Participant observation is a research and evaluation strategy in dealing with complex educational settings, organizations, and curricula. Three alternative models are presented. The first is a general structural model involving three research strategies: an experimental design with pretests and posttests; a social survey with interviews and questionnaires; and, a participant observer study of the program. Second, a sequential model which attempts to cumulate efforts over time rather than concurrently in time. This model is illustrated in some detail by use of a study on teacher awareness. The third strategy of participant observation and curriculum evaluation is the cumulation of case studies. Substrategies under this model are suggested. (LR)
Participant Observation and Evaluation Strategies

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Introduction

In the general abstract for today's presentation we described our intentions in this way:

"The symposium addresses the special methodological problems in the utilization of participant observation in curriculum evaluation. While the techniques have been tried in a number of settings this presentation concentrates on the analysis of the Berlak-Tomlinson Elementary Social Studies Curriculum. The application and integration of the point of view should be of use to curriculum developers, implementers, and evaluators."

My responsibilities are twofold: to introduce you to the participants and to make a few substantive comments of my own. The introductions could be handled best perhaps by relating briefly some of the history of the presentations. Essentially it's a story of the weaving of two relatively independent strands of activity into a common experience.

One of the most exciting aspects of Washington University's Graduate Institute of Education over the last few years has been a vigorous thrust in social studies curriculum and instruction. With their roots in the Oliver-Shaver tradition at Harvard, Harold Berlak and Tim Tomlinson have sought to develop a series of elementary school curriculum units which would involve 4th, 5th, and 6th grade pupils in experiences of Mexican, Russian, Indian, Italian-American and other children who are facing difficult decisions in their day to day lives. The problems of peer group living, family stresses and strains, and neighborhood changes contain basic dilemmas in value choices. A variety of experiences - textual material, slide tapes, role playing, group
discussions are used to engage the children. As the curriculum was being developed, concerns for evaluation - formative and summative were raised. Skepticism had long been felt for the limitations of some of the more usual research and evaluation strategies.

Concurrently with these developments, another strand of activity at Washington University and also CEMREL, Inc., our nearby regional laboratory, was the exploration of participant observation as a research and evaluation strategy for approaching complex educational settings, organizations, and curricula. Early efforts had focused on a middle class teacher coping with a class of lower class children, on the origins and development of an innovative elementary school, on an unusual teacher training program, on implementing a computer assisted instruction program in a rural community and in a structured discovery general science curriculum in the high school.

The two strands ran together in a curriculum evaluation seminar, which might best be described as a free-for-all. Parenthetically, unfortunately I might say, one of the things the new curriculum doesn't do is to teach people to respect their elders. Consequently, Harold Berlak and I barely survived. Applegate, Self, and Solomon pursued problems in evaluating the Berlak-Tomlinson curriculum; some of these they will be discussing today.*

* We owe thanks to Ann Berlak, George Fairgrieve, John Good, and Paul Pohland who pursued other problems, but whose ideas and points of view enlivened and facilitated the discussions.
Integrating Participant Observation Into Broader Evaluation Strategies

At this point I want to shift from moderator to panelist and develop briefly an argument regarding the relationship of participant observation to more general research and evaluation strategies. Three alternatives seem plausible and reflect our efforts so far: 1) a general structural model, 2) a sequential model, and 3) a case study accumulation model.

A General Structural Model

My own thinking and use of participant observation had been initially as a general research strategy to approach complex naturalistic problems. Howard Russell, then at CEMREL, and I began talking about a "three legged" model of evaluation. The model sought to bring three research strategies: 1) an experimental design with pre and post tests of achievement, control groups, and inferential statistics. 2) A second strategy was the social survey with interviews and questionnaires, random sampling of program relevant individuals (teachers, parents, and pupils), quantification, and cross tabulation of response. 3) The third "leg" of the model was a participant observer study of the program.

My colleague Paul Pohland and I engaged in the description and analysis of the mundane day to day operation of the program (Smith & Pohland, 1969, 1971). We have observed children at the teleypes, talked with teachers about the joys and tribulations, and inquired into arithmetic instruction. As it turned out, the problems in keeping the program running were severe. This moved us into a careful and serious consideration of the problems in putting highly sophisticated 21st Century Technology into an impoverished rural area of the nation.
Our data analysis suggested issues in complex technical and social systems. The roots of the innovation problems were as varied and complex as congressional funding patterns (lateness, cuts, rerouting through the state department) and the mobilization of five independent telephone companies to install lines and equipment. We think we have important data for understanding this kind of curriculum change.

The major point I would make is not that people have not used direct observation in curriculum development and evaluation, but that they have not exploited it as a major tool in the analysis. In a recent AERA curriculum evaluation monograph, Grobman (1968) devotes several pages to what she calls "visits." Her introductory paragraph states:

No project can afford to omit classroom visits, and such visits can serve a variety of purposes. Visits can serve to verify other feedback or to put it in a more meaningful context. Teachers who are reluctant to write criticism or who find writing difficult may talk quite openly in a face-to-face encounter. Conversation with school officials, teachers, students, and parents can elicit information that cannot be provided by questionnaires and may open up new avenues of thought not previously considered by the project. [p. 54]

In effect, we have taken seriously her doubts regarding the validity of responses people give. More basically though, we see the participant observer strand as an attempt to describe and conceptualize the nature of a very complex independent variable—the nature and utilization of the new curriculum. Such a research strategy has a potency which we felt had not been utilized fully before.

As Russell (1969) pointed out in the introductory chapter of the final report in the CAI evaluation the combined analysis made a powerful summative analysis of the program. The learning gains, the
rise and fall of changing attitudes toward the program, and the implementation of the program by pupils, teachers, classes, and organizations was clarified.

The Sequential Model

The sequential model attempts to cumulate efforts over time rather than concurrently in time. The major position we take is that the kind of field work we have been doing is important for the generation rather than the verification of hypotheses. To accomplish the latter, one moves to other research paradigms. For instance, in our intensive observational study of an urban classroom (Smith & Geoffrey, 1968) we utilized the concept of "teacher awareness" to interpret some of our data. The concept was defined as:

a dimension of teacher behavior in which the teacher knows information important in the group members' lives and indicates his knowledge to the group. [p. 470]

One of the explicit illustrations used to educe the concept was the teacher's teasing of an adolescent boy about his girlfriend and about the fact that he, the teacher, might have to move their seats. Besides the two adolescents, at least one audience pupil had an incredulous look on her face. A second illustration involved a pupil's seeming intention to "fool" the teacher in getting an extra turn at a simple and pleasurable alphabetizing task. The teacher caught her at the game and she responded with a sheepish grin and a return to her seatwork. We developed a number of hypotheses surrounding the phenomenon of teacher awareness.

Paul Kleine and I sought to explore the implications of the concept teacher awareness (Smith & Kleine, 1969). In an inten-
sive theoretical analysis of the concept of cognitive complexity as this has grown out of the Kelly tradition and cognitive differentiation from the Witkin tradition, Kleine (1968) argued for the theoretical similarity of the ideas. Each is concerned with the degree of structure (differentiation or complexity) the individual possesses in his conceptual organization of the environment. We predicted that these personality variables would correlate with teacher awareness and would be important antecedents of this part of the ongoing classroom situation. That is, the teachers with the more differentiated and complex cognitive structures would be more aware, more knowledgeable of the ongoing classroom social system. In our analysis we hypothesized also that teacher awareness, the knowledge of events in pupils' lives, leads to pupil esteem for the teacher. Pupil esteem refers to the generalized sentiment which the pupils hold for the teacher. For many years commentators have talked about pupil attitudes toward school, toward lessons, and toward their teachers. Some investigators of attitude learning and opinion change have argued that prestige and esteem are important social psychological variables.

While the conception of teacher awareness began with several intriguing illustrative observations from our field study (Smith & Geoffrey, 1968), the translation we made for quantitative purposes proceeded as follows:

1. each teacher rank ordered her pupils on three dimensions: popularity, arithmetic ability, and psychomotor ability;
2. the pupils in each class filled out a best friends choice type sociometric questionnaire regarding their classmates. They took a short arithmetic achievement test. And they
filled out a "Guess who?" type sociometric perception questionnaire regarding psychomotor ability;

(3) correlations between teacher rankings and pupil measures were obtained for each classroom;

(4) the correlation coefficients were converted to z scores and combined to form a single score of teacher awareness.

Methodologically, a sample of 69 teachers and their classes was drawn from the CEMREL region (Tennessee, Kentucky, Missouri, and Illinois). Some were from rural and small town communities; others were suburban. The majority of teachers were female (58). Their range of experience varied from one to forty-nine years and averaged sixteen years. All classes were at the fifth and sixth grade levels.

Among the results we found a significant correlation between cognitive complexity and teacher awareness and a significant correlation between teacher awareness and pupil esteem.*

However, my point is not theoretical but methodological. We have found the field study important for the generation of concepts, hypotheses, and miniature theories. These ideas can then be operationalized, quantified, and tested in broad-scale correlational analyses as we did with "teacher awareness." Hopefully also, these ideas can be moved into even more rigorous experimental designs. Only after that kind of endeavor can one have confidence that the findings pertain to more than our one case. The sequential blending of the techniques seems to produce extra benefits.

*Correlational data have known and admitted limitations for cause-effect interpretations.
Cumulating Case Studies

A third strategy of participant observation and curriculum evaluation is the one we are illustrating today: the cumulation of participant observation case studies. In general, the argument we have been making is that participant observation is especially fruitful for what Glaser & Straus (1967) have called the "generation of grounded theory." However, as one engages in multiple case studies, questions arise regarding the increasing credibility of hypotheses and models generated in one setting and now reappearing in second and third settings. In turn, we have been asking ourselves additional questions:

1) Must we always turn to the quantitative experimental model for verification? 2) Are there some problems that the laboratory cannot replicate—as Kounin (1970) suggests in his recent work on classroom management? 3) Are research skills different enough and idiosyncratic enough that specialization of labor is a major issue? 4) Are enough persons doing enough work with any one technique to be especially facile with it? And so forth.

Within the cumulative case study approach several sub strategies seem to viable: First, a sequential thrust of one classroom study, then another, then another. In effect, cumulating cases (descriptions, concepts, hypotheses and models) in the same domain. Second, a sequential thrust wherein one moves from classrooms to curricula to school to organization to community analysis. In effect, one maps enlarging and interlocking domains into more comprehensive theory. Third, and more illustrative of our efforts in today's symposium is the concurrent attack upon several parts of the same curriculum. For instance a concern for the curriculum writer's in-
intentions compared and contrasted with the realities of the situation, a focus on the teacher's behavior and the kind of thought processes generated by the curriculum, and reconceptualization of a special technique - role playing which is a major tactic in the curriculum. Such a concurrent "triangulated" attack seems to have a further kind of analytical power.

Conclusion

In this symposium we are raising issues regarding participant observation as a research and evaluation strategy. Individually and collectively the members of this symposium have been actively involved in the approach and its problems and its relationships to other points of view. The three most general ways of integrating participation into more general research and evaluation models might be labeled 1) the general structural model 2) the sequential model 3) the case study accumulation model. Each brings certain pluses as well as certain weaknesses. Each holds promise for making increasingly credible statements about important problems in curriculum and instruction.
References


