A survey of studies reported between November 1966 and November 1967 on how teachers behave while teaching transformational and structural linguistics to elementary school and preschool children is described. Only empirical studies of teacher behavior are reported. Studies primarily concerned with listening, children's literature, thought processes associated with language arts teaching, reading, oral language, speaking, spelling, and writing, as well as guides, general directions, manuals, and linguistics in foreign language instruction, are excluded. The studies that are reported include several describing controlled teacher behavior and the effects of using various linguistically based classification schemes, the compared behavior of groups of teachers carrying out differing curriculum tasks, and changes in behavior resulting from linguistic manipulation. Many of the studies center on the improvement of oral language or the teaching of oral language, nonstandard speech, and the language of bilingual children. The studies are few and marginal, suggesting that teacher preparation does not generally require linguistics training, that curriculum studies which cite what is being taught are usually not concerned with teacher behavior, and that further research is needed. (HS)
TEACHING LINGUISTICS TO ELEMENTARY AND PRE-SCHOOL CHILDREN:
REVIEW OF RESEARCH AND COMMENT

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TEACHING LINGUISTICS TO ELEMENTARY AND PRE-SCHOOL CHILDREN: REVIEW OF RESEARCH AND COMMENT

The concern of our literature search is the behaviors of teachers who are in the acts of teaching linguistics to elementary and pre-school children. In order to proceed with the literature search, it is necessary to agree on a definition of linguistics. Because of the scope, complexity, and recent changes in thrusts in linguistics, controversy is the rule rather than the exception. We begin with a widely accepted, but deceptively simple statement, knowing full well that painstaking examination will follow. Linguistics is the scientific study of language.

Analysis of this brief definition suggests three questions: "What is language?", "What is science?", and "what is study in linguistics?" We can answer the first question, "What is language?", best by seeking expert authority. John Carroll provides a definitive statement that proves satisfactory for our purposes.

A language is a structured system of arbitrary vocal sounds and sequences of sounds which is used, or can be used, in interpersonal communication by an aggregation of human beings, and which rather exhaustively catalogs things, events, and processes in the human environment (Carroll, 1953, p. 10).

The remaining two questions are treated methodologically. Science is the generic methodology which includes linguistics. To be scientific, an undertaking must be logical, critical, precise, and it must generate verifiable statements using shareable methods. Study in linguistics is inquiry into language. It includes gathering language data, analyzing it, and describing language by interpreting the data. Linguistics is the name for man's most precise attempts to describe language and how it works.

Description and Value

In surveying studies listed under linguistics and teaching, we find numerous explicit and implicit attempts to support value statements with linguistic method. Value statements about good or bad grammar and the value of standard and non-standard English are examples. Value statements are claims of what should happen or what should be. Value statements are logically acceptable only when they are backed by a prescriptive
discipline designed to produce value statements. Philosophy, law, psychiatry, religion, and education are prescriptive disciplines. Linguistics is not. Studies making value claims supported solely by descriptive methodology, such as linguistics, are not reported here.

Structural, Generative, and Traditional Grammar

Structural linguistics is often called descriptive linguistics, as though other facets of linguistic science are not descriptive. Pointing out the confusion will not change usage but we can clarify for the purposes of our literature search. If all linguistic methodology is descriptive, then scientific studies labeled generative grammar and traditional grammar are also descriptive. The term "structural" is a useful name for descriptive linguistics (Wardhaugh, 1969, p. 31). We treated all linguistics as man's scientific attempts to describe language and how it works. In selecting studies, we searched for studies of how teachers behave while teaching transformational or generative linguistics as well as structural linguistics to elementary school and pre-school children.

Selection Constraints

Only empirical studies of teacher behavior between November 1966 and November 1971 are reported. Guides, general directions, manuals, and linguistics in foreign language instruction are excluded. Studies primarily concerned with listening, children's literature, thought processes associated with language arts teaching, reading, oral language, speaking, spelling, and writing are excluded from this section because they are treated in other sections of the bibliography.

Related Studies

No studies surveyed totally met the constraints for selection. The studies reported here marginally relate to the criteria of selection, but they represent some of what is occurring in relation to this limited area of research.

Several studies describe controlled teacher behavior and study the effects using various linguistically based classification schemes. Fox (1970), Hunter and Bruce (1971), Kesses (1970), Hoetker (1968), and Miller (1967)
generally fall into this category.

Fox (1970) studied the effects of controlled teacher language behavior on the language of eighty children from grades kindergarten through three. Significant growth occurred in the number of T-units, number of words in T-units, and the mean word length of T-units between kindergarten and first-grade level.

Huntinger and Bruce (1971) found that adult verbal modeling produced differences in the verbal performance of Head Start children. The study drew heavily on the work of Muller (1966) and Cazden (1965).

Kessel (1970) categorized four types of sentences and studied their uses with a small sample in a clinical situation. Linguistic behaviors of both the clinician and subjects were reported.

Hoekker (1968) noted in his study on questioning that the proportion of correct answers was inversely related to the rate of questioning and unaffected by the ability level of the subjects in his study.

Miller (1967) found teaching combining sentence forms had significant effects on the written response of fourth graders. The teaching behavior that was described involved the teacher reading cue sentences to stimulate students' responses.

Two studies compared behavior of groups of teachers carrying out differing curriculum tasks. Kean (1967) compared the language of second and fifth grade. Seifert (1968) compared teacher-pupil language behavior in two different programs at one level.

Kean (1967) analyzed the language of second and fifth grade teachers with respect to phonological and sentence unit segmentation, structure patterns, pattern components, dependent and independent clauses, and vocabulary diversification. No significant difference between the language of second and fifth-grade teachers was established.

Seifert (1968) found the number of statements made by teachers and pupils was significantly greater in a Bereiter language program than in a Weihart cognitive program. Other variables studied are promising though hypotheses were not supported.

A study by Kelley (1970) involved changes in teacher and pupil behavior due to linguistic manipulation. Kindergartners' use of two of four linguistically defined language forms were increased. Teachers' behaviors for teaching the
language forms were significantly increased in most of the fourteen categories studied using videotapes; a handbook, and model lessons.

Sources for the Interested Researcher

Though none of the studies reported are specifically within the constraints of the criteria of selection, they may prove helpful to those seeking to fill the identified void. Specific resources warrant mention for the interested researcher. Research in the Teaching of English (Braddock and Blount, 1966-1971) is productive. Rosenshine's review, Evaluation of Classroom Instruction (1970) should prove very valuable. Mirrors for Behavior (Simon and Boyer, 1967) is indispensable for teacher behavior studies, but curriculum content areas are usually not specified. Linguistic Instruction in Elementary School Classrooms - An NCTE/ERIC Report (Denby, 1969) is a good source. Dissertation Abstracts lacks curriculum area information in relation to teacher behaviors though it is excellent for late work. Linguistic Bibliography for the Teacher of English is helpful (Curriculum Committee, Minnesota Council of Teachers of English, 1968). Other sources include the ERIC system, Annotated Bibliography on the Professional Education of Teachers (Lindsey, Heidelbach, and McClure, 1969), and The Encyclopedia of Educational Research (Ebel, 1969).

Many of the studies surveyed center on the improvement of oral language or the improvement of the teaching of oral language. Investigations consider both bilingual and so-called language deprived children. Many studies are based on language deficiency models, while few emphasize language difference models. Two I.R.A. annotated bibliographies deal specifically with linguistics in relation to reading but teacher behavior is not central (Zuck and Goodman, 1971) and (Goodman and Goodman, 1971).

Studies in Language Behavior (Lane, ERIC Code EB 010 236) includes useful reviews of studies in the general area of language behavior, but they do not include both teacher behavior and linguistic instruction.

Speculation on the Void

Why is there a lack of studies of teacher behaviors while teaching linguistics to elementary and pre-school children? The fact is linguists,
as it is scientifically defined, is an unusual curriculum component in pre-school or elementary school settings. This is true partly because most elementary and pre-school teachers are not trained in linguistics. Teacher preparation does not generally require linguistics training.

Another part of the explanation involves the way studies are described and reported. Though Simon and Boyer's survey includes many studies of teacher behavior, what is being taught is usually not cited in the interaction studies (Simon and Boyer, 1967). Conversely, curriculum studies that cite what is being taught are usually not concerned with teacher behavior or teacher-pupil interaction (Rosenshine, 1970, p. 280).

Teacher behaviors while teaching linguistics appear to be relatively unbroken ground to researchers. The studies we reported are marginal with respect to the stated bibliographical constraints, but suggest a framework of areas begging research inroads. Findings reflect Richard Braddock's comment "...we need research on basic process at this time almost more than we do research in teaching methods and curriculum" (Braddock, 1967, p. 5).

Comment

The presuppositions to this search beg examination. Currently, there are directives about suggesting that linguistics should be taught to elementary and pre-school children. Educators must question the support for such directives. We must put these directives into perspective before we can proceed with a productive examination of how teachers behave while teaching linguistics.

Psycholinguistics joins linguistics, the formal descriptions of language; and psychology, the formal descriptions of the acquisition of systems and how the systems work (Slobin, 1971). Both linguistics and psychology are totally descriptive and can not generate scientific statements or theory that tell what teachers should do; in teaching English, reading, or anything else. A linguistic or psycholinguistic method of teaching is a misnomer (Smith and Goodman, 1971). What educators must draw from linguistics and psychology are insights into language and the systems involved in learning (Goodman, 1968).

These insights offer aid in making the educational decision to teach or not to teach linguistics at various chronologically designated points in curriculum. The responsibility for this decision structure falls squarely in the education domain where teaching must be related to the consequences it
has on people. Neither linguistics nor psychology is designed to handle that responsibility.

At present, the consequences of teaching linguistics to elementary and pre-school children are not clear. We know that people, adults and children, do not need to know how to formally describe language or its acquisition in order to use language effectively. It is linguists who must know the techniques of describing language, and it is teachers who must use the products of linguistic inquiry to better understand the processes of structuring learning situations in language bound curriculum areas. Research must be aimed at finding out how linguistic insights can be used to help teachers in planning, implementing, and evaluating educational programs. The present search is an incremental step in that direction.

Though no claim to exhaustivity is made, the search led down many paths, all of them interesting. Purposefully excluded were courses of study, program descriptions, and linguistics in foreign language instruction. Each represents an area of pertinent worthy studies that fall outside of the selection constraints. It is hoped that the findings of this search will prove useful and that this brief report will serve to spur further investigation.
REFERENCES


New knowledge about language and how it works is apparent in educational research and literature. Effects upon teacher-pupil interaction in instruction are not yet clear. A search was undertaken for studies describing behaviors of teachers in the acts of teaching linguistics to elementary and preschool children. Only worthy studies reported between November 1966 and November 1971 are treated. Guides, general directions, unsupported value-oriented studies, and studies treated in other sections of the cooperative literature search effort are excluded. No studies surveyed perfectly fit the stringent criteria. Selected, marginally appropriate studies are reported to represent research trends: linguistically controlled teacher behavior, linguistically controlled curriculum tasks, and teacher-pupil behavior effects due to linguistic manipulation. Analysis of the relationship of linguistics and education generates recommendations for research.

Acknowledgements

Patience and persistence characterized the small group of professionals involved in this limited search. Appreciation is due each member for time and effort put forth.

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Commentary

Studies were sought that systematically recorded and described teachers' behaviors teaching linguistics to elementary or preschool children. None were found.

Some studies controlled the linguistic behaviors of teachers and searched for effects. Studies by Fox (1970), Huntzinger and Bruce (1971), Kessel (1970), Hoetker (1968), and Miller and Hey (1968) generally represent this group. Studies involving adult verbal modeling rely on linguistics for definitions and descriptions of selected forms.

Some studies compared the language behaviors of groups of teachers carrying out differing curriculum tasks. Studies by Kean (1967) and Seifert (1968) were judged by the subcommittee to be somewhat representative of this category. The manipulation of linguistically defined forms produces effects on both teachers and pupils. A study by Kelly (1970) represents this area of studies.

Some studies assumed that a particular regionally defined version of Standard English is somehow better than deviations from it. Attempts to show improved language behavior using an ethnocentric yardstick to judge improvement fall in this category. Studies based on value claims assumed to be supported by the descriptive science of linguistics were noted. None of these studies are reported because of the inadequate attention given to the warrant for value statements. Changing from the use of one linguistically defined form to another requires a value-based explanation before it can be called good or bad.

Considerable doubt exists about teaching linguistics to elementary or preschool students. Virtually no support was mustered for the practice in our search. Children learn to speak and read well without knowing either the methodology or the resultant facts of the descriptive science of linguistics. Whether they can learn better, faster, or easier by knowing what linguists know about language remains to be seen.

Linguistics can help elementary or preschool teachers, but neither the teachers nor the students need to become linguistic scientists in the process. Teachers make instructional decisions regularly. The decision making process is based on expectations. Linguistic descriptions of how language works can help teachers generate more accurate expectations and thereby make more productive instructional decisions.
REFERENCES


