This document identifies teacher attitude as the most important variable in effective teaching, describes a preliminary study of teacher conceptions of reading, and outlines the scope of subsequent research on teacher decisions, patterns of instruction, and time allocation. Two instruments, the Proposition Sort and the Rep Test, were used to screen 350 teachers; eleven teachers who manifested strongly-held beliefs about reading were selected for the study. The data for the study consist of 35 field observations of each teacher, during which the observer took notes and conducted pre- and post-observation interviews. Following the observation, each observer's field notes were analyzed and the results used to refocus the subsequent observational cycle. Conclusions from the study are as yet unsubstantiated. The document states that the focus of research for 1978-79 will remain on the expanded observations. In addition, the effect of institutional constraints, economic factors, and teacher decision-making processes on teacher belief systems will be explored. (MAI)
A STUDY OF TEACHER CONCEPTIONS OF READING

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BACKGROUND

Research on reading methodology indicates that the most important variable in instructional effectiveness is the teacher rather than the method or material (Bond and Dykstra, 1967; Early, 1976). However, the still unanswered question is: "What makes a teacher effective?" Some researchers point to conceptions as the
crucial variable. For instance, Brophy and Good (1974) say:

The teacher individual difference variable that appears to be especially important for the classroom is the teacher's belief system or conceptual base. (p. 262)

Similarly, a University of Wisconsin research report (1967) states that "It is the teacher's own thoughts and conceptualizations of the instructional process which mold and control the learning climate" (p. 5) while Carroll and Chall (1975) conclude that an important aspect of the teaching process is the teacher's system of beliefs about how different children learn to read.

However, despite conjecture such as the above, teacher conceptions of reading has not been researched (Belli, Blom & Reiser, 1977). Consequently, the Institute for Research on Teaching at Michigan State University is sponsoring a study to determine whether a teacher's belief system about reading influences instructional decisions and, ultimately, what the pupil learns. This longitudinal study began with conceptual work in 1976-77 and will continue for several years. The research objectives for 1977-78 are:

1. to identify ways in which teachers conceptualize reading;
2. to develop the methodological skills and techniques needed to conduct a naturalistic study of teacher practices; and
3. to collect data regarding teacher decisions, patterns of instruction and time allocation.

IDENTIFYING TEACHER CONCEPTIONS

As the first step in identifying teacher conceptions, a literature search was conducted to determine how reading is conceptualized by reading experts. Five major categories were tentatively identified: basal text, linear skills (as epitomized by programs such as Wisconsin Design), natural language (including both language experience and
and psycholinguistics), interest (of which the writings of Veatch (1959) and Fader (1968) would be typical) and integrated whole (in which reading is taught throughout the school day).

Next, instruments were developed for determining teacher beliefs relative to the above categories. Both a Proposition Sort and a variation of George Kelly's (1955) Role Concept Repertory Test (more commonly known as "The Rep Test") have been used.

In its current form, the Proposition Sort consists of thirty-six propositions and is administered in either a sorting format or a Likert-scale format. The Rep Test, in contrast, is a nonstructured interview technique in which teachers sort their own pupils in response to questions posed by an interviewer, with transcripts of the interviews then being analyzed (Johnston, 1977) to identify implicit teacher conceptions.

Both instruments were employed to select teachers for study during 1977-78. The Proposition Sort was used to screen approximately 350 in-service teachers attending the 1977 summer school at Michigan State University with the Rep Test being administered to 37 of those teachers who demonstrated strongly-held beliefs about reading. Teachers who consistently reflected a strong conception on both instruments became candidates for study.

Preliminary data produced by these instruments indicate that teacher beliefs may reflect three categories rather than five. These include (1) a structured view which encompasses the basal and linear skill categories, (2) a more unstructured view encompassing the natural language, interest and integrated whole categories and (3) an uncategorizable group of teachers who either reflect eclectic belief systems encompassing several categories or who have
developing methodological techniques

While efforts to identify teacher conceptions have produced promising results, further refinement is necessary in three areas. First, construct validity is being established for five reading conceptions using direct statements from the writings of non-eclectic authors representing each of the five belief systems. Second, the Proposition Sort is being revised on the basis of an internal consistency analysis of responses (using Cronbach's Alpha) which revealed that reliability on the categories ranged from .52 to .69. Finally, new data will be collected with revised forms of both the Proposition Sort and the Rep Test to more accurately identify teacher conceptions of reading.

developing methodological techniques

Since the purpose of the study is to determine whether teacher conceptions influence instructional decision-making, teachers must be observed as they work. To do so, ethnographic techniques have been employed to produce "slice of life" episodes for analysis. In the words of Wolf and Tymitz (1977), project researchers are "talking with people and observing them while they do what they do." Since this type of research presents unique difficulties, special skills and techniques needed to be developed. Two tentative conclusions have emerged. First, ethnography of this type requires unusual cooperation from teachers. They must be selected not only on the basis of their belief systems but also on their willingness to participate. In contrast, their openness to observation and their candor during interviews. Once selected, they must be involved as collaborators in planning the research and in collecting the data. In contrast, no discernible belief about reading.

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to experimental designs, teachers in natural inquiry studies must be aware of the research goals and involved in the attempts to achieve these goals if valuable data is to result.

Second, the collection and analysis of ethnographic data requires special techniques and skills. For instance, the use of pre-conceived observation instruments designed to guide the observer were found to be less productive than field notes. Field notes, however, result in such a wealth of information that data reduction becomes an exceedingly difficult task requiring many more hours than simple tallying from observation instruments. Finally, identifying relevant observational data and making defensible inferences about how teachers conceptualize reading requires a subtle sensitivity unique to natural inquiry studies.

FIELD OBSERVATIONS

Field observations are being conducted during 1977-78 to identify the decisions teachers make and why they make them, the instructional patterns employed by teachers holding various conceptions and the ways in which teachers with different belief systems allocate time. These data will become the foundation for a more intensive investigation in 1978-79.

Eleven teachers, who were either selected using the Proposition Sort and the Rep Test or nominated on the basis of their reputations, are each being observed thirty-five times: ten in September, five between Thanksgiving and Christmas, ten in mid-winter and ten in the Spring. Observers take field notes and conduct pre- and post-observation interviews. Following the observation cycle, each observer's field and interview notes are analyzed, with the results being used to re-focus the subsequent observational cycle.
During this exploratory year of observation, pupil outcome data are not being systematically collected. However, both achievement and affective measures are being developed and will be administered during the Spring on a non-comparative basis as a pilot for use in 1978-79.

At this writing, each of the eleven teachers has been observed ten times. Eight of these teachers evidenced strong belief patterns on both the Proposition Sort and the Rep Test, with two reflecting a structured (basal/linear skills) view, five reflecting an unstructured (natural language/interest/integrated whole) view and one reflecting a combination of both. Of the remaining three teachers, one tended toward an unstructured view but did not represent a strong pattern of beliefs and two had no discernible pattern of beliefs.

The first cycle of observations provided interesting data regarding the way teachers' practices reflect their belief systems. For instance, of the eight teachers who evidenced strong belief patterns, four consistently employed practices which directly reflected their beliefs; these included the two teachers who had structured beliefs, the teacher who had an eclectic view and one of the teachers having an unstructured belief system. Of those teachers whose practices did not consistently reflect their beliefs, two having strong unstructured belief systems were found to be "smuggling" elements of unstructured practices into administratively-imposed programs reflecting a structured view while two other teachers holding unstructured views operationalized these beliefs only some of the time with some pupils. Of the remaining three teachers, the two who reflected no discernible belief system
operationalized very orderly practices reflecting a structured view while the remaining teacher did not evidence a strong pattern of practices due to special circumstances in the classroom.

No firm conclusions can be drawn until the first cycle data are substantiated. However, the tentative results raise interesting questions regarding the degree to which teacher practices reflect beliefs.

**FUTURE DIRECTIONS OF THE STUDY**

This research, currently in the exploratory stages, will be expanded during 1978-79. While the focus will continue to be on ways in which teacher conceptions influence instructional decision-making and pupil growth, hypotheses will also be generated regarding the ways in which teachers conceptualize reading, the ways in which these belief systems interact with practices, the relationship between the strength of a teacher's belief system and the tendency to operationalize that belief in practice and the degree to which materials influence teachers having strong and weak belief systems. These hypotheses will be tested using an expanded sample of teachers chosen to represent urban, suburban and rural settings as well as a variety of belief systems.

In addition to the expanded observations, three other areas of study will be explored. First, a sociological model will be used to study subtle institutional constraints as these intervene with teacher belief systems. Second, in collaboration with Brown and Saks (1975), economic theory regarding production factors will be applied to the study of teachers operating from various conceptions. Finally, the theoretical works on schemata by Neisser (1976) and Adams and Collins (1977) will be used to conceptualize the way in which teacher decision-making in reading interacts with belief systems.
CONCLUSION

This study is based on two assumptions: (1) that teachers are not mindless but are, rather, decision-makers, and (2) that teacher decisions are based in their beliefs and conceptions about what they teach. The task is to determine how teachers conceptualize reading and the impact these conceptions have on patterns of practice and pupil growth. As such, the study could provide valuable data about the mental life of teachers which would have far-reaching implications for pre-service and in-service teacher education.
References


Early, Margaret. Improving research in reading and writing. Phi Delta Kappan, January, 1976, 57 (5), 298-301.


