchers and share their different areas of expertise toward uncovering new knowledge.

Education research has traditionally been conducted by outside, usually university, researchers either observing in classrooms or removing students to be observed in other environments. The teacher participants in this project described a renewed sense of professionalism as they conducted their own inquiry. Teacher doing their own research will demand some standards be developed (Lytle and Cochran-Smith, 1991), but teachers and university researchers can work at this goal together. Through such collaboration, teachers, such as the group in this study, can contribute to the knowledge base of their profession.



## REFERENCES

- Asher, C. (1987). Developing a Pedagogy for a Teacher-Researcher Program. English Education, December, 210-219.
- Barritt, L., Bleeker, H., Beekman, T., & Mulderij, K. (1985). Researching education practice. Grand Forks: University of North Dakota.
- Berthoff, A. E. (1987). The teacher as REsearcher. In D. Goswami & P. R. Stillman (Eds.), Reclaiming the classroom: Teacher research as an agency for change (pp. 28-39). Portsmouth: Boynton/Cook.
- Bissex, G. (1987). Why case studies? In G. Bissex & R. H. Bullock (Eds.), Seeing for ourselves: Case study research by teachers of writing (pp. 7-20). Portsmouth: Heinemann.
- Bolster, A. S. (1983). Toward a more effective model of research on teaching. Harvard Educational Review, 53, 294- 308.
- Clemson, R. L., Arends, R. I., Young, D. B., & Mauro, L. H. (1989). Teachers as researchers and researchers as teachers: Lessons learned from three post-baccalaureate teacher certification programs. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA. (ERIC Document Reproduction Service No. ED 308 569)
- Clift, R., Veal, M. L., Johnson, M., & Holland, P. (1990). Restructuring teacher education through collaborative action research. Journal of Teacher Education, 41, 52-62.
- Cochran-Smith, M. (1990). Reinventing Student Teaching. Journal of Teacher Education, 42, 104-118.
- Cochran-Smith, M. (1991). Learning to teach against the grain. Harvard Educational Review.
- Cochran-Smith, M., & Lytle, S. L. (1990). Research on teaching and teacher research: The issues that divide. Educational Researcher, 19, 2-11.
- Cochran-Smith, M., & Lytle, S. L. (1993). Inside outside: Teacher research and knowledge. New York: Teachers College Press.
- Cruickshank, D. R. (1987). Reflective teaching: The preparation of students of teaching. Reston: Association of Teacher Education.

- Deega, P. E. (1981). An empirical phenomenological study of failing to learn. Journal of Phenomenological Psychology, 12, 231-259.
- Erickson, F. (1986). Qualitative methods in research on teaching." In M. Wittrock (Ed.), The third handbook of research on teaching (pp. 119-161). New York: Macmillan.
- Feiman-Nemser, S., & Buchmann, M. (1985). Pitfalls of experience in teacher preparation. Teachers College Record, 87, 53-65.
- Floden, R. E., & Clark, C. M. (1988). Preparing teachers for uncertainty. Teachers College Record, 89, 505-523.
- Giorgi, A. (1985). The phenomenological psychology of learning and the verbal learning tradition. In A. Giorgi (Eds.), Phenomenology and psychological research (pp. 23-85). Pittsburgh: Duquesne University.
- Goodlad, J. I. (1990b). Teachers for our nation's schools. San Francisco: Jossey-Bass.
- Goswami, D., & Stillman, P. R. (1987). Reclaiming the classroom: Teacher research as an agency for change. Portsmouth: Boynton/Cook.
- Hillocks, G., Jr. (1990). Teaching, reflecting, researching. In D. A. Daiker & M. Morenberg (Eds.), The writing teacher as researcher: Essays in the theory and practice of class-based research (pp. 15-29). Portsmouth: Boynton/Cook.
- Houser, N. O. (1990). Teacher-research: The synthesis of roles for teacher empowerment. Action in Teacher Education, 12, 55-59.
- Kantor, K. (1990). Learning from teachers. In D. A. Daiker & M. Morenberg (Eds.), The writing teacher as researcher: Essays in the theory and practice of class-based research (pp. 61-69). Portsmouth: Boynton/Cook.
- Kelsay, K. L. (1991). When experience is the best teacher: The teacher as researcher. Action in Teacher Education, 13, 14-21.
- Luckmann, B. (1978). The small life-worlds of modern man. In T. Luckmann (Ed.), Phenomenology and sociology (pp. 275-290). New York: Penguin.
- Mohr, M. M., & MacLean, M. S. (1987). Working together: A guide for teacher-researchers. Urbana: National Council of Teachers of English.

- Ross, D. D. (1984). A practical model for conducting action research in public school settings. Contemporary Education, 55, 113-117.
- Odell, L. (1987). Planning classroom research. In D. Goswami & P. R. Stillman (Eds.), Reclaiming the classroom: Teacher research as an agency for change (pp. 128-160). Portsmouth: Boynton/Cook.
- Ross, D. D. (1988). Action research for preservice teachers: A description of why and how. Peabody Journal of Education, 64, 131-150.
- Ruddick, J. (1985). Teacher research and research-based teacher education. Journal of Education for Teaching, 11, 281-289.
- Schechter, S. R., & Ramirez R. (1991). A teacher-research group in action (Technical Report No. 50). Berkeley: University of California, Center for the Study of Writing.
- Schon, D. A. (1983). The reflective practitioner. New York: Basic Books.
- Schon, D. A. (1987). Educating the reflective practitioner: Toward a new design for teaching and learning in the professions. San Francisco: Jossey-Bass.
- Spradley, J. P. (1979). The ethnographic interview. New York: Holt, Rinehart and Winston.
- Tabachnick, R. B., Popkewitz, T. S., & Zeichner, K. M. (1979-1980). Teacher education and the professional perspectives of student teachers. Interchange, 10, 12-29.
- Tesch, Renata. (1987). Emerging themes: The researcher's experience. Phenomenology and Pedagogy, 5, 230-241.
- Weber, S. (1986). The nature of interviewing. Phenomenology and Pedagogy, 4, 65-72.
- Wertz, F. J. (1985). Method and findings in a phenomenological psychological study of a complex life-event: Being criminally victimized. In A. Giorgi (Ed.), Phenomenology and Psychological Research (pp. 155-216). Pittsburgh: Duquesne University.
- Zeichner, K. M. (1980). Myths and realities: Field-based experiences in preservice teacher education. Journal of Teacher Education, 31, 45-55.
- Zeichner, K. M. (1983). Alternative paradigms of teacher education. Journal of Teacher Education, 34, 3-9.