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ABSTRACT
        This case study provides a practical example of
collaborative action research at work in a classroom setting, and
illustrates how collaborative action research can be used to help
teachers answer questions about their own practice and professional
development. Following a review of the available research and
historical foundations for collaborative action research, the Chapter
1 program for remediating students at risk for failure or dropout is
described. Research with the authors' Chapter 1 eighth graders
focused on using alternative assessment to motivate students.
Excerpts from the teacher's and students' learning logs and
teacher-student interviews are provided, tracing the process of
planning, implementation, and evaluation of the alternative
assessment techniques and activities. Results indicated that
alternative assessment improved motivation and academic achievement
among four out of five students studied, while teacher-student
relationships also benefitted. Drawbacks of collaborative action
research and alternative assessment are also discussed, including
considerable time and effort requirements for frequent meetings,
coordinated and organized data collection, and the complexity of
evaluating student writing. (Contains 91 references.) (PB)

Collaborative Teacher Research: An Investigation of Alternative Assessment

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Running Head: COLLABORATIVE TEACHER RESEARCH

Collaborative Teacher Research: An Investigation of Alternative Assessment

For more than a decade now, action research has increased in popularity as an avenue of improvement in teaching and teacher education. However, there has been little examination of the diversity of pertinence in teacher research, especially as it relates to the variety of perspectives which have emerged in recent years and are becoming more defined as interest grows. The need for teachers to become researchers is easy to affirm and it appears to make great sense (Glesne, 1991). Yet, once at that level of acceptance, many educators wonder precisely what is meant by the dictum that teachers should be researchers in their own classrooms. The purpose of this case study is to give a practical example of collaborative action research at work in a classroom situation and how it can be used to help teachers answer questions about their practice and develop professionally.

Action Research Review

Hundreds of articles and other works have been produced in recent years on the general subject of teacher research. The type of teacher research used in this study is a form of action research. Action research defies easy description, partly due to methodological variations across a number of countries. For the purposes of this study, action research is defined simply as classroom inquiry teachers undertake to understand and improve their own practice (McCutcheon & Jung, 1990). The research design reflects work done in collaboration with university researchers. Our model of collaborative research includes three important aspect. First, every phase of the research is done collaboratively, including planning, design, data collection, reflection, analysis, and writing up the results. Second, the research is

conducted "in the field," in this case in the classroom itself. Interviews, observations, discussions, and actions were all conducted on site, allowing the classroom teacher (Penelope) to be involved in all aspects of the project. The results were written up separately, but edited together.

Historical Grounding

For many of us interested in the continued improvement of education, the processes discussed under the banner of "action research" hold much promise for enhancing the relationships between and among theory, research, and practice. The improvement of education hinges on increasing the numbers of outstanding teachers, on serving their needs, and on trying to ensure that their virtues are not frustrated by the system (Stenhouse, 1988). Action research is about teachers becoming more acutely aware of what is happening in their classrooms and developing a research focus upon their practice (Sanger, 1990). Through the process of action research, teachers tend to be empowered in their attempts to improve their articulation, understanding, and implementation of not merely critical thought, but critical thought in action.

Collaborative action research represents a renaissance within educational research (Oja & Pine, 1986). The use of teacher research as a strategy for increasing teachers' motivation toward reflective teaching practice and self improvement is not new. As early as 1933, John Dewey published works promoting teachers as a valuable resource in the research environment. Kurt Lewin (1947) is most often cited as the "founder" of teacher research, or what he called "action research", since he combined action and research by arguing that a social

situation can best be understood if a change is introduced into it and its effects are observed. By mid-century these research models were being applied to the field of education and experienced teachers throughout the country were being encouraged to participate in various kinds of action research (Cory, 1953; Shumsky, 1958). The idea of a "collaborative" effort was demonstrated by Corey (1953) and expanded on by Schaefer (1967). Unfortunately, the 1960's saw the rise of "process-product" research (Shulman, 1986) and the sophistication of other quantitative research (Kelly, 1985), which suppressed the spread of action research. Educational research simply focused on other areas and those working with action research turned to other projects. It wasn't until well into the 1970's that interest returned to action research as a way to apply the knowledge gained through process-product, and researchers again began to tap this enormous resource (Cooper, Barrett, Hayhoe, Hobrough, Rowe, & Rumsby, 1975; Elliott, 1977). The late seventies saw the development of the collaborative action research models of Cory (1953) and Schaefer (1967) and their application by Oja (1979, 1980), Pine (1979a, 1979b, 1980), Pine and Keane (1986), Hord (1981), Ward & Tikunoff (1982), Smulyan (1984), and others. Concurrently, reports and articles emphasized the importance of involving teachers in research as a way to link theory to practice (Huling, Trang, & Correll, 1981; Sykes, 1984). If teachers develop research skills, it was argued , then university researchers would be more willing to work collaboratively with public school people, as many think they should (Carnegie, 1986; Ducharme, 1986; Eisner, 1984; Holmes, 1986). As teachers become better researchers and university researchers spend more time in public

classrooms, both will be better able to create theory out of practice as well as put theory into practice.

In addition, researchers began to introduce collaborative research to college students in preservice teacher education programs (Beckman, 1957; Perrodin, 1959) and the effort has continued in this field with preservice and inservice education projects through the work of Zeichner (1993), Gore & Zeichner (1991), Sagor (1991), McTaggart (1991), Noffke (1990), Oberg (1990), Schon (1990), Lucas (1988), and others.

It is interesting to note, in summary, that the application of action research theory cycled through educational history. After its theoretical conception and application beginning in the 1930's by Dewey (1933) and Lewin (1947), it was forgotten in educational circles until the 1950's, when it was successfully applied to both preservice and inservice educational development (Beckman, 1957; Corey, 1953; Perrodin, 1959; Shumsky, 1958). Again interest faded, not only due to other research interests, but also to the difficulty in applying quantitative techniques to the qualitative nature of action research (Cochran-Smith & Lytle, 1990). Finally, beginning in the later 1970's, as interest in qualitative research increased and researchers looked for more practical ways to apply the increasing body of educational theory, action research was utilized in a variety of arenas (Carr & Kemmis, 1983; Cobb, Yackel, & Wood, 1992; Elliott, 1990; McTaggart, 1991; Oberg, 1986; Oja & Pine, 1983; Schon, 1990; Stenhouse, 1979; Zeichner, 1993) and continues to increase in popularity. Recent work, yet to be published, is extending action research applications to middle school teacher teams, student

teacher progression, multi-age grouping, and "at risk" students, which is the focus of this study. The following case-study details Penelope's experience with using action research to chart the progress implementing alternative assessment techniques with eighth grade chapter students.

I, Penelope, was concerned about teaching eighth grade Chapter (at risk) reading for the first time. When I started this project, I was just beginning my sixth year of public school teaching. Prior experience included three years as a preschool teacher, one year teaching second grade, three years teaching sixth grade gifted, one year teaching middle grades Spanish/ library research exploratory classes, and one year teaching eighth grade language arts and reading. Though my background was diverse, I approached the new teaching year with trepidation. Eighth grade had been a difficult grade for me in the past and I was concerned about teaching at risk students. However, reading has always been my favorite subject and my class load would be less than fifteen, allowing more time for individual attention.

The purpose of doing the action research project was to assist me through this transitional year while helping me develop as a teacher. I felt that the benefits gained from asking questions about my practice, documenting student's work and comments, and compiling a personal journal would help my professional growth regardless of what research questions I came up with.

Setting

The project took place in a Georgia middle school located in a small community between larger metropolitan cities. A substantial portion of the community is employed by clothing manufacturers. Even though it is not a

prosperous community, it is experiencing population growth from people moving out of the larger nearby cities.

Chapter One is a federally funded program to provide remediation to students at risk of failing or dropping out. Our middle school uses a "pull out" program. My classes have half the number of students of the regular classroom of any given year, and our class is a mobile unit that is located in the "trailer park". Even though one mobile classroom is used for a "gifted" class, the "trailer park" is thought of as a place for "dumb kids." It is not an ideal location for remediating students who are at least one year behind, and are socially or economically deprived according to "Chapter" standards.

Data Sources

During the year that I began this study, I wanted to find methods of instruction that would improve the students' motivational interest in school. During the summer, Dan brought several articles to me on alternative assessment which I used as a beginning basis for developing the "tools" for motivating and educating my chapter students, and for developing a positive climate in the classroom. It was within this context that I came up with the questions for my action research project. The questions evolved during the summer as I learned more about action research and alternative assessment. I was surprised that Dan could be so helpful in clarifying my questions and it did not take long for me to become a believer in collaboration. Our entire first action research meeting (August 18, 1993) was spent hashing and rehashing my questions so that they developed from just trying

new things in the classroom to a more substantial look at my practice. My overall collaborative action research question became:

How can I use alternative assessment to improve motivation in my eighth grade chapter students? Focus questions developed from the main question and included:

1.) How do these students perform on standard (paper and pencil) tests?

2.) What forms of alternate assessment are effective with these chapter
students?

3.) How is student motivation affected by the use of alternative assessment?

On the first day of school, I talked with the students about what we would be trying to accomplish in class, discussed what they would like to do, and had them complete a student inventory (survey). The student inventory, observations, and two paper and pencil tests became the baseline data for the study. During the first two weeks of school, I observed student's motivational level and gave each student a rating of low, medium, or high. I also gave two paper and pencil tests. Both tests included true/false, matching, and multiple choice questions. In addition, I gathered more complete data on five students throughout the project including audio taped interviews, student writing logs, samples of their class work, and detailed observations.

The five students were chosen after the first two weeks of observation and represented a range of ability and motivational levels. The following entry from my journal summarizes the students:

Data from Personal Journal - September 1, 1993

Reading

Name	Motivational Level	Paper and Pencil Performance
Nick	Low	65%, 35%
Teresa	Medium	100%, 85%
Kriss	Low	100%, 50%
Shannon	High	100%, 95%
Todd	Low	85%, 75%

The student inventories included twenty questions regarding attitudes and opinions about Chapter, reading, and assessment. The inventories gave me valuable information about how they perceived alternative assessment and supported my motivational ratings. The students were also asked about their assessment preferences. Out of thirty-one students, all thirty checked plays and art projects, fifteen checked skits, ten checked learning logs, eight checked take home activities, three checked notebooks, and zero checked teacher/student oral exams as forms of alternative assessment that they liked.

By the end of the first two weeks I thought I had the study well set up, but needed more information on alternative assessment so that I could make sound decisions about what to do next. Dan supplied me with related research articles, and I learned that most classroom assessment tends to focus on "low order" knowledge and skills without assessing the broad understanding of the subject matter through meaningful applications, that what teachers emphasize in class is

often different from what they test, and that teachers rarely use the information

gathered from the test to improve instruction (Fielding and Shaughnessy, 1991).

Chapter students, any students, do not need more meaningless book knowledge,

they need knowledge that is applicable to the real world (Ornstein, 1988). I felt that

in order to assess my students more thoroughly and accurately, I would need to

look at more than just testing material. I was also interested in the climate of the

classroom, because if learning is designed with sufficient attention to the social and

emotional climate in which it occurs, students motivation and performance should

improve (Vatterott, 1991). Many areas of assessment should be considered

including computer testing, video evaluation, tying evaluation to learning, student

created assessments and research projects, climate assessment tools, and input from

others in the school and community (Brown, 1989 & Wiggins, 1992).

With this information in mind, I continued discussion meetings with Dan, searching

for more clarification as to what my alternative assessment technique would

include. We decided on the following:

1.) Adapt and legitimize assessments that come from other sources such as

textbooks. These would be expanded to include general essay questions (see

Saurino, 1993; 1994) and condensed to exclude material that was not emphasized

in the classroom.

2.) Make assessment tasks more authentic and meaningful, something that

the student finds interesting and worth mastering.

3.) Maintain scoring criteria tha t are valid, feasible, and reliable. Points are awarded and taken off for essential successes and errors, not for what is easy to count or observe.

4.) Incorporate a variety of assessment techniques, noting the advantages and disadvantages of each.

By October, the "action" part of my project was weil under way. My reading students were completing their first alternate assessment project which was to create an artistic archetype that reflected a scene from the story called "Spotted Eagle and Black Crow". This first project was done in cooperative learning groups. The groups each chose ten objectives by which they would be assessed. These objectives came from two sources, a list of objectives from the story they read and a list of objectives for the project itself. Each student in a group was assigned a series of tasks by the group to complete the project. I was pleased with the results. Data from the groups containing the five students I was tracking follows. Shannon's group did exceptionally well (97 for their overall grade). Shannon's learning log for October 11th reads:

> "Yesterday, we learned that you have to divide and split all the work up so everybody has something to do. Today we learned that you must respect the people and share everything. I didn't like all of the things that the class chose, but I decided that I wanted to do the art part anyway. Christy likes to write , so I gave her the writing part. Mrs. Saurino has ten objects (objectives) that we need to show in this project. It seems like a whole lot, Mrs. Saurino; are we doing this right?"

Notice that Shannon used her learning log to express her feelings on the subject, and to communicate with her teacher.

Nick wasn't crazy about school. He didn't plan on being in school long. In an interview that I taped on August 19th, Nick said, " I don't need this place (school). I have a job. I am going to lay carpet." This particular project was good for Nick. His group depended on Nick's artistic ability to complete the tasks, so this type of activity helped to improve Nick's outlook towards school. Nick wrote in his inventory at the beginning of the year that he liked art projects and skits, but Nick was not a writer. His entries in his learning log were brief,

October 11th - Blank

October 12th - " Came late."

October 13th - " I worked on our box covering it with paper."

October 14th - " As a group me and Todd worked on our project. We work good together as a team."

October 15th - Blank

As I observed Nick I noticed that he reread details from the story several times in order to include fine details in his drawing. Although his group needed extra time to complete the project, the end result was exceptional.

Teresa was a quiet child who didn't fit in well with the other students. At first, the other students in her group did not include her in the project. Teresa eventually worked herself into an artistic area that was not one of her talents and caused her a great deal of frustration. In her learning log she wrote,

October 15- " We are working on a puppet stage for 'Spotted Eagle and Black Crow'. I am SUPPOSED to do this puppet and I DON'T KNOW WHAT TO DO!!" When I suggested to the group that she be the writer for the group, her performance improved and so did her status within the group.

Todd was another challenge, but I knew when I took on a chapter class that I would have lots of challenges. Todd's problems weren't limited to the classroom. He loved to play sports, especially football, yet his parents didn't come to any of the games or even take him to and from the games. Todd also got into trouble with the law. He was taken down to the police station for stealing paging beepers and selling them to students at school. Todd's attention getting behavior in class and his competitiveness on the football field indicated to me that he might be a natural leader, so I used these abilities to channel him positively in the classroom. This first project on "Spotted Eagle and Black Crow" was a beginning for Todd. I felt like I was his shepherd constantly nudging him to move on, stay on task, discuss the project not the football game, and so forth. In my journal I wrote, October 22- " I didn't think that Todd would ever contribute to his group. The first attempt was a diorama in a box that was almost empty except for a few pencil drawings. The final product and third attempt, was completed with many three dimensional detailed figures that represent the objectives for the project effectively." His group's final product was put on display in the school's media center.

Kriss did not like coming to the trailer, and this attitude had an effect on her motivation in class. In an interview on August 24th, Kriss said, " I don't want to

come out here (to the trailer), my hair is going to frizz (when it rains) ... why can't I be in Mr. York's class? ... Coming to a trailer is dumb." Kriss did well on tasks that didn't require much motivation, such as paper and pencil comprehension questions or vocabulary exercises, where she knew what needed to be done to get the grade she wanted. However, tasks that were open ended or taken home were left uncompleted. This group project did not motivate Kriss at all. She did very little to contribute to her group. I encouraged the groups to talk with each other about the project, but most of Kriss' conversation was about her social life, and her conversation pulled the group away from completing the task in a timely manner. Even though Kriss didn't do well on this project, I continued to seek alternatives for her. On her student inventory, Kriss indicated that she liked to do art projects, yet her performance did not support her answer on the inventory. When I asked her about it, she said that she didn't like the story. Because of this talk with Kriss, I provided a choice of stories to the students throughout the rest of the year whenever a choice was appropriate. I found that Kriss' performance improved after choices were provided.

Significant changes took place in my teaching as well. On November 30th my journal read, "I have noticed that the use of my time and organization has improved. Lesson plans are prepared well in advance, for a change, and I am constantly searching for innovative alternative assessment ideas. I *know* these students better then I knew last year's students because of the student inventories, student interviews, and student involvement in the evaluation process."

The use of alternative assessment had some surprising results with my chapter students. Later in the year, our media center held a diorama contest. Each reading class was to create one diorama that represented a story or book read in reading class during the current school year. All of the reading classes in the school entered the contest including my three classes. The first place prize was a dinner theater for the winning class and publicity in the local newspaper. In addition, there were three honorable mentions. My reading class with Todd, Teresa, and Nick came in first for the school. Todd was the leader and director of the diorama project, Nick recommended different art medium to use in the project, and created the eagle which was the primary focal point of the diorama, and Teresa wrote the explanation of the diorama. My two other reading classes both received honorable mention. I believe that the use of alternative assessment activities and my collaborative action research project contributed to the success of these students.

Analysis

At the end of the first collaborative action research cycle, which coincided with the end of the school year, we worked on the final data collection which included observations, interviews, and the students re-taking the student inventory (survey). Although the constraints of this paper do not allow a full discussion of the data analysis, several results were quite apparent for the majority of students. First, the use of alternative assessment strategies seemed to improve the motivation of these at risk students in four out of the five cases tracked in the study, and in most of the other students. Second, academic achievement improved at about the same rate. Additionally, Penelope's relationship with her students, organization and

planning, teaching methods, and professionalism all seemed to improve as noted in both our journals and confirmed by students and administrative observations.

We agree that there are substantial benefits in collaborative action research, but feel obligated to point out some of the disadvantages. This type of research involves a considerable amount of time and effort. Meetings need to occur regularly, questions and research methods require development, data collection must be coordinated and organized, emerging action directions need reflection and modification, analysis is complicated, and writing is always a lesson in compromise. We have discussed strategies that seemed to be effective, but others were not and we spent a considerable amount of time in the project finding out what we didn't want to do. Collaboration is essentially a joint endeavor of autonomous people to achieve outcomes desired by all. Although a project of this type is not appropriate for all, we believe many staff development programs could benefit from the addition of action research. We think its worth the effort, especially for the children.

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