PRACTICAL STRATEGIES FOR FACILITATING CLASSROOM TEACHERS' INVOLVEMENT IN ACTION RESEARCH

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Action research has recently been promoted as a way to reform schools. Although it is gaining in popularity, there are numerous barriers facing teachers who want to conduct action research. The authors' interactions with experienced classroom teachers indicate six major barriers to conducting action research. These include fear of the perceived technical nature of research, the tendency to believe that research is not within the domain of practicing teachers, the belief that research is not relevant to teachers' every day lives, lack of time and flexibility in the school day to do action research, concerns about the potentially sensitive nature of action research topics to parents and other stakeholders, and either the lack of administrative support or administrative resistance to conducting action research. Among the strategies offered, the authors suggest better training of teachers and administrators in conducting action research starting with pre-service education.

Recently, many authors have contended that one important way to promote the reform of schools is to involve teachers in doing research in their own classrooms (Casanova, 1989; Cochran-Smith & Lytle, 1990; McCutcheon, 1987; Sardo-Brown, 1990; Shalaway, 1990). Since action research is conducted by the practitioner, it provides a way for teachers to investigate issues of interest or concern in their classrooms and to put the results into practical use in their classrooms. This process, which begins with teachers' questions and aims at influencing practice, affords the opportunity for teachers to have greater responsibility for directing their own professional development. Action research is then based around a practical problem and is planned and carried out by the person most likely to be interested in and affected by the finding - the teacher.

Calhoun (1993) has conceptualized action research as occurring on a continuum from classroom teachers to school-wide teams of educators. One form of action research is conducted by individual classroom teachers. This

may be supported by a supervisor, principal, or a professor from a university who may be offering course credit for participation in action research (Oja & Smulyan, 1989). As Sagor (1991) and Johnson (1993) have noted, a second form of action research involves collaboration with colleagues, administrators, or members of an educational consortium. This would involve focusing on a problem experienced in a single classroom or occurring in several classrooms. School-wide action research represents still a third form of the process in which a school faculty selects a problem of collective interest, then gathers, organizes, and interprets on-site data. After considering on-site data, as well as data from other schools or districts, the faculty collectively determines actions to be taken. In this way school-wide action research may also serve as a type of formative evaluation of the school district's activities.

While many authors promote teachers' involvement in research as a way in which to empower them (Maeroff, 1988), few studies

have collected data about the barriers which may prevent teachers from undertaking action research based on the actual conversations of classroom teachers who are in the process of doing action research. Thus, the purpose of this paper is to describe both the major barriers faced by teachers who contemplate doing action research and to address practical strategies to enable them to participate in the arena of classroom research.

The following groups of barriers faced by teachers as they contemplate doing action research were summarized based on the conversations we had with 20 classroom teachers. Teachers' perceptions about action research were recorded on notecards by two of us; after the completion of our conversations with teachers we then met to identify common themes to emerge in the teacher-generated comments. All participants were practicing classroom teachers who were engaged in some form of discussion about action research sponsored by a mid-sized, state university which specializes in the preparation for teachers. Of these teachers, five were members of a small class which focused on classroom research strategies during the summer of 1993, eight were enrolled in this same class during the summer of 1994, and seven were part of an informal group which met onsite in their school district to brainstorm about action research during the Spring, 1992 semester. The majority of participating teachers were female (16) while 11 of the teachers taught at the elementary level and nine at the secondary level. The average number of years of teaching experience was slightly over eight years.

Barrier #1: Research is Anxiety-Provoking

One obstacle in conducting action research that we observed among the teachers we worked with is anxiety surrounding the perceived technical nature of research. Teachers sometimes were intimidated by the specialized language and unique way of thinking used by researchers. One of the reasons for this anxiety may stem from the fact that those conducting traditional research attempt to isolate individual effects in order to better study them. Because teachers tend to view the events of their class in context, and perceive the world as a whole, the research paradigm may be contrary to the way they think. Some of the teachers we worked with also cited the fact that research relies heavily upon the use of mathematics, which is a cause for anxiety.

Strategy 1. In order to reduce anxiety about the language and methods used in conducting research, teachers should be afforded the opportunity to think about action research as a chance for them to both improve their teaching and the way they think about practice. Teachers should also receive more in-depth instruction in traditional subjects related to research, such as mathematics, as well as actual training in the use of action research methods for improving classroom teaching. This type of orientation to action research needs to be provided at the preservice level for both teachers and administrators. An additional benefit of this training is that the facilitation of self-reflection is part of the movement toward teacher empowerment.

Strategy 2. As part of the instruction provided in research methods, teachers need to be made aware of the fact that action research differs in methodology from traditional methods. Teachers will feel more comfortable with the concept of doing their own research once they realize that the goal of the action research paradigm is to understand variables in context rather than produce generalizable knowledge.

Strategy 3. Another way to reduce anxiety is to provide teachers who are doing action research with access to user-friendly computer programs. While the researcher needs to understand the logic and meaning of the numbers, the computer or the calculator should fulfill the role of an efficient number crunch-

er rather than pose a burden to the teacher. Furthermore, support groups should be created which include teachers who are comfortable with the mathematics which underlie commonly used statistics and who could provide assistance to their peers.

Barrier #2: Differential Status

In our work with classroom teachers, a second obstacle in teachers conducting action research often involved the idea that only those in so-called "ivory towers" (as one of our teachers remarked) conduct research. This leads to the feeling that research is done by "them" (at the university) on "us" (teachers and students).

Strategy 1. It may be helpful to share the myriad of research articles now available which have been either authored or co-authored by teachers. It may also be beneficial to introduce teachers to articles in which teachers are given full acknowledgement for participating in research and not relegated to an invisible role. In addition, an on-site school newsletter or minijournal could be established as a forum for teachers' action research.

Strategy 2. Appointing several teachers as research specialists may serve as another way in which to tackle the differential status issue. These individuals may be trained in action research strategies so they are able to provide teachers with on-site knowledge of the recent literature by condensing research articles into user-friendly summaries. Still other teachers may be appointed as experts in various action research topics such as cooperative learning or whole language approaches.

A second but related issue is that some of the teachers we have worked with report feeling patronized by professors who promote teachers' use of certain strategies which they have never used themselves. Just as teacher educators need to be the very best models of teaching practice, university faculty who encourage classroom teachers to do research need to model how to conduct action research themselves.

Strategy 3. One way to accomplish this is that those who instruct teachers in action research share endeavors which they themselves are undertaking. One that we've been following for some time is collecting data on our undergraduate students' perceptions of cooperative learning through the use of response cards and surveys. We, university teachers, also confront many of the same problems with implementing theoretically-based practices as do our classroom colleagues.

Barrier #3: Lack of Ownership

A third obstacle recently documented by Philips (1994) and observed among our group of teachers is one that involves ownership. The first issue has to do with teachers "owning" a research problem. As part of the action research process, we have had students review articles written on a topic they are interested in pursuing. Often, teachers in our classes remarked how removed they feel from the context of the educational research articles they read. One teacher summed it up this way: "The kids they studied probably weren't like mine. And the community they lived in certainly was not like mine."

Strategy 1. One way to remedy this difficulty is to require those involved with action research to generate their own problem or set of problems or interests, centered around reallife students they either have worked with or are currently working with. Likewise, both inservice and pre-service teachers could keep a journal in which they write about their own theories or hypotheses about practice. In our experience, having pre-service teachers write down their own hypotheses has been a very productive way to initiate their involvement in action research.

Another ownership issue has to do with owning the process of data collection and analysis. That is, often we try to instruct teachers how to analyze research data by reading about how someone else suggests hypothetical data should be analyzed or by analyzing "phony data" we may bring to class.

Strategy 2. As suggested by Philips (1994), it seems much more effective to ask teachers to collect their own data for theses purposes. For instance, teachers may use a transcript of an audio tape of their own teaching, a draft of a survey they would like to circulate among their colleagues, or student journal entries. Teachers could then put data analysis strategies into practice by analyzing their own data. There is nothing like making instructional content as personal as possible! Also, pre-service teachers can be encouraged to collect informal data (such as tallying the frequency of student participation) during their field experience observations done in classrooms. If pre-service teachers do not have such a classroom opportunity, they could design an instrument or pilot it among their peers on campus.

Barrier #4: The Structure of the School Day

A long tradition of research has shown that teachers typically have little time to interact with their colleagues during the school day about professional issues (Lortie, 1975). The teachers we worked with routinely told us that this fact poses still another obstacle to teachers who would benefit from "talking through" the action research process with a colleague.

Strategy 1. Benefits may be realized by using part of designated teacher meeting time to form action research teams in which teachers have an opportunity to systematically share their ideas about action research with each other. These teams could meet on an on-going basis to not only discuss ideas but perhaps formulate a "team plan" whereby several teachers who are interested in the same problem can work together to collect data on the problem. One natural format for this endeavor is the concept of common planning time at the middle school. Perhaps the practice of common planning time could be extended to the ele-

mentary and senior high levels for this purpose.

Strategy 2. An alternative idea to establishing action research teams would be to hold an in-service day in which teachers could be given time to orally present action research or do a poster session which summarizes action research findings. In such a setting teachers could interact with each other about action research and could also receive recognition from their peers for their action research efforts.

Another structural issue in the school day has to do with the lack of flexibility within a teacher's job description to take the time to engage in action research. Certainly teachers who already have a full-time teaching load and often take on many extra-curricular activities cannot be expected to do research without having the flexibility in their schedules to do so.

Strategy 3. Perhaps teachers could be given reassigned time during the school day to meet with other teachers about common action research ideas, review the literature on these topics, and plan how to collect action research data. This reassigned time could be given to each member of an action research team on a rotating basis to ensure even coverage of classes. Such release time could be justified by having the teachers involved address a schoolwide or possibly a parental concern and by requiring teachers to write a formal report of their findings to be shared with the school community. Another way to justify such reassigned time may be to require teachers to assess student attainment of district or state outcomes as part of their action research endeavor. Certainly such data, both quantitative and qualitative in nature, will be necessary in states implementing outcomes-based education.

Strategy 4. Another way to generate time is to incorporate action research within the school's curriculum by actively involving students who could conduct a literature search, develop data collection instruments, and collect, analyze, and interpret research data. These

efforts could in turn enhance students' attainment of the following skills: library research skills, calculation and interpretation of statistics, and research reporting skills.

Barrier #5: Sensitivity of Issues

The teachers we have worked with often report concerns about the sensitivity of issues both on the personal and professional levels. On the personal level, teachers worried about an emotional "gut level" concern that the research would uncover negative information about their own teaching abilities. One teacher compared this to her fear of going to the doctor after discovering a lump in her breast.

Strategy 1. An effective way to address personal concerns may be to encourage the creation of informal support groups in which teachers discuss their personal concerns related to conducting action research. The group of seven teachers we worked with who met on-site in their district to discuss action research discovered in talking with one another that they all shared a fear of negative results. The participants found that the discussion was cathartic and helped them overcome their fear. The fact that teachers in this group came from different schools and grade levels most likely increased the openness of the discussion.

Concerns about the sensitivity at the professional level often involve teacher worries about ethical issues and parental perceptions. For example, one teacher we recently worked with wanted to study the effectiveness of strategies to encourage a student who refused to speak in class, an elective mute, to begin to participate. However, since this student was the only elective mute in the district, a dissemination of research results would violate the privacy of the student and his family. Still another illustration of a concern over ethics involved a veteran teacher who was enrolled in coursework with us. In this case, the teacher steered away from doing an action research study in which he planned to survey students about their religious values. Although he was keenly interested in this topic, he feared negative community reaction.

Strategy 2. Typically, privacy of the students and their families can be protected by reporting group findings and guaranteeing anonymity. However, when the research is local, there may be instances in which the characteristics of interest identify a small group of subjects. When this is the situation, local dissemination of results can be on a "need to know" basis. Presentation of results at state or national levels should not report the name of the district. Additionally, it is vital to establish an atmosphere of open communication with parents. Parents need to be informed about the purpose and procedures used in an action research study, if the study falls outside the boundaries of the established curriculum. Also, teachers need to know and respect their community's standards when planning an action research study.

Strategy 3. One way to proactively address concerns about community reaction to action research would be to have teachers report about relevant action research at PTO's school board meetings, back-to-school nights, and during parent conferences. These efforts would provide community members with a frame of reference for understanding the action research process as well as making them aware of what the teachers are doing.

Another professional concern has involved the perception of unfairness when treating groups of students differently, especially when one group is receiving novel or potentially more effective methods or materials. Increasingly, teachers are concerned about parental wishes to be informed of any change from standard curriculum or procedures.

Strategy 4. This barrier can also be overcome by making sure all students have the opportunity to experience the innovative strategy at some point. This will not only ensure that all groups of students receive the treatment hypothesized to be the most effective, but will strengthen the research design. Parents of students will be reassured that groups are "taking turns" rather than being treated unfairly.

Barrier #6: Administrative or Institutional Resistance

Gaining administrative and institutional support is a priority for all researchers. Yet, nearly half of the group of teachers we worked with mentioned this an an obstacle that stood in the way of them conducting action research. Recently a teacher we have been working with presented a research project to her team for discussion. She was concerned that a recent controversial change to rotation scheduling in elementary school would create problems for the younger students. She feared reprisal, either formal or informal, from the administration who favored the change. All participants in the research group agreed that the research might be perceived as "making trouble". Research questions typically are concerned with areas that need to be improved for a student, a class, or a school. A barrier to undertaking such work seems to be the fear of "exposing the dirty laundry" and opening the school to criticism. Administrators, by necessity, are very concerned with the image or public relations of the school.

Strategy 1. One way to address this resistance may be to plan initial studies that reflect current administrative priorities. It may be helpful for teachers to select research topics that they hypothesize will be supportive of administrative initiatives. Once teachers have established themselves as sensitive researchers, they may be given greater freedom to tackle more controversial issues.

Strategy 2. A second strategy to employ would be to include an administrator in the planning stage of the research. Joint authorship on any reports that are generated could also be suggested. Just as ownership will overcome barriers for teachers, it may overcome administrative barriers as well.

Strategy 3. A third rule of thumb which may

be valuable to teachers is to minimize reliance. on institutional resources. Teachers could brainstorm with their administration to develop strategies to provide some support while avoiding overtaxing scarce resources. Teachers can also collaborate with the administration to explore sources of external support. This may include soliciting volunteers from the community to help with the actual research. A sample of ways they can help include collecting data. getting articles from the library, or working with a control group. Volunteers may also be used to work with the students while teachers attend to research demands. There are also grants that will provide financial assistance. Administration can be an excellent source of grant expertise.

Implications

Although the literature suggests that the importance of teachers doing action research is gaining recognition, there are still several barriers to its acceptance. Upon examination of these barriers, it seems apparent that when the topic of action research is addressed, it is often done in isolation. That is, action research is often not included as part of the knowledge base of teacher education nor presented on a logical continuum starting with the pre-service level and including continued attention at the in-service level. Problem-solving, hypothesis generation, and hypothesis testing ought to be part of the pre-service knowledge base so that doing action research is as critical to a student teacher as establishing anticipatory set.

Secondly, as part of this model, students enrolled in pre-service coursework may be paired with an experienced mentor who could model how to do action research. This opportunity would also afford pre-service students with the chance to practice collecting data and afford the mentor with some welcome help. This same strategy could be employed with student teachers and novice teachers. By having these individuals team with a mentor who is already doing action research, both parties could benefit. Those

learning how to do action research would have a "real laboratory' in which to collect data while mentors would gain much needed data-gathering assistance.

Thirdly, based on teachers' concerns about the need for administrative support found in these data, it would seem that action research also needs to be an integral part of the knowledge base of administrative programs. As part of an administrative degree, administrative interns should be required to participate in action research. Hopefully this will establish action research as a natural way in which to deal with school-wide issues. Strategies for supporting action research among teachers also need to be addressed in administrative programs as a valid part of faculty development.

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(Continued from page 603)

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