ABSTRACT. In the traditional educational research model teachers were not viewed as creators of new knowledge about education, but were perceived simply as consumers of information obtained through research conducted under the process-product paradigm. This paper provides an overview of two concepts that are closely related, the reflective teacher and the teacher researcher, and describes how school- and university-based researchers can more effectively utilize teacher-generated knowledge to help improve our schools. The emerging consensus is that encouraging teachers to become more reflective, or even to become researchers in their own classroom, will help produce significant improvements in education that traditional research has not been able to demonstrate.

Until recently, the division of labor between the teacher and the university-based educational researcher was unquestioned and unchallenged. More accurately, it was the researchers who assumed that there was a lack of questions and challenges, and who assumed a contentment on the teachers’ part with the status quo that was more imagined than real. In the traditional research model, one which has dominated views about teaching, teachers were not viewed as creators of new knowledge about education, but were perceived simply as consumers of information obtained through research conducted under the process-product paradigm (Gage, 1978).

The purpose of this special issue that I am guest editing is to introduce education professionals to an alternative model of educational research, one that empowers teachers to expand the knowledge base on teaching and learning through conducting their own classroom-based research and/or by working collaboratively with college faculty and students. In this paper I provide an overview of two...
concepts that are closely related, the reflective teacher and the teacher researcher, and describe how school- and university-based researchers can more effectively utilize teacher-generated knowledge to help improve our schools.

Reflective Teaching

The first concept I discuss is that of the reflective teacher, which is based in part upon Schön's (1983) concept of the reflective practitioner. Grimmett, MacKinnon, Erickson, and Riecken (1990) have suggested that this concept can be discussed from three perspectives: (1) reflection as instrumental mediation of action, which "represents a view of reflection as a process that leads to thoughtful mediated action, usually involving the putting into practice of research findings and theoretical formulations of education" (p. 23), (2) reflection as the deliberation among competing views of teaching, which involves the "anticipation of the consequences following from different lines of action, which are derived from competing versions of good teaching" (p. 25), and (3) reflection as reconstructing experience, which leads to "new understandings of the action situations, self-as-teacher in terms of the cultural milieu of teaching, and taken-for-granted assumptions about teaching" (p. 27).

Under the first perspective, teachers are encouraged to "reflect" on information derived from experimental studies of teachers' and students' behaviors, but they are not expected to challenge the findings, nor to question the means by which the results were achieved. This view presumes that a scientific basis for teaching and learning can be established, that teachers would reflect on how this information could be used to direct practice in the classroom, and consequently, that this reflective activity on the teacher's part will produce the desired benefits hypothesized by the researcher.

This perspective prescribes a very limited role for teachers, one of passive consumers, and a major criticism is that it fails to consider that teachers do not reflect more on the results of traditional research because they are unreflective by nature, but because they view much of that research as irrelevant to improving their knowledge of learning and instruction. I refer to research that is largely experimental in nature, and where the behaviors studied are so isolated from the context of classroom realities as to be virtually useless. To compound the problem, the results are primarily presented in terms of statistical output, where the emphasis is on generalizability across a wide variety of settings, and not on specific behaviors within an immediate classroom context.

The second perspective assumes that research will be used not to direct practice, but to inform it, and that teachers exercise their professional judgment as
to how this information would be applied in different contexts. In this sense, this perspective is closer to the idea of the expert teacher model proposed by Shulman (1987), in that experienced, reflective teachers recognize the gap between abstract theory acquired in college classrooms and practical, everyday teaching experience, and use their "craft knowledge" (Leinhardt, 1990) to make the necessary connections between the two. While this view still assumes that teachers are not actively involved in creating new knowledge, it does presume that teachers take a more active role in challenging the application of theoretical knowledge across a wide variety of contexts. It also places greater reliance on the teacher's expert judgment in being able to assess how successfully specific research findings can be applied in their immediate classroom environment.

The third perspective is one in which the assumptions are closest to the concept of teacher as researcher, since it implies an explicitly activist role for the teacher in using both theory and practical experience to transform practice. Under this perspective, teachers conduct a critical analysis of their own teaching practices, and continually reconstruct their teaching identity as they reflect on the meaning of behaviors they once took for granted. Teachers may begin to question, for example, whether norm-referenced grading practices are the optimal methods for assessing student learning and development, or whether this grading system merely reproduces inherent class, race, and gender biases in the classroom. Although teachers are expected to use their personal knowledge to transform their own practice, these transformations are individualized; they do not, for example, typically become part of the knowledge base handed down to new teachers.

These perspectives outlined above are not intended to suggest all the ways in which reflective teaching has been conceptualized. However, as Cochran-Smith and Lytle (1990) recently noted, the teacher's voice in contributing to the knowledge base on teaching and learning has been notably absent. If Schön's (1987) model of educating the reflective practitioner is to be fully realized in schools, then teachers need to play a stronger role in both posing and solving educational problems, and having these solutions become part of the research literature. This role shift is the basis of the concept of the teacher as researcher.

**Teacher as Researcher**

This concept has its origins in the concept of action research, which itself has a long intellectual tradition beginning with the works of Dewey (1904). While there are many definitions and interpretations, teacher research appears to be most influenced by the work of Stenhouse (1985) and his colleagues, who argued that teachers who engage in their own research become empowered by this process, and that "researchers should justify themselves to practitioners, not practitioners to
researchers" (Stenhouse, as cited in Ruddick & Hopkins, 1985, p. 19). Bullock (1987) further noted that when "teachers assert their own expertise and demonstrate it through publishing research results growing out of their work in classrooms, they force fundamental changes in themselves, their roles in schools, and their place in society" (p. 22).

What exactly is teacher research, how can it bring about these powerful changes, and how does it differ from traditional educational research? Again, while one definition cannot serve as the defining one for all models, an essential component is that teachers develop research problems and find solutions within the context of their own teaching situations (Nixon, 1987). They use such techniques as participant observations, interviews with children, analysis of documents, and on occasion, videotapes and audiotapes of their teaching performance. They also typically keep a personal journal in which they record their observations of, and reactions to, student behaviors, and reflect on the consequences of having taken certain actions. Often they form teams, and the team discussions become an intrinsic part of the research process. The intent is not to generalize the findings beyond the immediate context, but to help teachers systematically search for ways in which they can become more effective in the classroom. By sharing information across a team, teachers may find common patterns of behaviors emerging, which may cast light on organizational practices within the school, but again the effects will be specific to a school, and may not necessarily extend beyond that context.

Methodological differences between this approach and the standard experimental study in educational research are quite clear. Teacher researchers do not randomly assign children to treatment and control groups, they do not use complex statistical designs to assess effects, and they do not operationalize and control variables that are perceived as having independent effects on the outcome, which is usually a qualitative state (learning) assessed through a quantitative measure (achievement test). Although ethnographic or interpretive researchers collect their data using the same methods as teacher researchers, and claim they are working collaboratively with teachers, too often the teachers have little input into the final analysis and interpretations, and are given no authorial credit in the published report. To their credit, several leading ethnographic researchers have recognized this imbalance, and have sought to have teachers take a more active role in all phases of the research, including the final written document (Erickson, 1989). The ideal model is to develop collaboration between teacher researchers and university-based researchers that is truly equal, where the theoretical knowledge generated by academicians can be viewed in relation to problems located in actual practice. In turn, the knowledge teachers generate from their practice can be used to construct more comprehensive theories of learning and instruction. Several collaborative efforts are already underway nationwide, most notably the work being
done between the University of Pennsylvania and the Philadelphia School District, 
the work at Clark University through the Jacob Hiatt Center for Urban Education
and the Worcester School District, and the work of the Literacies Institute and the
Boston School District.

Teacher Research at Florida State University

At the Florida State University School, a publicly funded K-12 school 
affiliated with the College of Education at Florida State University, we have begun
our own teacher-researcher program. It began two years ago in my educational
psychology class for pre-service teachers. With the assistance of Fran Kochan, who
was then principal of the elementary school, and Karla Kelsay, a faculty member
in the elementary teacher education program, we recruited 14 teachers to work with
us. The program involved assigning the educational psychology undergraduate
students to a classroom to observe and record data relevant to classroom practice.
The teacher and students worked as a team in selecting and researching the
questions being addressed. At the end of the semester, the students wrote up the
research results, which provided the teacher with a valuable resource in reflecting
upon and dealing with the problem being addressed. This approach enabled the
classroom teacher to view the particular problem more critically. It also allowed
the undergraduate students the opportunity to view the classroom on a unique level
and to conduct action research. Not only did it change both groups’ perceptions
of what research is, allowing them to understand action research and their role in
it, it also enabled them to discover that classroom-based research can provide
valuable insights into the teaching/learning process and how to improve it. This
program has now become an integral part of the way teachers at the University
School function. It provides a unique opportunity to blend research and practice
to improve education.

Most of the papers in this special issue were first presented at a symposium
at the 1990 FERA meeting. I have also added two papers by teacher researchers,
and one by one of the pre-service students who was in the first class when this
program began. In the next paper, Karla Kelsay describes how teachers respond
to her graduate class, "Teacher as Researcher," and shares her feelings about being
a teacher researcher at the college level. Fran Kochan (who is now the Director
of the University School) presents an administrative view of the teacher-as-
researcher program, and details what actions principals need to take to develop this
program in their schools. The next two papers by Jane Leonard and Karl Hook,
both teacher researchers at the University School, describe their thoughts on
changing classroom practices after having been involved in the program. Nancy
McFarland, a pre-service English education major, describes her research in a high
school English class. She illustrates the dilemma teachers face in changing
curriculum to conform to modern demands, and the risks entailed when the traditional emphasis on writing skills is lessened. In her paper, Ginger Weade examines the teacher-as-researcher movement from an "insider-outsider" perspective, and describes its potential for enhancing student learning. Finally, Dorothy Routh and Dianne Wilkes provide a policy-level perspective in describing steps teachers can take to ensure that they become more involved in the process of educational reform.

Conclusion

The emerging consensus is that encouraging teachers to become more reflective, or even to become researchers in their own classroom, will help produce significant improvements in education that traditional research has not been able to demonstrate. Stories by teachers who have been involved in this process are glowing; they become more empathic and attuned to children's individual differences, more committed to making changes in their teaching behaviors, and as they become more empowered by "adopting a more public and authoritative stance on their own practice, they are more likely to create the contexts for their own students to be empowered as active learners" (Cochran-Smith & Lytle, 1990, p. 9). We have also found that as several teachers at the University School became more comfortable in the research process, they expanded their studies, and one of them recently achieved national recognition for her research by winning a very prestigious fellowship. Several other teachers have become quite active in presenting the results of their work at state and national conferences.

Despite the positive effects of these collaborative efforts, vexing problems in differential status and power between faculty in public schools and universities still need to be resolved. This movement raises a number of questions about issues such as who controls knowledge production in education, what data should count as contributing to the knowledge base, and more importantly, what is the purpose of educational research? For too long, the presumptions have been that the hierarchical power relations between universities and public schools should be standard operating procedure, that only data which are measurable and "objective" are valid indicators, and that the purpose of most educational research is to build abstract theories untouched by the realities of classroom life.

In sharp contrast to this view, teacher-research models that draw upon the concepts of action research see research intimately linked to practice. More importantly, researchers who work within a collaborative framework raise fundamental questions about the purpose of educational research. They challenge the conventional notion that educational theories must remain "pure," without the reality of everyday life in classrooms intruding, and that the researchers themselves
can remain distanced from their own practice. Carson (1990) described this difference well:

... action research as a way of knowing becomes a hermeneutics of practice. A hermeneutics of practice tries to attend most carefully to interpreting the way we are with our colleagues and students in schools. It does not neglect the desire to make specific improvements, but it tempers this with the realization that because of our deeply ingrained habit of totalization (seeking certainty of knowledge or the "last word" on a topic) and prescription, we will easily be convinced to impose these improvements on everyone. An emphasis on interpretation attempts to resist and reform this habit, urging us to better develop our abilities to hear others. In the end, probably the most fundamental improvement that action research as a hermeneutics of practice attempts to make is the improvement of the quality of our life together (p. 173).

Notes

1. One reason why I became involved in the teacher-as-researcher movement is that I still have very vivid memories of sitting in my graduate educational research classes and thinking, "What does this information have to do with the problems I faced as an inner-city high school English teacher?" Now that I am an educational researcher myself, I intend to change that thinking which still predominates among many teachers.

2. Giving teacher researchers publication credit is a more complex issue than just having their names appear on the report. Judith Shulman (1990) has written an excellent account of the problems faced by several teacher researchers who wanted to publish their work in the face of district opposition. The district administrators felt that the teachers' critical comments on their students' performance breached the confidentiality of the data, once the teachers' identities were revealed. The district was also uncomfortable with providing an "inside" view of several schools' problems.

3. One of the most exciting outcomes of this movement is the involvement of students in the research process. Two teacher researchers recently had their 5th and 6th grade students make an invited presentation at a national research conference (Oldfather & Hudson-Ross, 1992). It's quite startling to see these students in this role; too often adults overlook the competencies students bring to this process, and fail to build on students' desire to make a meaningful contribution to educational reform. When teachers center their research
within the classroom, and focus on problems that need to be solved within that setting, students can also contribute to building knowledge about learning.

4. Deborah Barrett, an art education teacher at the University School, recently received a fellowship from the Getty Foundation for her research on students’ reactions to a new art program, Discipline-based Art Education.

References


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