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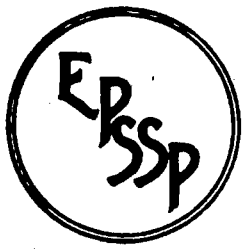
ABSTRACT

Collaborative research can contribute to teachers' personal growth and professional development as well as to the coordination of instructional approaches and goals throughout the school. Collaborative research in teaching can be defined as research conducted inside the classroom by two or more individuals with different role orientations and professional concerns. The collaborative effort can be seen in the mutual work and ideas of the Ecological Perspectives for Successful Schooling Practice Project (Far West Laboratory for Educational Research and Development, San Francisco, California) and of another research project, Interactive Research and Development on Teaching (Tikunoff, Ward, and Griffin). Three general characteristics of collaborative research are: (1) Collaborative research requires the establishment of parity among collaborators; (2) It demands the maintenance of reciprocal relationships among team members representing different professional orientations; and (3) It requires the establishment of a common language among its participants. Three collaborative research activities found particularly productive are: (1) open-ended interviews; (2) collaborative data analysis; and (3) collaborative planning. Collaborative research on teaching has a central role to play in staff development programs. It provides an important core of activities in which teachers and researchers come together and examine the problems and possibilities of teaching. (JM)



Ecological Perspectives for SUCCESSFUL SCHOOLING PRACTICE

MUTUAL INQUIRY:

THE ROLE OF COLLABORATIVE RESEARCH ON TEACHING IN SCHOOL-BASED STAFF DEVELOPMENT

1981 AERA Annual Meeting
(Session 29.14)
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I am going to talk about the experiences which I and my colleagues at the Far West Laboratory have had in conducting collaborative research at the elementary school level. I will argue that collaborative research can contribute to teachers' personal growth and professional development as well as to the coordination of instructional approaches and goals throughout the school. Although credited to a single author, this paper is a collaborative effort also in that it reflects the mutual work and ideas of the Ecological Perspectives for Successful Schooling Practice Project at the Far West Laboratory.

Let us begin by examining what we mean by "Collaborative Research on Teaching."

Collaborative Research on Teaching

Collaborative research on teaching can be defined as research conducted inside the classroom by two or more individuals with different role orientations and professional concerns. In its most basic form, collaborative research involves the mutual inquiry of a reseacher and a teacher into educational problems of interest to both. The pioneering work of Smith and Geoffrey (1968) provides an example of such a mutual collaboration.

The Ecological Perspectives staff has been involved in two successful collaborative research projects. Most recently, we have been collaborating with all the teachers at Central Elementary School. The goal of this 18 month effort has been to understand and describe successful instructional programs and practices which occur in successful schools from the perspective of both teachers and students. To collect data about the world of the classroom, we employ a naturalistic methodology which relies on continued, in-depth observation and interviews with teachers, students, principals and parents. We seek to create a portrait of school life and instructional practice grounded in the everyday reality of those who inhabit the social-instructional worlds of the classroom and school. At the same time we seek

To involve all of the teachers in a staff-development program designed to help them achieve their own instructional goals.

I will draw upon examples from our work at Central School and also use illustrations from an earlier collaborative research project, Interactive Research and Development on Teaching (IR&DT), which was conceptualized and organized by William J. Tikunoff and Beatrice A. Ward. (See Tikunoff, Ward, & Griffin, 1979.) In the IR&DT approach to collaborative research, teams consisting of teachers, a staff developer and an university or school district based researcher worked together to complete intertwined research and staff development programs.

Based on Ecological Perspectives and IR&DT, three general characteristics of collaborative research can be described: First, collaborative research requires the establishment of parity among collaborators. Secondly, it demands the maintenance of reciprocal relationships among team members representing different professional orientations. Finally, it requires the establishment of a common language. I will discuss each of these characteristics below.

Establishment of Parity

Very real differences of perception arise between the members of a collaborative research team. To some degree, these differences can be attributed to psychological factors such as temperment or personality. However, more important to the successful conduct of collaborative research are those differences of vision which result from professional socialization and the fact that individuals occupying different professional roles attend to different aspects of ambiguous stimuli (Biddle, 1979). If these different visions of the classroom are to help guide the research effort, they must be expressed. Teachers must not be cowed by the supposed expertise or status of researchers.

We define parity as the establishment of mutual respect among the members of the research team. When no one set of professional capabilities are thought to be superior to those held by other members of the research team, parity has been established. Once this occurs, each team member has an equal opportunity to take part in the direction of the collaborative research activities.

The collaborative research projects we have been involved with demonstrated parity among team members in different ways. For Interactive Research and Development the research agenda was established as the result of a consensual decision among the team members. Leadership in the ensuing research and development activities was issue-specific and rotated among the relevant members of the team according to the competencies needed at a particular time.[1] In the Ecological Perspectives Project, where researchers and teachers work together to examine problems of mutual interest, parity was established by scheduling research and feedback activities so that time was devoted to answering the questions of both role groups. After the Far West Laboratory researchers completed their classroom observations

they generated narrative classroom protocols (similar to that which appears as Figure 1). These protocols were then returned to the teachers for them to read. Teachers discussed the protocols informally with the Far West Laboratory researchers in the faculty room and after school. In addition, entire days were set aside during the school year to discuss the protocols with each other and the Far West staff. At these times, we drew upon our own teaching experience to discuss the events recorded on the protocols and to brainstorm with the Central School teachers about ways in which their instructional goals could be attained. Thus, the researchers' interest in collecting data did not overshadow the teachers' interest in reflecting upon and improving their teaching practice.

Dr. Kenneth Howey of the University of Minnesota conducted an independent evaluation of the staff development activities which were part of the collaborative research procedure (Howey, 1980). After interviewing all of the teachers at Central School Dr. Howey reported:

> On numerous occasions teachers spoke to the degree of partnership they perceived themselves to have in this project. More than one teacher indicated that they had been treated as "professionals." Others reported that the core EPSSP staff had "validated our worth." The language employed indicated that the EPSSP staff respected the teachers' abilities and treated them as equals. As one teacher indicated, "As helpful as these people were and as many ideas as they had, at no time did they indicate that we had to do something because they wanted it done."

Above all, parity is a way of showing mutual respect. It can be furthered by balancing data collection with mutual reflection -- time specifically set aside during the research activities to respond fully to teachers' needs and questions. We believe that if research is to respond to the needs of teachers, it must begin in partnership with teachers, a partnership which demonstrates parity.

Reciprocity

Relationships which demonstrate reciprocity have a natural give and take. As Webster's New Collegiate Dictionary would have it, there is a "mutual exchange of privileges in such relationships" (1977, p. 964). Reciprocity occurs among members of a research team when each member has something valued to share with the others. In the conduct of the IR&DT project, members of the collaborative research teams exchanged ideas freely among themselves and established research questions and methodology which built upon individual preferences and strengths.

Our work in the Ecological Perspectives Project was organized so that teachers could take advantage of our research background and

Page Number: 01
Teacher Number: Teacher 1 (Whole Class Observation Protocol)
Student Number:
Date of Observation:
Protocol Number:

10:30AM

1. Observation begins. Students are seated at their desks.
2. T1 is at his desk and T2 is standing in Zone 4. In-
3. dividual children read out their answers from the math
4. tests. T1 calls on the students to read and then asks
5. for mistakes to be identified. Students raise hands and
6. offer corrections.. Students from both classes take part.
7. T1 gets up and stands in Zone 4. T1 says, "Okay,

10:40AM Noise Level 0

8. class meeting." He checks up on work done and talks
9. about the day's schedules and assignments. T1 tells
10. who he wants to meet with first of all and reads out a
11. list of names. One boy goes to get a drink. Others get
12. up to move. T1 says, "Stay! Hold it!" And they go
13. back. He finishes with the words, "If I didn't call
14. your name and you completed your ten sentences yesterday,
15. you're okay." Children move. T2 says, "I want to see
16. all those students who are not going to Mr. T1.
17. T1 moves to Table B in Zone 5 and 16 students sit
18. around him. He talks about quotations, direct and
19. indicrect. He tells how everyone had got it wrong the
20. day before; gives examples of how it should be done. He
21. tells them they have to redo the sentences. One girl
22. goes back to her desk. She returns saying, "I'm right
23. here. I had to go and get my pencil." Teacher gives
24. back the papers from the day before. He gives to one
25. boy and says, "I want you to change 'Sue said, 'I'm in
26. love' to "Sue said she was in love.'" Some children
27. go back to their desks or walk around. Two or three
28. ask the teacher questions. The teacher stands up by
29. the table. Others start to write. One boy asks what
30. is wrong. The teacher says, " 'Then I said how is she'
31. has got to be changed to 'Then I said how was she.'"
32. Sometimes the verb tense has got to be changed. Teacher
33. walks around the table from student to student, explain-
34. ing and showing what to do. One boy shouts, "Mr. T1."
35. And he says, "Okay, I'm coming round." The children
36. write and some whisper to their neightbors. The custodian
37. comes int to stick down some carpet next to Table B. The
38. teacher says, "You ended up with a plain old white glue
39. after all that." Custodian nods. Some children look

Noise Level 1

40. over to the custodian. Three children take their papers
41. up to the teacher and he deals with each in turn. They
42. wait about thirty seconds each. Two boys set up a
43. desk next to Table B and sit opposite each other. One
44. girl whispers to her neighbor, "He said not to do that."
45. Two boys at the desk chat bout something that is going
46. to happen in the lunch break.

Figure 1. Example of classroom protocol

teaching experiences. While we did not have answers, we did have ways of focusing problems and helping teachers to think through what they were trying to achieve in the classroom. Additionally, we could provide them with written records describing the instructional activities we had observed.

Here is an example of the problem-solving potential of our data collection activities. Two teachers at Central School who team-taught the fifth and sixth grades expressed concern about student behavior during the individual help periods. The Far West Laboratory researchers conducted some observations at appropriate times during the school day, and then met with the teachers to examine the protocols which had been generated. From the narrative record, it was evident that: (1) Although there was much physical activity and conversation, most talk was directed toward the assignments which were being completed; and (2) Students were waiting at the "help table" for attention from the teacher for up to 14 minutes. As a result of the ensuing discussion, the collaborating teachers determined that their initial perceptions of student activity during the individual help period were not supported by the observed behavior. Moreover, they realized that what they had thought to be an opportunity for unlimited individual help was actually a time of help for the fleet-footed few and a time of frustration for the other students who stood in line.

Ken Howey talked to the teachers about the contribution the Far West Laboratory researchers had made to their work and the reciprocity which had been established. He reported:

> Typical comments which were shared with this writer included such phrases as; "they had very good insights, they provided us with new perspectives" . . . [one] teacher recalled that "they helped us assess ourselves and our needs in more accurate ways; they were willing to work with individual teachers on individual problems."
>
> The process of describing in detail what was occurring in the teachers' classrooms and then sharing it with them was viewed very positively by those at the school site. Eight of the twelve staff members shared comments about this process and they were almost entirely positive. As one teacher indicated, "This is a terrific approach. It is a rare opportunity for teachers." Other commentary on the process included such statements as, "It's forced us to be more reflective."
>
> In summary, it appeared that the process of observing and recording what occurred in the teachers' classrooms was perceived as most helpful by the teachers. As one teacher indicated, "It provided a sense of dignity and importance to my role." Another teacher put it this way, "It is the only

time I can recall in my teaching career that I have had a chance to systematically examine the actual process of teaching."

Through the establishment of parity, teachers are drawn into the research effort as valued members of the research team. By establishing reciprocity between teachers and researchers, each stands to gain from the interaction. Teachers have problem-solving assistance on tap while researchers are able to collect "thick description" of the classroom and its occupants.

The Establishment of a Common Language

Researchers and teachers "talk" differently. They talk about different things. A profession's language reflects the concerns and ways of thinking prevalent within that profession. Words like "variable," "practice," "evaluation" and others gain special meanings depending upon the context in which they are used, and often, the training of the individual who uses them. In non-collaborative research and development, conceptual communication between researchers and teachers is often strained or non-existant. Common linguistic conventions often are not established, and a research design which has been constructed carefully by the researcher may look like so much gobbledygook to the classroom teacher.

Given this natural breach of language and more importantly the thinking it represents, a collaborative research effort must take special pains to ensure that the different members of the collaborative team use the same language and understand each other's concerns.

During the implementation of IR&DT, a consensual lexicon grew up between the researchers, the teachers and the trainer/developers. At one of the sites, words like "coping" and "classroom distraction" and "effectiveness of coping technique" took on special, operationally defined meanings which were understood and shared by each member of the team. At the other site, words like "mood" and "supportive instructional behavior" took on new meanings. These also became consensually understood. As new teachers were introduced to the research findings and processes in successive phases of the IR&DT implementation, part of the training effort was devoted to defining the concepts so well understood by the original IR&DT team.

In our current work with the Ecological Perspectives Project, an intriguing cross-fertilization occurred as a result of our interaction with teachers. One of our theoretical interests is the effect different patterns of instructional organization (or activity structure) have on classroom activity. Bossert (1979) has studied the effect of activity structure on classroom climate and peer relationships, and we have been strongly affected by his work. In talking with teachers about activity structures and after working with several teachers to plan instructional interventions using some of the basic concepts found in this paradigm, the teachers' reactions

have helped us see ways in which the basic elements of the activity structures perspective as developed by Bossert, can be elaborated so that it has more meaning for practitioners. Not only has our own work been furthered by the insights of the teachers at Central School, the concepts we are using to make sense of the classroom have been useful to the teachers. To ensure that teachers and researchers talk with each other rather than at each other, special attention must be given to the meaning of the concepts used in common. When these concepts are new to teachers -- as was the case with many dimensions of the EPSSP Project -- they provide new ways to analyze classrooms and reflect upon the business of teaching. While teachers are given new conceptual lenses, as researchers we have our formulations subjected to an on the spot "field test" which ensures that they will make sense and communicate to the audience they are intended to serve. After talking with the teachers at Central School, Ken Howey reported:

> Almost everyone of the teachers who examined transcriptions of their classroom interaction was able to detail specific content or new concepts which they believed to be beneficial to them. A review of the various concepts about classroom interaction which teachers shared in an unsolicited manner included: the concept of teacher evaluation as both a public and a private venture, the idea of looking at the social dimension of the classroom in terms of a "division of labor concept," and the variety of student options and choices available in an instructional context. [Note: all of these are elements of an "activity structure."] Other concepts of a more general nature which were enumerated by the teachers included more attention to: the number of interruptions which occurred in an instructional activity, the perceptions of students themselves of what was occurring, the type and amount of talk which occurred between pupils and the teacher, and greater sensitivity to where different materials, objects and furniture were located throughout the classroom.

Parity, Reciprocity and Communication -- these are three characteristics of collaborative research. I will now consider the types of activities which can be part of a collaborative research effort.

Collaborative Research Activities

While many activities can be a part of the collaborative research effort, our own experience suggests three to be especially productive. They are: 1) Open-ended Interviews; 2) Collab ative Data Analysis; and 3) Collaborative Planning. These activities are discussed below.

Open-ended Interviews

Although designed to evoke information about specific subjects, an open-ended interview does not employ an interview guide to structure the interview. Instead, the interviewer poses a general question to the interviewee and then follows the respondent's lead before asking further questions. Although the interviewer must keep the interview within the general bounds of the topic, questions and probes are invented which build upon the responses of the interviewee. The purpose of the interview is to understand the interviewee's perceptions while introducing a minimum amount of interference from the interviewer.

We have asked teachers to talk at length about three subjects: 1) their ideal students -- that is, the sort of student they most enjoy teaching; 2) their curriculum; and 3) the individual students in their classes. Each interview topic has the potential to reveal a great deal about the teacher and his/her perception of teaching. These are important data if we are to fully understand the world of the classroom. However, more important in terms of staff development, is the effect these interviews have on teachers.

The demands of classroom teaching are exhausting. Teachers rarely have time to reflect upon what they are doing and why they are doing it. An open-ended interview gives the teacher a chance to take a look at his/her activities, consider their effectiveness, and consider alternative teaching strategies. We are careful to not ask teachers to justify their activities. Quite often, however, they take themselves to task and openly discuss their problems and hopes. Since we have observed their classrooms, we can -- if appropriate -- offer alternative ways of viewing the problem or help them clarify just what it is that does not seem to be working. As we all know, teaching is a lonely profession. Being interviewed by a sympathetic person who finds the teacher's concerns interesting and worthy of discussion can not only boost teachers' morale, it can be a step in the continuing process of personal and professional growth.

Collaborative Data Analysis

Once we have generated the narrative classroom protocols, we return them to the teachers for their own use. Sometimes feedback ends at that point. Other times, we meet with the teachers and analyze the observation together. An example of this occurred at Central School when we became interested in differences and similarities existing in classroom rules. First, we collected four days of observational data in each classroom. Then both teachers and researchers read the protocols, noting any explicit rule statements or sanctions which indicated that a rule had been broken. We discussed our individual readings of the protocols and then prepared a joint chart listing the rules in each teacher's classroom. Once this classroom-level analysis was complete, we combined the classroom charts to produce a school-wide chart. This led to a discussion of the consistencies and inconsistencies existing from grade to grade. In this

instance we analyzed the collective data with the faculty as a whole. Other times we have worked with individual teachers in a similar manner.

Collaborative Planning

When data analysis revealed aspects of instruction which the teachers wanted to change, we generally worked together to plan alternative activities. This planning occurred with individual teachers and with the faculty as a whole. In the example presented above, the collaborative rule analysis was followed by the establishment of school-wide rules which all of the teachers agreed to enforce.

Planning activities can occur also by themselves. After working with the teachers for a year, we proposed to facilitate a summer workshop which would try to articulate a school philosophy and school-wide objectives which could be supported by the entire faculty. In this meeting, we helped the faculty to go beyond rhetoric and specify activities which were indicative that they were meeting their goals.

The Role of Collaborative Research in School-Based Staff Development

Perhaps it should come as no surprise that collaborative research demonstrates many of the elements which have been identified by Ken Howey (1980) as characteristic of successful staff development programs:

(1) Teachers are centrally involved in all aspects of the staff development process;

(2) Attention is given not only to individual teachers but to key functioning groups and entire faculties;

(3) School-focussed inservice goes beyong the sharing of ideas and includes demonstration, experimentation, supervised trials and feedback;

(4) There is continuity, i.e., inservice is seen as a process, often a developmental or incremental one, and not an event;

(5) There are ample opportunities for reflection about as well as action in: there is consideration of alternative to what one is doing.

(6) School-focussed inservice is concerned with teacher changes which are implied in resolving cross-cutting school problems of mutual concern; and

(7) School-focussed inservice often is embedded in experimentation and problem-solving which is integral to the daily

> instructional tasks of the teacher; it is differentiated from teaching by the conscious planning for teacher growth and the type of critical examination and sharing which accompany the teaching.

This congruence confirms our own experiential impressions that collaborative research on teaching has a central role to play in staff development programs. We believe (and believe the research demonstrates) that staff development must be school-based and directed to the entire faculty if it is to be successful. Collaborative research provides an important core of activities in which teachers and researhers come together to examine the problems and possibilities of teaching. It provides the glue to bring diverse staff development experiences together: observation and feedback, collaborative analysis of classroom problems, goal setting, instructional experimentation and planning. More importantly, it directs the attention of an entire faculty toward their own instructional problem solving and growth. This collaboration engages teachers and researchers in mutual inquiry -- a process which we believe should be at the heart of any staff development program.

FOOTNOTE

[1]Because a major focus of IR&DT was to conduct a rigorous piece of research, the knowledge and skill of the researcher were often needed by the team, and not surprisingly, the analysis of the tape recordings made at each team meeting revealed that on a percentage of time basis, the researcher gave more input to the decisions that were being made than did individual teachers. The membership of the collaborative team, however, was weighted toward the participation of teachers -- 3 teachers to 1 researcher and 1 trainer/developer -- and thus when the percentage of input given is considered by role group, as opposed to individual members, the teachers had far more to say than the researcher. We feel that this structural strategy of loading the collaborative team with teachers gives them more power, and when combined with individual commitment to the collaborative ideal, helps to establish parity among team members.

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