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ABSTRACT

This study examined the beliefs of 21 experienced teachers who implemented individual action research projects as part of a graduate degree program in teacher leadership, focusing on the extent to which they believed that action research is a viable mechanism for change. Participants consisted of primary, middle, secondary, postsecondary, and community youth educators ranging in age from 28-53 years with 3-20 years of teaching experience. Descriptive data for the study were drawn from a 20-item survey that asked teachers to describe what they believed were the effects of their action research projects on themselves, their students, other teachers, and the education community. They also described steps that could be taken to make action research a mechanism for change on a large scale. Results showed that teachers believed engaging in action research helps them grow personally and professionally and enables them to influence other teachers toward improving curriculum and instruction. Although action research is compatible with the current emphasis on reflective practice and professional development, certain barriers do exist. These include lack of widespread understanding of action research by the education community, lack of restructured work time, and persistence of traditional teaching approaches. (SM)

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What Do Teachers Believe about Action Research as a  
Mechanism for Change?

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## Abstract

This study examined the beliefs of 21 experienced teachers who implemented individual action research projects as part of a graduate degree program in teacher leadership. It focused on the extent to which experienced teachers believe that action research is a viable mechanism for change. Participants consisted of eight primary teachers, seven middle school teachers, three secondary teachers, two post secondary teachers, and one community youth educator. Teachers in the study (19 females and two males) ranged in ages from 28 to 53 years old and had three to 20 years of teaching experience. Descriptive data for the study were drawn from a 20-item survey that asked teachers to describe what they believed were the effects of their action research projects on themselves, their students, other teachers, and the education community. They were also asked to describe steps that could be taken to make action research a mechanism for change on a large scale. Results showed that teachers believe engaging in action research helps them grow personally and professionally and enables them to influence other teachers toward the improvement of curriculum and instruction. Although action research is compatible with the current emphasis on reflective practice and professional development, certain barriers do exist. These include lack of widespread understanding of action research by the education community, lack of restructured work time, and persistence of traditional approaches to teaching.

## What Do Teachers Believe about Action Research as a Mechanism for Change?

### PERSPECTIVE

This study examined the extent to which experienced teachers who implemented individual action research projects as part of their graduate studies believe that action research is a viable mechanism for effecting change in schools. It was a follow-up survey of 35 experienced teachers who conducted action research as part of a M.A. degree program in Curriculum and Instruction at an off-site campus in southeastern Virginia during 1996-98.

In the past decade, action research has been made a major component of many graduate programs for both preservice and inservice teachers. It has been cited as “a way of meeting the investigative needs of the educational community” (Oja & Smulyan, 1988, p. 1). Discussions by teachers about action research are said to “provide the kind of environment which will encourage adult development in schools. These discussions frequently draw on teachers’ deeply held values about students, teaching, and curriculum and have a moral/ethical dimension that encourages teachers to think in more encompassing ways” (p.141). However, some recent research (e.g., Feldman & Atkin, 1995; Russo & Beyerbach, 1998; Neapolitan, 1999) has suggested that varying understandings of action research held by the local education community may hinder any widespread effects of its use.

In a previous study (Neapolitan, 1999), I found that teachers who designed and implemented action research as part of their graduate studies gained autonomy and confidence for redesigning classroom instruction to meet new state standards. The teachers believed they reached a higher level of problem-solving ability and learned to use classroom data more effectively. Also, their students received the benefits of improved instruction and took more responsibility for their learning. In brief, these teachers reflected on their teaching practice “in action,” and became partners with their

students in the journey toward school improvement.

On the other hand, my previous study also showed that, in the opinion of the teachers, the influences of action research on the local education community were limited. The teachers believed that administrators and fellow teachers were interested in the results of action research as they affected students (i.e., increased academic success) but not as they affected teachers (i.e., increased professional ability).

Although they shared the “good news” about action research at meetings and conferences, the teachers believed that their colleagues were not interested in action research per se because it was perceived as taking too much time. According to one middle school teacher, colleagues were “not able to connect with the action research component” of her study on using portfolios in the LD resource classroom. She went on to say, “There is a lack of true understanding of teacher educators and action research. One thing [other teachers] do like is the results and how it meets the school system's guidelines for [new standards].”

Given the current climate of high stakes accountability for both teachers and learners, it is imperative that teacher education become clearly focused on the most important knowledge, skills, and attitudes needed by practitioners for the realities of the new millennium. This focus will not only ensure student success but will also ensure teacher development and help build a professional culture in schools (Darling-Hammond, 1996). Thus, if action research should remain a major component of many teacher education programs, what links must be made to ensure its widespread effects for students, teachers, and the education community at large?

With these concerns in mind, then, I conducted a follow-up survey of my former graduate students who had been inservice teachers in a field-based graduate program that focused on teacher leadership. For the program, teacher leadership was defined as teachers' exhibiting expertise in the areas of curriculum design, professional development, and action research (see Miller, 1988). Because the teachers, and I as their coach, had dedicated much time and effort toward the

implementation of their action research, I wanted to know the extent to which the teachers (several years after completing the program) believed that action research is a viable mechanism for effecting change in schools. This was of special importance to me because the theme of the teacher leadership program had been “teacher as change agent” (see Fullan, 1988?).

Thus, I conducted the follow-up study with these questions in mind: (1) What do teachers believe are the immediate and long-term effects of using action research on students, teachers, and the local education community? (2) What do teachers believe are the existing supports and barriers to using action research? (3) What recommendations do teachers make for connecting action research in a substantive way with the wider education community?

## METHOD

### Participants

This study was a follow-up survey of experienced teachers, grades 1 through post secondary. All had been graduate students during 1994-1998 in an advanced degree program (both M.A. and Ed.S.) in Curriculum and Instruction at an off-campus site in southeastern Virginia of a major university. Teachers who responded to the survey (21 out of 35) taught at the following levels during the time of their research projects: primary (n = 8); middle (n = 7); secondary (n = 3); post secondary (n = 2); and community education (n = 1). Teachers in the study (19 females and two males) ranged in age from 28 to 53 years old and had three to 20 years of teaching experience. Seven of the teachers had moved into administrative or teacher leadership positions since they had conducted their research. These positions included assistant principal, Title I math specialist, grade level chair, and district level social studies curriculum leader, and vocational program director. Two were not teaching at the time of the survey. One had deferred her teaching career in order to pursue full-time parenting, and another was pursuing a career change outside of

teaching.

Prior to conducting their action research projects, the teachers had completed graduate courses in curriculum, instruction, and assessment that examined the work of current experts in those areas. A practicum in curriculum and instruction provided the teachers with directions on how to use an action research model for self-renewal (Calhoun, 1994). In-depth knowledge about action research, including certain aspects of qualitative research analysis, complemented what the teachers had studied in traditional graduate research courses, such as Tests and Measurements (Quantitative Methods I) and Research Design (Quantitative Methods II).

During implementation of their action research projects (approximately two months in duration), the teachers met every two weeks at a local school with their respective cohorts and myself, who served as a coach. These meetings provided a forum for discussing their work in progress and for obtaining feedback from their peers. Formal reports of their projects were submitted at the end of the course.

### Action Research Projects

Topics examined by the teachers represented their particular concerns and interests in effecting change in schools and included a variety of topics, such as new instructional strategies, program evaluations, and teacher development initiatives (see Table 1 for the complete list of project topics). Except for the biweekly support seminars, the teachers worked as individual researchers.

### Data

Descriptive data analyzed for this study were drawn from a 20-item follow-up survey that was sent to the teachers in Summer 1999. The open-ended questions asked the teachers to describe what they believed were the effects of their action research projects (both immediate and long term) on themselves, their students, other teachers, and the education community at large. The teachers were asked to describe

what they believed were existing supports and barriers to teachers' using action research. Finally, they were asked to describe, in their opinion, steps that could be taken to make action research a "mechanism for change."

## RESULTS

### Personal Benefits of Engaging in Action Research

The teachers in this study reported that many of their beliefs about teaching and the teaching profession had been affirmed through the results of their individual action research projects. More importantly, this affirmation of beliefs was now supported by data, rather than by their intuition only. The acquisition of good research habits, such as better record keeping, for example, were cited as new skills that attributed to this affirmation.

Confidence for making changes in instruction and assessment was also reported. Because the teachers had "tested" new instructional and assessment strategies with their students and had monitored the results in a more scientific way, they had convinced themselves to continue to use the successful strategies in future teaching.

A deeper knowledge and understanding of special populations of students, such as learning disabled and at-risk children, were also gained by these teachers as a result of conducting action research. Having the opportunity to get to know their students better and make their students partners in the research process allowed them insights they may have previously missed.

By reflecting on their practice through action research, the teachers also gained a deeper knowledge and understanding of teacher development as it related to themselves and others. Teachers gained professional insights into the needs of both beginning and experienced teachers and how those needs connect with wider issues of curriculum, teaching, and reform.



### Continued Use of Action Research

Seventy-five percent of the teachers reported that they continue to use action research in some capacity or other. Although only three of them reported using action research in a formal way, such as in a graduate assignment or a school improvement plan, the majority reported using it informally for continuous improvement of instruction and assessment. By sharing what they had learned with other teachers and administrators, they believed they had contributed to the “fine tuning” of educational programs in general.

The teachers in this study who had moved into administrative roles also found that they utilized many of the principles of the action research process for designing and carrying out school- or district-wide improvement initiatives. By taking a researcher’s stance, they were able to think abstractly and solve problems more effectively when dealing with issues of a broader nature.

### Immediate Effects of Action Research

On Students. The majority of the teachers reported that a desired change in the curriculum (via improved knowledge, skills, and attitudes of students) was the most immediate effect of their using action research in the classroom. By implementing active learning strategies that were carefully monitored and documented by the action research process, teachers generated data that were used to empower students’ learning.

Specifically, teachers reported that their students demonstrated a willingness to persist at difficult tasks because they had a better understanding of the processes involved. Teachers believed they had created better learning environments by providing for student choice and decision making. Finally, they believed students had developed closer relationships with them, especially students from special populations, because the students were included in the process of the research.

On Fellow Teachers. Seventy-five percent of the teachers wrote that they had shared information about their action research with other teachers. This sharing ranged from informal inquiries by other teachers to formal presentations at faculty meetings, district-wide inservices, and regional conferences. A third grade teacher, who had conducted her action research on math problem-solving partnerships, cited her study as having influenced changes in the third grade math curriculum at her school. She noted that, as a result of the changes made, the third grade at her school had the highest scores in the district on the state's standardized test.

On Others in the Education Community. As part of their graduate studies in the teacher leadership program, all of the teachers in this study shared the results of their action research with their cohort members. Cohorts (total of three) were comprised of teachers from several public school districts, private schools, and community colleges in the region. Although the teachers believed this was, indeed, one aspect of effecting change in the education community, only four reported what they believed were specific effects of their research on the wider education community.

One effect was the inclusion of services of a guidance counselor to help further coordinate and support an after school program. In another situation, a principal of one of the teachers cited the results of her action research at a conference to illustrate to the audience the effects of teacher empowerment. Grant continuation and parental support of school initiatives were also mentioned by some of the respondents.

### Long-Term Effects of Action Research

On Students. Although the majority of the teachers in this study were not able to follow the progress of their students into subsequent grades or learning situations, they did feel their students had benefited, in the long run, from improved skills and positive attitude changes about learning. The teachers believed that by becoming participants in action research, students received more opportunities to learn through increased applications and connections to real world experiences.

On Fellow Teachers. More than half of the teachers reported that their action research had long-term effects on other teachers. They believed the primary effect was one of having influence on other teachers. Several described this influence as becoming a “role model” or “change agent.” In other words, having conducted action research had helped to establish their credibility with other teachers. This credibility ranged from more personal teacher-to-teacher influences to broader influences for making changes in curriculum and instruction on a grade, department, or school level.

On Others in the Education Community. Less than half of the teachers found any long-term effects of their individual action research on the wider education community. Seven of them, however, did cite specific examples where they believed their research had helped to effect change in the community. These included (1) more parental and community involvement in special programs, (2) improved assessment of school initiatives for continuation of funded programs, and (3) improved communication with other educational professionals for better integration of services to children.

### Existing Supports for Teachers As Researchers

Eighty percent of the teachers in this survey believed there are a number of supports already in place that can enable teachers to participate in action research. First, the current emphasis on reflective teaching practice makes action research easy to use because the action research process itself enhances one’s own quest for improvement of his or her teaching. Second, most schools and districts provide support to teachers for conducting research by means of mini-grants and professional development opportunities. Third, the standards movement was cited as a support for teachers’ doing research because it challenges teachers to change their mode of instruction. Fourth, administrators/leaders who themselves want to understand processes of teaching and learning that result in student success are more willing to provide supports for teachers as researchers. And, finally, a greater interest in school

improvement, in general, by both parents and the community helps support teachers as researchers.

### Barriers to Teachers As Researchers

Fifty percent of the teachers cited lack of time as the number one barrier to the implementation of action research. Specifically, the lack of money to support release time for teachers to do research on the job. This lack of money could also be connected to reasons why some administrators are reluctant to restructure teachers' work time for pursuing research in the first place.

Other barriers mentioned were the lack of knowledge and understanding by administrators and teachers of what action research really is. For example, it was noted that some school districts do not allow use of student information for research projects without the consent of the local board of education. Yet, it is virtually impossible for teachers to engage in the level of inquiry needed to address many students' problems without using such information.

Finally, the tradition of teacher-directed learning and the separation of school learning from "real world" or experiential learning were noted as barriers. One teacher commented that the standards movement (i.e., teaching to the test) did not encourage teachers to take risks in the classroom by experimenting with curriculum and assessment.

### Steps for Making Action Research a Mechanism for Change

The teachers in this study offered suggestions for steps that could be taken to help make the practice of engaging in action research more effective and widespread. First, both preservice and inservice teachers should be educated about action research through teacher education and professional development. Also, administrators should become equally as educated about it, through administration certification programs and professional development. Moreover, administrators

should learn how they can provide support for teacher research toward school improvement.

Learning environments that support collaborative inquiry by teachers, including cohorts and professional networking, should be created. When conducting action research, all stake holders (internal and external) should be involved in the process to ensure its widespread effects. Finally, involvement in action research should be connected to the evaluation of teachers' performance, as it pertains to professional development and teacher leadership.

### Summary

In conclusion, the teachers in this study believed (1) they had benefited from engaging in action research both personally and professionally; (2) they continued to use action research informally for the continuous improvement of their teaching practices; (3) their students had been empowered as learners by being made partners in the process; (4) they had influenced fellow teachers by becoming change agents; and (5) the effects of their individual research projects on the wider educational community were very limited.

In addition, the teachers believed that there already exists the following supports for action research: (1) compatibility with reflective practice, (2) availability of funding and professional development opportunities, (3) the challenge of the standards movement, (4) supportive administrators, and (5) general public interest in school improvement. Barriers, however, consist of (1) lack of time for engaging in research due to the structure of teachers' work, (2) Confusion in the education community over what action research is and its purposes, and (3) persistence of a teacher-centered approach to teaching and learning.

Finally, teachers in this study suggested the following steps for making action research a mechanism for change: (1) include background information on action research in education programs for preservice and inservice teachers, and for

administrators; (2) create learning environments for professional collaboration and inquiry; and (3) connect participation in action research to the reward structure and accountability system for teachers.

## DISCUSSION AND IMPLICATIONS FOR TEACHER EDUCATION

Any efforts to analyze and discuss the nature of action research is, to say the least, messy business. A recent report by Marilyn Cochran-Smith and Susan Lytle in Educational Researcher (October 1999) summarizes the complexity of issues embedded in the teacher research movement over the past 10 years. Although the study I have described herein is limited by its small sample of teachers, reliance on self-report, and the fact that I was a participant-observer in the study itself, I am convinced that any confusion I have experienced as a researcher and any confusion experienced by my participants are part and parcel of the phenomenon of the teacher research movement. Anyone who has tried to explicate the action research experience must grapple with the fact that action research, which is technically an extension of qualitative research, consists of three dimensions: the personal, professional, and political (Noffke, 1997). Thus, I discuss in this section the results of my study as they pertain to the interplay of the three dimensions of action research and with an eye toward their implications for teacher education.

The teachers in this study believe they have grown both personally and professionally through their experiences as teacher researchers. For them, being a change agent has become a reality, as their roles have evolved into a larger conception of what teaching is. These roles include teacher as decision maker, consultant, curriculum developer, analyst, activist, and school leader (Cochran-Smith & Lytle, 1999). The range of topics pursued in their research projects are prime examples of the practical uses of action research to examine important innovations in teaching. The benefits to their students who participated in the research reflect the

sociopolitical underpinnings of action research to make a difference or give “voice” to those who are marginalized from the mainstream of society, such as children with special needs or children at-risk.

However, where the professional and the political dimensions of action research meet, the effects of engaging in it become murky. The teachers in this study believe that, despite the availability of money and professional development opportunities for conducting action research, the perennial problem in schools of “not having enough time” continues to stifle the potential effects of teachers as researchers. This is because efforts to restructure schools and professionalize teaching are not yet a reality when compared with what most teachers must face daily in the workplace (Darling-Hammond, 1996).

Some ambiguity felt by the teachers in this study over whether or not the standards movement is a support or barrier for the potential of action research is a very important result. This ambiguity hearkens a new era in which the climate for teachers as change agents has vastly changed from the 1980s and 1990s. Because the agenda regarding instruction, curriculum, assessment, and promotion policies is exerted primarily from outside forces, the transformative nature of action research, i.e., to empower individuals and communities toward the construction of new knowledge for taking action, is greatly diminished. Thus, the direction of the teacher researcher movement has been deemed uncertain in years to come (Cochran-Smith & Lytle, 1999, p. 22), and could remain little more than a “historical curiosity” (Feldman & Atkin, 1995, p. 127).

When considering the future of the teacher research movement, we, as teacher educators, must first examine our own beliefs and assumptions about it. In my own experience as a teacher educator working with both preservice and inservice teachers for the past six years, I have learned that assisting teachers as researchers can be personally uplifting but professionally and politically fraught with ambiguities. Barriers by some school districts for gaining permission to conduct research on children, as



reported by some teachers in this study, can become a nightmare. Teachers feel their positions as professionals are demeaned and that confidence in their professional conduct is broken. Teacher educators, then, must be willing to support teachers and act as mediators with school and district authorities when these problems occur.

From the university's side of the ethics issue, requiring teacher researchers who are graduate students to comply with Institutional Review Boards can be very frustrating. Teachers and their university mentors can lose sight of their mission to make a difference for children when they must first comply with the rigors of a review process that was originally designed for traditional methods of research. Teacher educators who work with teacher researchers in graduate courses must be willing to help educate their university colleagues on the nature of action research. They must be willing to collaborate with university colleagues to find ways that can ensure adherence to ethical standards and protection of human subjects but, at the same time, are more in keeping with school practices and policies.

Surprisingly (or not), only one teacher in this study recommended that schools should make universities their partners to support teacher research. It should be noted that the teachers in this study teach in a region that has only a few school-university partnerships or professional development schools (PDS) in existence. Thus, the idea of a PDS as a place where teacher education, professional development, student achievement, and inquiry function together under one roof (Levine, 1998), is not a part of how school districts and universities "do business together" there. By pointing this out here, I do not mean to assess any blame, but merely to emphasize that achieving a new status quo of collaboration toward the improvement of teaching and learning still has a long way to go.

The bottom line, then, is that we--teachers and teacher educators as partners--must continue to be committed to finding ways that will transform teacher education and professional development. Formal school-university partnerships, such as the PDS, are critical to this transformation. Through such partnerships, teaching and



curriculum are linked to wider political and social issues that cause “dissonance” in the educational community, and this is a good thing for the future of teacher research. It must continue to be our mission to challenge business as usual by raising meaningful questions together. In doing so, we can ensure that teachers and teacher educators will continue to exert a reality check “to improve the school lives and life chances of students” (Cochran-Smith & Lytle, 1999, p.22).

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Table 1

List of Action Research Topics by Instructional Level

Topic	Instructional Level
1. Constructivist classroom	Primary
2. Reading tutorial program	Primary
3. Reading remediation	Primary
4. Basic math facts	Primary
5. Math problem-solving	Primary
6. Math problem-solving	Primary
7. Math problem-solving	Primary
8. Integrated spelling	Primary
9. Social skills instruction	Middle
10. Academic, career, and social skills	Middle
11. Mentoring of beginning teachers	Middle
12. Time constraints on teacher planning	Middle
13. Computer-assisted language arts skills	Middle
14. Outcomes-based education	Middle
15. Cooperating teachers' support of beginning teachers	Middle
16. Homework motivation	Secondary
17. Contextual learning in algebra	Secondary
18. Interdisciplinary curriculum	Secondary
19. Satisfaction of nursing education	Post-secondary
20. Interactive learning in office technology	Post-secondary
21. Internet use among disadvantage youth	Community Education



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